MIDLANDS STATE UNIVERSITY

DEPARTMENT OF DEVELOPMENT STUDIES

AN ECONOMETRIC ANALYSIS OF CAPABILITY ENHANCEMENT EFFECTS OF MICROFINANCE AMONG WOMEN IN TSHOLOTSHO DISTRICT, ZIMBABWE

BY

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A THESIS SUBMITTED TO THE DEPARTMENT OF DEVELOPMENT STUDIES OF THE MIDLANDS STATE UNIVERSITY IN PARTIAL FULFILMENT OF THE REQUIREMENTS OF THE DOCTOR OF PHILOSOPHY DEGREE

NOVEMBER 2020

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ABSTRACT

There has been an unprecedented effort to reduce poverty in the world recently and the achievements have been significant. Various definitions regarding nature as well as the scope of poverty exist. Indeed, it is evident that the entirety of the history of poverty studies so far is a history of different definitions. However, there is a general agreement towards the conclusion that poverty is the deficiency of capabilities to achieve fundamental functioning. It has been observed that the burden of poverty is still higher on women than it is on men, a phenomenon termed 'feminisation of poverty' and studies on ways to enhance women's capabilities are gaining more attention like never before. Microfinance is one of the tools proposed for enhancing capabilities through mixed results on its efficacy exist in the literature. Tsholotsho, the district with higher feminisation in the most deprived province of Zimbabwe, provides a fertile ground to investigate the impact of microfinance on capability enhancement among women. The focal objectives were to identify analyse the capability enhancement effects of microfinance through microenterprise development and women empowerment in Tsholotsho District, Zimbabwe. It is out of the Capability Approach by Amarty Sen that this study derived its primary proposition - that evaluation of microfinance effects must be done in the context of capability enhancement. In an endeavour to avoid boondoggle research in favour of an avant-garde study, some trappings from sociology are evident - the roles of birth order effects and family business history effects on capability enhancement were analysed. Rooted on the one true reality independent from the researcher ontology, an epistemology that assumed observable and quantifiable facts, an objective standing as the axiology, in line with the positivism paradigm, the researcher employed quantitative analysis. Three models were formulated, namely, microfinance participation and

microenterprise development based on logit regression while women empowerment model premised on Tobit regression. Findings show that individuals with diversified income sources and high spouse incomes are less likely to adopt microfinance while those with a family business background and large cattle herd size are more likely to participate. Age and membership in other social groups are insignificant in determining adoption of microfinance among women. The study shows that microfinance enhances the capabilities of women through microenterprises development. Birth order effects and family business background contribute positively to microenterprise development. Perceived impact of microfinance on women empowerment is influenced positively by birth order effects and family business background. The majority of the members of microfinance projects investigated scored highly the positive perceived impact of microfinance on women empowerment based on functionings representing various latent capabilities. Overall, microfinance was found to be a tool that can enhance capabilities in the context of capabilities approach as it enhances women empowerment and women micro-entrepreneurship. The study recommends packaging of microfinance taking into account birth order and family business history effects in Tsholotsho and also spreading of informal microfinance models to other districts and provinces. The study identified areas which require further study, namely, (i) conducting a replica of this study in other districts with similar socio-economic situations to confirm the research findings of this study; (ii) carrying out a study, looking at a larger number of variables excluded in the current study can help in reducing rural poverty; and (iii) assessing the economic impacts of male folk migration to South Africa on women empowerment and general poverty alleviation in rural areas, especially Tsholotsho.

Keywords: microfinance, capability enhancement, poverty reduction, the capability approach

DECLARATION

I, the undersigned, hereby declare that this thesis is my work in partial fulfilment of the Doctor of Philosophy Degree at Midlands State University and that to the best of my knowledge, it does not have any content previously published by another person nor content accepted for the award of a different degree of the University, apart from where due acknowledgement has been made in the text.

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ACKNOWLEDGEMENTS

Firstly, glory is to the Almighty God who art in the heavens for this and other blessings. Surely he has not treated us according to our sins.

In carrying out my research, I received tremendous support from Professor Jephius Matunhu and Professor Mago, my promoters. I received a lot of support from the Organisation of Rural Associations for Progress (ORAP), an organisation from which I collected data. I am also grateful for the cooperation I received from Tsholotsho District authorities, namely, the District Administrator's office, Tsholotsho Rural District Council CEO's office and the President's Department.

Anne Dhamukwa and Peter Chundu, lecturers at the University of Zimbabwe, were very instrumental in proofreading and offering technical support. Admire Matondo and Farai Matenga offered me great assistance in data collection. My interaction with Rob Swinkels (Senior Social Scientist, World Bank), Munjira Mutambwa (Analyst, Zimstat), Tisha (Indian Embassy), Dr. C. Dzingirai (Lecturer at Midlands State University), Dr. Z. Tambudzai (Lecturer at Midlands State University), Mr Manjengwa (Lecturer at Midlands State University), Shruti Majumdar (UN Women, former World Bank employee) and Jeffrey Alwang (Professor at VirginiaTech and World Bank Consultant) contributed positively to my successful completion of this study.

In participating in international training programmes on rural development during my Doctoral study, I have fruitfully interacted with development experts from different countries, namely, Yulissa Duncan (Trinidad and Tobago), Coulibarly Allu Akissi Anne Marie (Cote D'Ivoire), Hellen Ngoa (Kenya), Aiperi Umarbekova (Kyrgyzstan), Soobug Namawtee (Mauritius),

Dookhitram Seeta (Mauritius), Nargiza Yulchiveza (Uzbekistan), Tserendos Munkhjargal (Mongolia), Nontokozo Mabhena (Zimbabwe) among others.

Last but not least, a round of applause goes to my family and friends for the encouragement and support. Shadreck Kudzai Sabbath Matindike, Mathew Takudzwa Kodwo Matindike and Blessing Scholarstic Bestina Matindike proved to be unique in the wisdom they imparted to me unknowingly.

DEDICATION

To those that came before me,

Maraki Matindike

Gladys Matindike

And those that came after me,

Shadreck Sabbath Kudzai Matindike

Blessing Scholarstic Bestina Matindike

Mathew Takudzwa Kodwo Matindike

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LIST OF ABBREVIATIONS AND ACRONYMS

ANOVA……...Analysis of Variance

DHS…….....Demographic and Health Survey

GAD……Gender and Development

ISAL……Internal Savings and Lending Projects

MFIs……Microfinance Institutions

MICS……...……Zimbabwe Multiple Indicator Cluster Survey

MIMS……..Multiple Indicator Monitoring Survey

NGOs……...Non-Governmental Organisations

ORAP……..The organisation of Rural Associations for Progress

SHGs……Self Help Groups

SPSS……Statistics Package for Social Sciences

UN……United Nations

UNICEF……United Nations Children Educational Fund

UNIFEM……...United Nations Fund for Women

USAID……..United States Agency for International development

VS & L……..Village Savings and Lending Projects

WAD…… Women and Development

WID……..Women in Development

WQ ……...Wealth Quartiles

ZDHS……Zimbabwe Demographic and Health Survey

ZIMSTAT……..Zimbabwe National Statistics Agency

Chapter 1

INTRODUCTION

1.1 Background

World poverty has decreased remarkably in recent decades. The world achieved its Millennium Development Goal number 1 of decreasing by 50% the 1990 poverty rate by 2015, attaining the target a lustrum ahead of plan (World Bank, 2015). However, UNIFEM (2012) revealed that 7 out of 10 of the world's poor are females. The situation whereby the burden of poverty falls more on women than men is termed 'feminisation of poverty.' The feminisation of poverty is being caused by women's constrained access to socio-economic resources resulting from inequalities and limited capabilities. Put simply, this means that a woman is deprived of a chance to attain an acceptable level of functioning due to deficiency in capabilities. To reduce and defeminise poverty in the world, microfinance is pointed out in literature as one of the effective tools.

Following the approach by Sen (1999), microfinance, when adopted as a tool in reducing and defeminising poverty, leads to the expansion of people's capabilities and increases the freedoms or opportunities and choices to acquire desired things (Sen, 1999b). Functioning is being what one desires, for example, being happy, being active in societal life or possessing self-respect (Alkire, 2005; Sen, 1999b).

Several studies registered positive contributions of microfinance towards reducing and defeminising poverty, especially in India and Bangladesh. Fernando and Azhagaiah (2015) studied women empowerment through Self Help Groups (SHGs) in India. The findings proved that a positive link connecting SHGs to economic empowerment of SHGs women members

existed. A study on association linking microcredit programme with women empowerment was undertaken in Bangladesh by Hossain, Islam and Majumder (2016). By utilising the binary logistic regression model, they found a positive link connecting microcredit to women empowerment. This means that the change in microcredit had a positive nexus with the perceived change in women's empowerment.

In another study by Gangadhar and Malyadri (2015), the association linking microfinance to capability enhancement among women in India was examined using cross-sectional research. They found microfinance to be a strong tool in enhancing women empowerment concerning indicators such as legal awareness and economic decision making within the household. A study conducted by Wijewardana and Dedunu (2017) focused on examining the association linking microfinance to the empowerment of female entrepreneurs in Sri Lanka. The results of the study indicated that microfinance has a positive and significant effect on women empowerment. A recent study was undertaken by Akhter, Kun and Chukwunonso (2018) examined the effect of microcredit schemes in defeminising poverty in rural Bangladesh. The results of the study confirmed statistically positive influence of microcredit on capability enhancement among women. The researchers concluded that microcredit schemes are successful in capability enhancement among women.

In Africa, some studies were also conducted on the effect of microfinance on capability enhancement among women. Addai (2017) investigated in Ghana to analyse the nexus between microfinance and capability enhancement among women. He found a positive association linking microfinance with capability enhancement among women. Gelan and Nigussie (2016) investigated capability enhancement among women through microfinance services in Ethiopia.

The results confirmed that years of membership in the microfinance institution, contact with development agents, and years of experience in income generation have a positive effect on the capabilities of women. In Ethiopia, Alemu, Kempen and Ruben (2018) investigated the relationship existing between women SHG membership and empowerment of women in Chencha District. The researchers concluded that women SHG membership effectively enhances women empowerment at the community level. The researchers suggested that SHGs is considered to be a powerful tool which offers an effective avenue for women to raise awareness and share information about their rights.

Karlan, Savonitto, Thuysbaert and Udrya (2017) conducted a study on savings groups' effects on poor people's lives with a particular focus on developing countries, namely, Malawi, Ghana, and Uganda. The researchers carried out a randomised assessment of Village Savings and Loans Association (VSLA) scheme in Malawi, Ghana, and Uganda using a sample of 561 clusters (282 clusters that participated in the VSLA and 279 non-participants). The results revealed that community-based savings' groups result in the enhancement of women's empowerment and microenterprise activity.

1.1.1 Microfinance for capability enhancement among women in Zimbabwe

Zimbabwe is not spared also from the feminisation of poverty. To detect the feminisation of poverty in Zimbabwe, the wealth index can be used. The wealth index is one of the components of the Multiple Indicator Cluster Survey (MICS) and Demographic and Health Survey (DHS). It is employed as a proxy for indicating long-term living standards within a household. It is calculated from data for ownership of household consumer goods, accommodation characteristics, drinking water sources, latrine facilities, among other indicators of socio-

economic standing of households. The commonly used scale of wealth index ranges between 1 which is the poorest quintile to 5, the richest quintile. The wealth index can be used to compare poverty levels across provinces in Zimbabwe and gender lines.

Table 1 below shows the bottom 2 quintiles for the wealth index across provinces. Bottom quintiles were adopted to show a more robust depiction. Generally, there has been a drop in the household population proportion in the lower 40% among all provinces except Masvingo.

Table 1: Deprivations across Provinces

Province	ZDHS 2006	MIMS 2009	ZDHS 2010/11	MICS 2014	General pattern
	Bottom 40%	Bottom 40%	Bottom 40%	Bottom 40%	Categories
Manicaland	38	39	39	34	Average
Mashonaland Central	56	59	55	50	Deprived
Mashonaland East	32	38	40	30	Average
Mashonaland West	45	44	43	38	Average
Matabeleland North	80	80	75	74	Very deprived
Matabeleland South	45	56	50	53	Deprived
Midlands	47	53	51	50	Deprived
Masvingo	61	53	60	60	Very deprived
Harare	0	0	2	0	Not deprived
Bulawayo	0	0	0	0	Not deprived

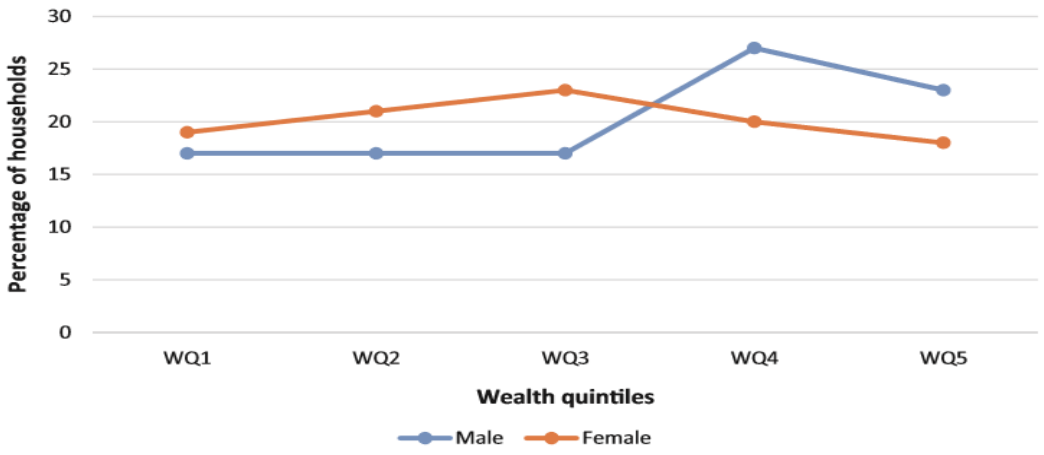
Key:
60 - 75 Very deprived
45 - 59 Deprived
30 - 44 Average
0 - 29 Not deprived

ZDHS 2006 – Zimbabwe Demographic and Health Survey 2006
MIMS 2009 – Multiple Indicator Monitoring Survey 2009
ZDHS 2010/11- Zimbabwe Demographic and Health Survey 2010/11
Source: UNICEF Zimbabwe (2016)

The table above shows that all Zimbabwean provinces are deprived except Harare and Bulawayo. The two are the centre of Zimbabwe's economic activities and that may be giving residents economic opportunities resulting in the relative limitation of deprivation. Two provinces are very deprived in Zimbabwe of which Matabeleland North is the worst.

Having analysed deprivation across provinces of Zimbabwe, it is imperative to reveal deprivation across gender lines. This can assist in identifying the feminisation of poverty in Zimbabwe if there is any. One of the ways is to observe the households' percentage distribution concerning wealth index according to the gender of the household head.

Figure 1: Wealth and Household Heads in Zimbabwe



Source: UNICEF Zimbabwe (2016)

As shown by the figure above, there is a strong association linking women-headed households to deprivations. It indicates that households headed by females are associated with lower wealth (WQ1 and WQ2) whereas those headed by males dominated indices for higher wealth (WQ3 and above). Therefore, there is evidence of the feminisation of poverty in Zimbabwe.

To deal with the feminisation of poverty, microfinance was introduced in Zimbabwe as one of the tools. The formal microfinance sector has the weakness in the form of gaps in product delivery and product composition which limit accessibility for the poorest. To fill the gaps left out by Microfinance Institutions (MFIs) and banks, Allen (2007) argues that informal microfinance groups are an answer as they are based on members' savings and have the potential to reach the poor in large numbers as they can be set up in different forms and institutional settings. As a result, proponents of microfinance as a tool for reducing and defeminising poverty in Zimbabwe are promoting informal microfinance in the form of ISALs, VS & L, ROSCAS, etc.

Some studies on the association linking informal microfinance to capability enhancement among women were conducted in Zimbabwe. A study by Allen and Hobane (2004) uncovered a positive effect on the capabilities of VS & L members. Allen (2007) argued that microfinance enhances women's capabilities to achieve desired functionings and thereby resulting in capability enhancement among women.

1.1.1.1 Headships of Households in Matabeleland North

Since Zimstat (2012) concluded that women-headed households encounter more deprivation than men-headed ones, it is crucial to analyse the structure of household heads in the most deprived province, Matabeleland North. This can be done by observing the number of households headed by females and those headed by males.

Table 2: Distribution of Household heads by gender

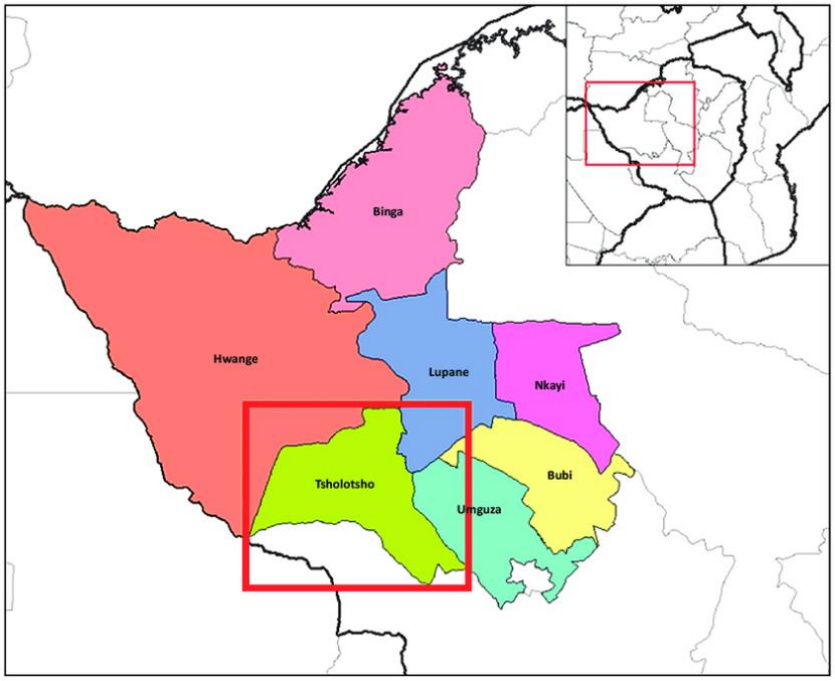
District	Household Head			
	Males	% of Total	Females	% of Total
Binga	17 268	55%	14 016	45%
Bubi	9 163	68%	4 385	32%
Hwange	8 880	61%	5 725	39%
Lupane	11 503	61%	7 419	39%
Nkayi	12 704	60%	8 581	40%
Tsholotsho	**11 420**	**48%**	**12 210**	**52%**
Umguza	13 259	70%	5 727	30%
Hwange Urban	7 350	76%	2 286	24%
Victoria Falls	6 622	73%	2 394	27%
Total	98 169	61%	62 743	39%

Source: Zimstat, 2012

The number of female household heads is very significant. In the whole province of Matabeleland North, Tsholotsho is the only district with more female heads of households than male ones. As a result, in the context of Zimstat (2012) assertion that women-headed households encounter more deprivation than men-headed ones in Zimbabwe, it can be concluded that Tsholotsho is way ahead in terms of the feminisation of poverty than other districts in the most deprived province of Matabeleland North. In other words, the feminisation of poverty in Tsholotsho is linked to the dominance of female headship. To analyse the feminisation of poverty in Tsholotsho, it is crucial to uncover the possible causes.

Tsholotsho District is an area within Matabeleland North Province, found about 64 kilometres from Nyamandlovu and 114 kilometres from the city of Bulawayo.

Figure 2: Location of Tsholotsho District in Zimbabwe



Source: Dube *et al.* (2018)

In addition to the analysis of female headship, it is also crucial to analyse the distribution of economic activities along gender lines in Tsholotsho District. This activity will reveal if there is more feminisation of poverty in Tsholotsho than other districts in the province.

Table 3: Distribution of Economic Activities among Males and Females in Tsholotsho

	Economically active persons	Paid employee %	Employer %	Own account worker %	Unpaid family member %	Looking for work %
Males	18 781	19.61	0.19	42.88	18.49	18.82
Females	24 147	9.1	0.1	57.4	20.7	12.8

Source: Zimstat (2012)

It is important to note that Tsholotsho has the highest proportion of economically active females. However, gender issues reflected in Table 3 are alarming. Although there are more economically active females than males in Tsholotsho, a larger percentage of males than females are participating in gainful economic activities. On one hand, a larger percentage of economically active males than females are paid, employees and employers. On the other hand, a larger proportion of females than males are engaged in unpaid family work and own-account work even though there are more economically active females than males. It can be seen that in Tsholotsho there is the feminisation of poverty that is caused by inequalities within the household and society concerning opportunities like paid labour.

Migration is also a possible cause of the feminisation of poverty in Tsholotsho. As indicated by the Zimstat (2012), in the whole province, Tsholotsho has the largest number of people residing in other countries. The migrants are mainly males going to neighbouring countries looking for work.

It is interesting to note that Tsholotsho is a host to many Village Savings and Lending groups (VS & L) groups which are promoted by the Organisation of Rural Associations for Progress (ORAP) under the USAID funded project, Amalima. At the time of the study, there were 2 460 VS & L members under Amalima in Tsholotsho District. The existence of the feminisation of poverty in an area where there are many VS & L groups raises questions regarding the capability enhancement effects of microfinance as a tool in reducing and defeminising poverty. Also, most studies show positive connections linking microfinance activities to capability enhancement among women (Beyene, 2018; Ampah, 2017; Maity and Sarania, 2017; Shakina, 2017; Gelan and Nigussie, 2016; Ravinda and Tiwari; 2016; Abubakar et al.., 2015; Kasili, 2015; Samer et al., 2015; Usman, 2015) while other studies (Banerjee and Jackson, 2017; Karim, 2011; Roodman, 2011) show a negative effect. As a result, more research is needed to advance the knowledge of the association connecting microfinance to capability enhancement among women, considering social constructs existing in Tsholotsho's body politic.

The current study models the effect of microfinance on capability enhancement in Tsholotsho District taking into account some social constructs, namely, birth order effects, and family business history effects. Before investigating the capability enhancement effects of microfinance in reducing and defeminising poverty in Tsholotsho District, it was crucial to first come up with a definition of poverty which helps in identifying the poor but also shape the study. The study adopted Amatya Sen's Capabilities Approach and defined poverty based on capabilities. Poverty refers to the deficiency of essential capabilities not just a result of low-level income (Sen, 1999b). Therefore, the study assessed the capability enhancement effects of microfinance based on two indicators, namely, the formation of microenterprises and women empowerment. Tseng (2011)

proposes the inclusion of women empowerment in assessing the capability enhancement effects of microfinance as a tool in poverty defeminisation. According to Mayoux (2000), poverty reduction is a tail while women empowerment is a head on the same coin within the poverty reduction paradigm. The underlying principle is that increasing women's access to microfinance in conjunction with other interventions will lead to improved household income which will translate to improved welfare for the whole household and society. The role of social constructs in capability enhancement among women is analysed in the context of microenterprise development and women empowerment. Birth order is considered in terms of firstborns or otherwise within the family of birth. Family business history was taken into account with regards to the background of the family of origin. The inclusion of social constructs in Tsholotsho as variables that were not used before in the study of capability enhancement makes this study an avant-garde investigation.

1.2 Statement of the problem

In the whole province of Matabeleland North, Tsholotsho is the only district with more female heads of households than male ones. As a result, in the context of Zimstat (2012) assertion that women-headed households encounter more deprivation than men-headed ones in Zimbabwe, it can be concluded that Tsholotsho has more feminisation of poverty than other districts in the most deprived province of Matabeleland North. Moreover, although there are more economically active females than males in Tsholotsho, a larger percentage of males than females are participating in gainful economic activities. On one hand, a larger percentage of economically active males than females are paid, employees and employers. On the other hand, a larger proportion of females than males are looking for employment, engaged in unpaid family work

and own-account work even though there are more economically active females than males. It can be seen that in Tsholotsho there is the feminisation of poverty that is caused by inequalities within the household and society concerning opportunities like paid labour as a result of the patriarchal system. Also, the feminisation of poverty in Tsholotsho was mainly inherited from the colonial system that restricted the black female population to reserve lands, which were infertile, neglected and isolated from the mainstream economy while the males would live in towns where professional advancement was possible (Lephakga, 2015). The problem of the feminisation of poverty is being perpetuated by the migration of the male folk for greener pastures in neighbouring countries. As indicated by the Zimstat (2012), in the whole province, Tsholotsho has the largest number of people residing in other countries.

The feminisation of poverty is occurring in Tsholotsho despite a plethora of Village Savings and Lending (VS & L) groups which are supposed to reduce and defeminise poverty. Microfinance is viewed as an important strategy for capability enhancement (Cabraal, Russell and Singh, 2006). In the context of the approach by Sen, microfinance when adopted as a tool to reduce and defeminise poverty, can expand women's capabilities and increase the freedoms or opportunities and choices to acquire the desired things (Sen, 1999b). As a woman is granted opportunities to access resources to form microenterprises and to be considered in household economic decisions, the feminisation of poverty goes down. The existence of the feminisation of poverty in an area where there are many VS & L groups raises questions regarding the capability enhancement effects of microfinance. Also, most studies show a positive connection linking microfinance activities to capability enhancement among women (Beyene, 2018; Ampah, 2017; Maity and Sarania, 2017; Shakina, 2017; Gelan and Nigussie, 2016; Ravinda and Tiwari; 2016; Abubakar *et*

al.., 2015; Kasili, 2015; Samer *et al.*., 2015; Usman, 2015) while other studies (Banerjee and Jackson, 2017; Karim, 2011; Roodman, 2011) show a negative effect. As a result, more research is needed to advance knowledge of the link connecting microfinance to capability enhancement among women, considering social constructs existing in Tsholotsho's body politic. Tsholotsho provides a fertile ground for the investigation due to its high levels of feminisation and active microfinance groups. Therefore, the current study interrogates microfinance as a tool for capability enhancement in Tsholotsho District, taking into account the role of social constructs such as birth order and family business history. Birth order is considered in terms of firstborns or otherwise within the family of birth. Family business history was taken into account concerning the background of the family of origin.

1.3 Research Objectives

The study aims at analysing the capability enhancement effects of microfinance among women in Tsholotsho District.

Specific Objectives are to:

1) Investigate drivers of adoption of microfinance by women as a tool for capability enhancement among women in Tsholotsho District.
2) Analyse the impact of microfinance on capability enhancement among women through microenterprise development in Tsholotsho District.
3) Analyse the perceived impact of microfinance on women empowerment in Tsholotsho District.

1.4 Research Questions

The research was conducted based on the following questions:

1) Which factors drive adoption of microfinance for capability enhancement by women in Tsholotsho District?
2) What is the impact of microfinance on women's capabilities as represented by microenterprise development in Tsholotsho District?
3) What are the factors determining the perceived impact of microfinance on women empowerment among participants in Tsholotsho District?

1.5 Hypotheses

Hypothesis 1: Drivers of adoption of microfinance as a tool for capability enhancement among women

Null Hypothesis: Individual characteristics do not increase the probability of adoption of microfinance as a tool for capability enhancement by women in Tsholotsho District.

Alternative Hypothesis: Background characteristics of an individual increase the probability of adoption of microfinance as a tool for capability enhancement by women in Tsholotsho District.

Hypothesis 2: Impact of microfinance on women's capabilities as represented by microenterprise development in Tsholotsho District.

Null Hypothesis: Microfinance does not enhance women's capabilities as represented by microenterprise development in Tsholotsho District.

Alternative Hypothesis: Microfinance enhances women's capabilities as represented by microenterprise development in Tsholotsho District.

Hypothesis 3: Perceived impact of microfinance on women empowerment.

Null Hypothesis: Individual characteristics do not affect the perceived impact of microfinance on women empowerment among participants in Tsholotsho District.

Alternative Hypothesis: Individual characteristics affect the perceived impact of microfinance on women empowerment among participants in Tsholotsho District.

1.6 Justification

There is a knowledge gap in the literature on microfinance in Tsholotsho, yet microfinance has become one of the well-acknowledged tools in capability enhancement among women. The work on poverty reduction in Zimbabwe focused on poverty as measured by income. The current study adopted Amatya Sen's Capabilities Approach which provides a comprehensive measure of poverty.

Also, according to the researcher's knowledge, there is no literature on microfinance-poverty nexus on Tsholotsho, yet many VSALs exist in the district.

Generally, the literature on microfinance and capability enhancement shows mixed results. Meganathan (2012), reacting to mixed results, indicates that microfinance as a capability enhancement intervention tool depends upon local circumstances. Therefore, a study to assess its efficacy in the Tsholotsho context becomes relevant. Also, the role of social constructs such as birth order and family business history in capability enhancement among women is considered, adding new knowledge to the existing body of literature.

The current study assesses the capability enhancement effects of microfinance in the form of ISAL or Village Savings Loans Association projects in capability enhancement among women in Tsholotsho District. It is believed that this would provide a better understanding of the problem

from the perspective of the members themselves. It is hoped that the results of the ISALs/VSLAs projects may influence the policy on the enrolment of these projects, curriculum design, all programmes and even changes in their distribution methods. Community members will benefit from this study through awareness of whether or not ISALs/VSLAs reduce poverty among them. This will help in participation decisions. This study informs NGOs on how to improve their approaches in administering ISALs/VSLAs. Government is the one that formulates policy in a country. This study provides evidence of how ISALs/VSLAs enhance the capabilities of women. Research institutions will also benefit from this study. The results from this study will be valuable additions to the academic literature and will stimulate research interest in the assessment of microfinance programmes.

1.7 Delimitation of the study

The study was conducted in the Tsholotsho District of Matabeleland South Province and mainly focused on the capability enhancement effects of microfinance projects (VS&L) in selected communities.

1.8 Limitations of the study

I foresaw and faced some methodological limitations based on financial constraints. Due to financial constraints, there were limitations on sample size and the study area.

The literature on microfinance as a tool in capability enhancement among women in Tsholotsho is scanty. However, great care and thought were taken in ensuring that the study is scientific, systematic and objective as much as is possible.

1.9 Ethical Considerations

The study was guided by the principles and guidelines of ethical standards at Midlands State University. Participants were treated respectfully and their rights were respected. The researcher obtained permission from the custodians of land, culture and law in Tsholosho, namely, the Tsholotsho District Administrator's office, Tsholotsho Rural District Council, Zimbabwe Republic Police, The President's Office, as well as ORAP. The authorities allowed the study to be undertaken in Tsholotsho.

No coercion was used on participants. All the recordings were done after notifying the participants that the researcher was going to record the conversations. The promise given to the authorities and participants that information gathered will not be used for any other purpose than academic was upheld.

1.10 Summary of the chapter

Chapter 1 gave the introduction of the study, concentrating on the issue of poverty concerning capability enhancement among women through microfinance. The background was explained and the problem statement presented. Also, the objectives and questions guiding the study were outlined.

1.11 Organisation of the thesis

The thesis consists of 5 chapters. Chapter 1 presents the introduction to the study. Chapter 2 presents the literature review, outlining the theoretical and empirical issues. The theoretical literature review section presents various theories related to the current study, zeroing in on the Capability Approach to Poverty which was adopted in evaluating microfinance as a tool in capability enhancement. The empirical literature section deals with related studies and presents

the gap the present study attempted to cover. Chapter 3 presents the methodology that the current study employs. The chapter gives the research design adopted, data collection methods used, data analysis methods, among other methodological issues. Chapter 4 presents data, results and discussions of findings. Chapter 5 winds-up the thesis by outlining the summary, findings, conclusion as well as recommendations of the study.

Chapter 2

LITERATURE REVIEW

2.0 Introduction

This chapter discusses theoretical and empirical literature on the relationship between microfinance, capability enhancement among women through the channels of microenterprises development and women empowerment. Various dimensions of microfinance as well as relevant theories are reviewed. Consequently, the research gap is identified.

2.1 Theoretical Review

This section examines various theories of poverty including Amartya Sen's Capabilities Approach to Poverty, the link amongst microfinance, capability enhancement through microenterprise development and women empowerment, theories on micro-entrepreneurship and approaches to women empowerment. The theoretical framework is also presented.

2.1.1 Theories of Poverty

2.1.1.1 Marxian Theory of Poverty

The theory asserts that the poor are poor because of the situation they find themselves in caused by the production systems. According to Karl Max, poverty increases among people as a result of owners of the means of production (capitalists) embracing technology thereby moving from labour intensive to capital intensive methods. Under such circumstances, many workers are retrenched with the aim of improving profitability. The retrenchments lead to massive unemployment. The unemployed face two options: to change professions or change locations.

The structural problems with the production system include corruption, discrimination of all forms and denying opportunities to some sections of the economy.

2.1.1.2 Cultural Theory of Poverty

The theory was introduced by Oscar Lewis in the year 1968. It was developed from the Marxian Theory of Poverty. The theory states that as unemployment increases due to job losses caused by the movement to capital intensive methods, the retrenched may find themselves grouping in a certain class or geographical area. The grouping may be the result of government welfare programmes or, informally, the migration of the unemployed to affordable residential areas. This explains how slums are developed in urban areas.

According to Manjoro (2013), the socialisation of the emerging groups results in the development of certain behavioural traits in order to cope with material deprivation. These traits include low aspirations, short-sightedness and impulsive gratification (Shulma, 1990). The traits shape the mindset of the poor, locking them in the vicious cycle of poverty (Lewis, 1968; Shulma, 1990). The behavioural traits are passed on to children who are raised in this class or these geographical areas, restricting the children's future to this class of the poor. These behavioural traits were termed the culture of poverty by Lewis (1968).

According to the Culture Theory of Poverty, poverty can be alleviated by migrating to other areas to change social groupings (Manjoro, 2012), altering the people's ideologies (Lewis, 1968) or by improving production technology (Wind, 1987).

2.1.1.3 Neo-Conservative Theory of Poverty

This theory is based on the writings of Thomas Malthius and Robert Brenner (Harvey and Reed, 1922). The causes of poverty under this theory are the economic factors emanating from the mismatch between population growth and improvements in production systems. Manjoro (2012) points out that unless population growth is checked by wars, famine, pestilences, and other similar checks, poverty will continue to increase.

To alleviate poverty, the theory suggests introducing ways of curbing overpopulation like moral education that encourages sexual restraints and abstinences before marriage. In addition, ways of improving production systems can also alleviate this type of poverty.

2.1.1.4 Social Democratic Theory of Poverty

This theory asserts that poverty is a class issue as well as a market issue. In other words, it assumes that poverty arises due to the politics of distribution of goods and services which results in some classes getting poor (Sraffa, 1926; Harvey and Reed, 1992; Sen, 1981). According to this theory, poverty is not based on the means of production but it can be alleviated by distribution justice which entails the equitable distribution of goods and services among the poor. Sen (1984) reveals that a lack of access to resources and income leads to absolute deprivation as a person's capabilities are restricted.

The market forces are not able to correct that unfair distribution of goods. As such, the government should step in and correct the situation. It can achieve this by issuing entitlements through political processes. The Social Democratic Theory of Poverty proposes a reformation that eliminates the unfair distribution of goods through political processes while preserving a production system based on profit-making.

2.1.1.5 The Social Darwinist Theory of Poverty

The theory asserts that the poor are in their situation because of their own natural characteristics and poverty is a result of natural selection by which society eliminates the unfit. The poverty evolves over time according to this theory. Harvey and Reed (1992) point out that the Social Darwinist Theory of Poverty identifies two types of poverty: the normal class poverty and lower-class poverty. Normal class poverty is caused by social and ecological developments such as physical handicaps, old age, child or female-headed families and it is correctable. The theory further asserts that poverty is corrected through the provision of education, movement from one class to another and lower-class poverty is caused by a lifestyle that does not promote hard work, self-improvement or service to the family. This poverty evolves into natural processes through which society eliminates the unfit members.

2.1.1.6 Programmatic Poverty

This is the poverty practised by religious or political leaders wishing to enjoy the benefits associated with that poverty. Common examples are missionary priests of the Roman Catholic Church and Buddhists who take vows of poverty (Harvey and Reed, 1992).

2.1.1.7 Situational Poverty

Under this theory, the poor find themselves in a situation in which they do not gain much from hard work and long term view of life (Manjoro, 2012). As a result, the poor show fatalism and immediate gratification behaviour as a response to their situation (James, 1984). An example is a child who is raised in the ghetto and tries to study hard. Lack of supportive structures such as school fees, career guidance, textbooks and a conducive environment may lead the child into

situational poverty. The child gives up and tends to focus on immediate gratification through theft, commercial sex, and similar acts, to cater for daily upkeep.

2.1.1.8 Structural Theory of Poverty

This theory shifts the blame for poverty from the individual to the structures in the social or economic systems such as discrimination, bad governance, wretched state of infrastructural development in certain geographical areas, sexism and segregation which lead to deprivation of opportunities sufficient to maintain an acceptable living standard (Cobb,1992; Ducan, 1992; Abrecht *et al.*, 2001).

2.1.1.9 Membership Theory of Poverty

The theory supposes that an individual's poverty status depends on the composition of groups to which he/she is affiliated during his/her course of life. These groups take many dimensions that include race, residential neighbourhood, schools and workplaces. The groups exert influences that ultimately determine the socio-economic outcomes of the individual. According to Manjoro (2012), factors through which the influence impacts on individual outcomes include peer group effects and role model effects. Peer group effects are the impacts of the other members' preferences on one's choices. Role model effects occur when the behaviour of other members influences the young ones who look up to them for guidance.

2.1.1.10 Sen's Theory of Poverty

Amartya Sen's Capability Approach depicts poverty in terms of scarcity or under-development of capabilities (Sen, 1999a). Within the context of Sen's capability approach, the appropriate *"space"* for analysing poverty is not what people have, nor how they feel, but what they can do

and be (Hick, 2012; Comim, 2001). Notably, it is salient to examine capability deprivation as the basis for analysing poverty. In the past 30 years, Sen's approach has gained prominence for studies on poverty (Kuhumba, 2018). It is, of course, worth mentioning that if poverty is not dealt with, development cannot be efficiently, effectively and sustainably achieved. Consequently, it is necessary to recognise the origin of poverty, causes of poverty, and to promote capabilities of people through the lens of Sen's Capability Approach.

In focusing on deprivation of capability as the basis for poverty analysis, the Capability Approach marks a break from the dominant income-based tradition for analysing poverty (Hick and Burchardt, 2016). Sen is regarded as part of the influential philosophers involved in pioneering the Capability Approach in the 1980s. Sen managed to usher in a new dimension on poverty analysis in a dispensation characterised by large-scale studies concentrating on income inadequacy as the chief cause of poverty. Indeed, Sen's approach is being used widely in the field of human development. Sen (1979) managed to firstly introduce the concept of capability and he discussed 2 fundamental ideas namely, capability and functioning. Sen's capability approaches to poverty focuses on assessing how well off people are when it comes to their capabilities to attain lives they value. The capability of an individual to afford the desired life is presented as combinations of "actual opportunities a person has", that is, beings and doings (Sen, 2009). This approach is different from resourcism which concentrates exclusively on the availability of means for good life or utilitarianism which focuses on subjective well-being.

2.1.1.10.1 Poverty as deprivation of capability- Capability Approach

Globally, about 20 000 individuals die every day due to extreme poverty, amounting to a total of 8 million people a year (Sachs, 2005). As of now, it is well-known that life-threatening poverty is

more prevalent in 2 regions, that is, Sub-Saharan Africa as well as South Asia (World Bank, 2015). Notably, these regions have the lowest levels of per capita income, but that standpoint does not provide the complete picture and context of associated deprivations. Nonetheless, it is vital to note that defining poverty as deprivation of some basic capabilities requires a more informative picture on aspects of poverty (Sen, 1999a). It is worth mentioning that poverty is just an unnecessary situation of deprivation which can be corrected. However, many people are affected by poverty in different contexts and their state of deprivation manifests itself in different ways such as poor health, disabilities, lack of aspirations or opportunities. It is worth noting that the main focus is on our capability to attain the lives we desire (Sen, 1999b).

It is worth noting that Sen developed the Capability Approach slowly and organically; he considerably polished it during the past two decades. The Capability Approach plays an important role in poverty analysis (Knecht, 2012). In this regard, the basic characteristic of this approach is that it looks at what the person can do effectively and be, that is, on his or her capability. Sen used the Capability Approach to analyse concrete poverty phenomena. He developed ideas for measuring welfare based on the ability to execute actions of interest and also the scope of these actions. Sen managed to label this scope as *"capabilities"*. In the context of poverty analysis, the Capability Approach gives a framework for our understanding of concerns about poverty. From the 1990s, Sen's Capability Approach is continuously being employed in poverty researches and has proved very relevant in interpreting worldwide as well as countrywide poverty data (Hick, 2012). Notably, the advantage of the capability approach is in its evaluation of poverty in respect of ability to acquire various valuables.

It is more remarkable that Sen utilises the Capability Approach in aggrandising our appreciation of the essence of poverty and to establish that the foundation of poverty assessment is the individuals' ability to do and be what they cherish and to eradicate barriers in order to attain lives they value (Daojiu, 2014). As stated by Sen (1999b), the Capability Approach was commonly adopted by the World Bank and United Nations (UN) in poverty evaluation. In the context of the Capability Approach, deprivation of capability of the needy and poor people is the crux of poverty, which is more than lower income. Admittedly, real poverty as capability deprivation, encompassing numerous poverty types not only poverty with reference to income (Pogge, 2002; Sen, 1984). It is worth mentioning that the perspective of the Capability Approach shifts the view of poverty away from means to ends, and towards freedom in attaining the ends (Sen, 2009). Hence, to diminish human poverty and improve individual self-fulfilment and freedom, it is deemed necessary to augment the poor's capabilities (Daojiu, 2014).

Moreover, Sen also highlighted that people are different as regards their capacity to transform resources such as income into improved welfare. Within the Capability Approach, poverty depicts the inadequacy of basic capabilities required to function. These capabilities, according to Sen (1983, 1999b), encompass a plethora of *"beings and doings"* such as escaping avoidable disease, meeting nutritional requirements, to be sheltered, to be clothed, to be educated, to be able to travel, to acquire self-respect and be active in community activities. Put simply, this means that an individual is deprived of a chance to attain an acceptable level of functioning. The Capability Approach settles the differences between the concepts of absolute and relative poverty. Therefore, it is of importance to note that relative deprivation when it comes to incomes and commodities may lead to absolute deprivation with respect to minimum capabilities.

Under the Capability Approach, the condition of deprived people can be more accurately analysed using their ability to transform resources into income (Knecht, 2012). Conducting poverty analysis in accordance with this approach requires one to differentiate sources of poverty i.e. poverty resulting from income deficiency, physical disability or/and educational shortcomings (Knecht, 2012). In this respect, one can better examine the negative effect on longevity and health, on work capacity and the likelihood of community participation.

2.1.1.10.2 Functionings and capabilities

The Capability Approach looks at the standard of life people can attain. This standard of life is analysed with reference to *"functionings"* as well as *"capability"* (Hick and Burchardt, 2016). To evaluate well-being, according to Sen, the key issue is to examine what people can do and be (Sen, 2009). People's goods, wealth or their utility are unfitting focus since they offer only constrained information regarding the wellness of life. For the purpose of clarity, Sen demonstrated his idea with the illustration of a typical bicycle. Although its main use is 'transportation', for it to offer transport, it relies on how able the people are in using it. Therefore, it can only be useful to people with legs. Sen's Capability Approach generally centres on the freedom to acquire something' in general and he zeroed in on the 'capability to function' (Sen, 1995). In Sen's Capability Approach, the major constituents are capabilities and functionings. It is noted that a 'function' is an end while a capability' is a means.

The line dividing 'function' and 'capability' can best be depicted using an illustration. Assume 2 individuals who both do not eat sufficiently to attain the 'function' of being well fed. One individual is a survivor of Cyclone Idai in Mutare left with no food, while the other individual chose to do a hunger protest before the American embassy in Harare to demonstrate against what

he is calling illegal sanctions on Zimbabwe. Although both individuals lack 'function' of being well-fed, their freedom to avoid hunger is different. To show such a difference, we consider the notion of capability. A survivor of floods in Mutare does not have the capability to be well-fed while the protestor before the American embassy possesses the capability. This permits analysis to look at sets of functionings associated with specific areas of life like the capability of literacy, of health, etc.

In contrast to monetary approaches, the Capability Approach permits analysis of actual events in a poor person's life (Hick, 2012). Consequently, poverty depicts the absence of basic capabilities for an individual to function (Sen, 2009).

2.1.1.10.3 Determinants of capability

Determinants of capability are crucial in considering a public initiative focused on eliminating poverty (Sen, 1999a). In order to reduce poverty, the Capability Approach may be employed to analyse the underlying predictors of the association between commodities and people. Therefore, it plays a crucial role in explaining poverty. According to Sen (1999a), these determinants include:

Individual physiology - The association between capability and income can be strongly influenced by the individual's age, gender, roles in family or society, etc. In making contrasts between population groups, these parametric variations are very important when it comes to poverty analysis using the approach by Sen. To acquire same functionings, individuals may have a need for special commodities such as prosthetics in cases of physical disability.

Distribution within the family - This refers to issues that are related to the allocation rules used in a family which influence the distribution of food or health-care along gender lines for instance, whether or not a 'male preference culture' exists. In many contexts, gender bias is a major determinant of resources allocation within households in Asia as well as Africa (Sen, 1999a). Diagnosis of capability inadequacy, or markable differences among persons, directs focus towards causes. It is well accepted that differences among persons determine their respective abilities to acquire resources, for example, differently-abled individuals require extras to attain the same capabilities as others (Kuklys, 2005).

The difference in relational perspective - Relative deprivation of income may result in absolute deprivation with regard to capabilities. The difference in relational perspective covers the principles as well as customs influencing commodity needs of accepted standards of conduct and consumption. In this context, relative poverty for a wealthy country may transform into poverty in respect of capabilities. For instance, local needs for self-confidence may differ widely (Sen, 1999a).

Differences in social contexts - The social conditions such as availability of public goods such as security and education, and the essence of associations in the community, such as those across ethnic divisions or class can influence the capability of an individual to transform resources into income (Sen, 1999a).

Based on the above-mentioned determinants of capability, it is interesting to remind ourselves that the approach by Sen advances our appreciation of the essence as well as causes of deprivation by changing primary interests away from resources to desired ends so as to pursue freedoms required to achieve the ends desired (Sen, 1999a). The scope for unpacking such

interactive impacts is of great importance within the approach. Consequently, assessing one's advantage basing on capability is reasonable.

Furthermore, Sen's capability approach has various implications for informing policy and practice, in areas as diverse as the empirical measurement of poverty or thinking about social justice. In this regard, Sen's Capability Approach to poverty has made significant contributions to Non-Governmental Organisations (NGOs) such as Oxfam International as well as UN organisations (Kuhumba, 2018; Hick, 2012). In the context of Sen's Capability Approach, anti-poverty means overcoming the formidable barriers which hamper individuals from improving their capabilities, specifically the capability of association. In this respect, anti-poverty strategies should examine the causes of capability failures for it to be effective (Daojiu, 2014). Apparently, to improve the capability of the poor and needy people, it is deemed necessary to promote their dignity during the process of development. To augment the efficiency and effectiveness of the anti-poverty policy, the strategy for anti-poverty should focus more on the promotion of people's capabilities. Based on the approach by Sen, calculation and promotion of capability is crucial.

Furthermore, the capability enhancement of the poor promotes their inclusion within the broader society. Therefore, this puts into perspective the notion that we should insist on anti-poverty initiatives that advance the capabilities of the poor and the needy. In line with the approach by Sen, there are numerous capabilities and functionings that we have reason to cherish and value. Sen identified primary capabilities to examine the degree of extreme poverty and recommended a basket of capabilities relevant to human development (Dreze and Sen, 2002). To this end, during the development process, it is generally appreciated that capability promotion of the poor and needy is a must for anti-poverty and sustainable development to be realised. Consequently, this

offers the approach by Sen a "universal-local" character, appropriate across economic, cultural and political borders.

However, although Sen's Capability Approach to poverty analysis is increasingly gaining popularity, it is also subjected to criticism. A major critique of the approach by Sen hinged on the idea that it does not pay enough attention to groups (Kuhumba, 2018). This limitation is prevalent in Sen's approach since it does not incorporate aspects of people's abilities to resist social and moral pressure stemming from groups (Robeyns, 2007). Indeed, Gore (1997) challenges Sen's approach to poverty on grounds that it does not encompass the fact that a person belongs to institutions or society. Therefore, this approach is weak when it comes to multi-cultural societies. More interestingly, Sandel (1998) underscores that an individual does not exist in a vacuum which means that he or she cannot be isolated from society since he or she is part and parcel of society.

As discussed above, Amartya Sen's Capability Approach has made major contributions when it comes to poverty analysis. This framework advocates for a multi-dimensional perspective towards poverty analysis since it incorporates both non-monetary and monetary constraints and dimensions. Indeed, this framework for poverty analysis offers a strong critique of income-based analysis since it suggests that analysis of poverty should concentrate on impoverished lives, and not just depleted wallets (Sen, 2000). Interestingly, the approach by Sen depicts poverty as under-development or scarcity of capabilities. Apparently, Sen's Capability Approach illuminates that a person's welfare depends on his or her capabilities as well as functionings. Sen strongly recommends that issues regarding income are just but part of poverty's main causes. In his approach, it is recommended that individuals acquire freedoms so as to live desired lives. In order

to eradicate poverty as well as increase individual self-fulfilment and individual freedom, it is deemed necessary to improve the poor's capability. Therefore, this section has focused on the approach by Sen so as to better understand the essence of poverty and to demonstrate that the poverty analysis should concentrate on what people are able to perform and be. In this context, policy interventions should focus on eradicating obstacles that hamper the achievement of desired lives by people. However, a major criticism of the approach by Sen is that it does not pay enough attention to groups (Kuhumba, 2018). Despite, the criticism of Sen's approach to poverty, it is imperative to enhance the poor's capability as a strategy to accelerate the effectiveness and efficiency of strategies to reduce poverty, especially in developing countries.

Table 4: Theories and their application to Tsholotsho District

Theory	**Application to Tsholotsho District**
1) Marxian Theory	The theory has little application in the rural setting.
2) Cultural Theory	Applies to the district since it is a rural set up where culture cannot be overlooked.
3) Neo-Conservative Theory	Applies as there is population pressure on the means of production.
4) Social Democratic Theory	Applies as many people in Matabeleland believe they are disadvantaged in the distribution of goods and services in Zimbabwe.
5) The Social Darwinist	Little application as not all people can be blamed for

Theory	their poverty.
6) Programmatic Theory	Very little application in Tsholotsho
7) Situational Theory	Relevant
8) Structural Theory	Relevant
9) Membership Theory	Relevant
10) Sen's Theory	Relevant

Among many theories of poverty that may be relevant to the Tsholotho District in Zimbabwe, Sen's theory or approach to poverty is the most popular in current literature. International institutions such as the World Bank adopted Amatya Sen's ideas in its poverty reduction strategies.

2.1.2 The Capability Approach and Microfinance

This section discusses Amartya Sen's Capability Approach and microfinance towards capability enhancement. As reported by UNDP (2014), around 1.2 to 1.5 billion individuals are living in acute poverty while a total of 162 million who are children are tormented by malnutrition. Microfinance is viewed as an important strategy for capability enhancement (Cabraal *et al*., 2006). The primary goal of microfinance programmes is the provision of wider financial options to poor people who are excluded. In order to advance our appreciation of how initiatives in microfinance address this issue, it is deemed necessary to assess microfinance from a perspective of capability framework.

The capability enhancement strategies should concentrate not only on the monetary means but also on the ends of individuals and on the freedom required to fulfil these ends (Becchetti and Conzo, 2011). In this context, Sen (1999b) identified five influential freedoms: economically viable opportunity, transparency guarantee, safety, social facilities as well as political freedom. Notably, microfinance is under instrumental freedom category (economic opportunities) which involves freedom of reaching credit facilities for poor borrowers (Cabraal *et al.*, 2006). As a result, microfinance is a powerful technique for reducing poverty which can be appreciated better by adopting the Capability Approach. According to Prathap, Mahesh and Karthik (2018), microfinance means the supply of short term financial services in very small amounts to poor individuals so as to improve their welfare.

Despite the mixed results related to the nexus between microfinance and capability enhancement it is well accepted as a distinctive programme for reducing poverty and for uplifting the poor and needy people. In particular, microfinance in Bangladesh is regarded as a strong tool for poverty reduction (Churchill *et al*., 2016). More interestingly, the adoption of the Capability Approach in the assessment of the influence of microfinance on capability enhancement is timely and improves our appreciation of the role as well as possible benefits derived from microfinance initiatives in eliminating poverty worldwide (Cabraal *et al*., 2006). In the perspective of Capability Approach, it is more interesting to examine the scope of microfinance for capability enhancement among women through the extension of the agency and capability of the poor and needy women around the world.

Moreover, Sen managed to mention the Grameen Bank as one of the first successful entities to target the poor and needy people and he underscored that microcredit organisations have had

great success in increasing women's agency through various programmes for economic empowerment (Sen, 1999b). In this context, Sen recognised the significance of microfinance in reducing poverty as he managed to link microfinance and the Capability Approach. It is worth mentioning the constraints faced by the poor in reaching institutional forms of credit due to their inability to physically access banks, lack of collateral or classism enacted by money lending institutions. Nonetheless, from Sen's approach, microfinance attempts to circumvent these obstacles by developing flexible credit procedures to offer credit to poor people so as to expand their capabilities to transform resources into income. In this light, the Capability Approach appears to be a useful framework for understanding microfinance towards poverty reduction. In other words, the Capability Approach advances our understanding of microfinance as a means of gaining freedom and also as a larger development tool that incorporates a multi-dimensional approach towards poverty reduction. Moreover, the link between the Capability Approach and microfinance can help to highlight the significance of borrowers (poor people) as participants in their own development.

The notion of microfinance has been widely accepted as a powerful tool in the struggle against poverty (Cabraal *et al.*, 2006). Many studies recognise the need for a broader approach that helps individuals to develop their capability when it comes to poverty reduction. It is worth emphasising that poverty within the Capability Approach is not all about the levels of income of people but it extends to the ability of people to make informed choices (Sen, 1999b). Consequently, adopting Sen's approach permits us to incorporate microfinance as a development strategy to reduce poverty around the world. According to Cabraal *et al.* (2006), microfinance is a cost-effective tool aimed at poverty reduction and, therefore, it is a worthy cause for donor

investment. Economic variables such as GDP do not take into account the numerous ways in which people can be deprived through access to financial resources and other valuable resources. In addressing this gap, the Capability Approach focuses on the extension in "capabilities" for an individual to live a desired life (Sen, 1999b). Notably, Sen (1983, 1985) underscores that strategies for poverty reduction should concentrate on developing capabilities of poor people so that they can leverage economic opportunities.

It is striking to note that microfinance increases the economic opportunities for the poor due to the fact that access to funds permits the borrowers to be agents of their desired lives. Indeed, microcredit can also contribute a great deal to other instrumental freedoms such as political freedoms. Within the Capability Approach, sustainable development necessitates the taking away of key obstacles that create "unfreedoms" like restricted opportunities and oppression (Sen, 1999b). Following this line of thinking, if microfinance is linked to improvements in expenditures and incomes, without improving individual abilities and freedoms are not improved, then sustainable development cannot be attained.

2.1.2.1 Background of Microfinance

The notion of microfinance as a development strategy is ancient. It can be traced back to the time of money lenders, savings and lending groups (ROSCAs) as well as local co-operatives (Armendariz de Aghion and Morduch, 2005). Nonetheless, the contemporary version of microfinance initiatives is usually credited to Mahammed Yunus who started providing small loans to bamboo furniture makers and basket-weavers to help them with their business in rural Bangladesh during the 1970s (Churchill *et al*., 2016). The microfinance products include

microcredit, microsavings, microinsurance, microenterprise, financial education, and remittances. Interestingly, two factors are attributed to the existence of modern microfinance organisations: the reluctance of formal financial institutes to lend to the poor and failure of agricultural credit. It is worth mentioning that microfinance as an instrument for reducing poverty has received much attention in the past three decades.

It is common knowledge that poor households are excluded from formal banking services because of collateral requirements, high-interest rates, red tape on admissions processing, and complicated application procedures. Notably, about 3 316 microfinance institutes managed to provide financial products and services to 155 million customers in nearly 100 countries around the world by the end of 2007 (Daley-Harris, 2009). In order to reach the poor people, microfinance was developed by the Grameen Bank in Bangladesh, NGOs as well as village banks of the Bank Rakyat Indonesia as a new lending scheme. In particular, Grameen Bank of Bangladesh was created in 1976 by Muhammad Yunus, a Nobel Peace Prize winner, as he implemented the microcredit idea as a strategy to provide banking services to the rural poor (Kristen, 2013). The Lending Model by the Grameen Bank has been replicated around the world, including in countries such as Bolivia, India, China, Ethiopia, Sri Lanka, Malaysia, Thailand, United States of America, Vietnam and Philippines.

Allen (2007) argues that banks and other formal organisations are failing to offer sustainable rural financial services. Lending to the poor has been made difficult by information asymmetry resulting in banks failing to come up with reasonable interest rates to cover these risks as well as higher costs (De Aghion and Morduch, 2005). The problems result in credit rationing issue, the

adverse selection issue as well as moral hazard issue which further makes the formal system fail to reach the poor.

(i) Credit Rationing

It means a situation in which some borrowers are excluded from credit even though they are comfortable with high rates of interest. This is not caused by shortage but by asymmetric information.

In the credit market, the rise of interest rates under the market influence may decrease the quality of borrowers. This is because low-risk borrowers with low-yield get pushed out of the market by rising interest rates and high-risk borrowers with high yield are pulled into the market. The high risk-high yield borrowers are pulled by high interests because their projects have a lower probability of success which translate to lower repayment levels favourable to them in case of failure (assuming limited liability to borrowers). At the aggregate level, profits of lending institutions such as banks then decrease with rising interest rates because default rates rise faster than increased interest income within the pool of high-risk borrowers (Stiglitz and Weiss, 1981).

To be on the safe side, the lending institutions restrict credit and provide it at low rates of interest to capture the low-risk borrowers. As a result, demand exceeds supply with the price failing to help, leading to market failure (Jaffee and Russel, 1976).

According to Helsen and Chmelar (2014), lending institutions use collateral or guarantee requirements as a screening strategy. These requirements deter the poor who lack collateral to access financial services.

(ii) Adverse Selection

Adverse selection is a problem that arises when one party to an economic contract has insufficient knowledge about the other party leading to inaccurate decisions (Akerlof, 1970). To counter the problem of adverse selection, finance institutions tighten up the selection process so as to pool high-quality borrowers. The tightened selection processes disadvantages the poor who are most likely to fail in meeting the requirements.

(iii) Moral Hazard

Moral hazard refers to the risk associated with the possibility of one party to a contract defaulting once the contract is concluded (Akerlof, 1970). To solve the problem of moral hazard, lenders may use contracts to improve the probability of repayment. These contracts may end up restricting the chances of the poor to access finance.

Microfinance deals with those problems of credit rationing, adverse selection and moral hazard through peer selection within the groups, peer contract enforcements which are guided by contracts too costly to breach, peer-forced savings and dynamic incentives in the form of repeat loans (Roodma and Quareshi, 2000; Kiru and Mburu, 2007).

Allen (2007) identified two groups of short-falls of banks and MFIs as providers of Microfinance arising from information asymmetry problems which are:

(i) The gap in service delivery: The MFIs and banks are failing to reach the poor and, in most cases, if they do, they never cover their costs. The MFIs are successful in urban areas where there is a high demand for credit and the costs of reaching the people are low.

(ii) The gap in product composition: MFIs focus on providing credit. They base their services on the premise that the poor can borrow and invest their way out of poverty. The

development practitioners challenge that notion and hold the assertion that the poor people opt to accumulate assets through savings and insurance not to expose themselves to increase risk brought by borrowing.

To cover the gaps left out by MFIs and banks, Allen (2007) argues that informal microfinance groups are an answer as they are based on members' own savings and have the potential to reach the poor in large numbers since they can be set up in different forms and institutional settings.

2.1.2.2 Social Capital and Microfinance

Haldar and Stiglitz (2016) compared microfinance experiences in Bangladesh and those in India, deriving insights from occurrences surrounding the crisis that happened in Indian microfinance around the year 2010. They investigated the reasons behind the contrast in the performance of Grameen Bank against that of SKS Microfinance. For more than 30 years, Grameen Bank led a successful microfinance movement characterised by over 90% repayment rates on a clientele base of nearly 25 million in Bangladesh while SKS Microfinance experience a crisis that commenced around November 2010 in India. Haldar and Stiglitz (2016) argued that the success of one and failure of the other within similar countries in the same region was a puzzle whose solution lies with the root of microfinance. They argued that the version in India was based on the wrong idea that had become common within economic theory, that is, microfinance in Bangladesh was premised on purely ‘economic’ calculus instead of a basically ‘social’ one. In other words, the original model of microfinance had a social face rather than an economic one. The social aspect of microfinance is what is called social capital, a term from sociology.

The original version of microfinance was characterised by the provision of small credit for productive activities based on groups. Lending was premised on joint liability or the principle that for the next member to get credit, the first one should payback and that led to peer monitoring. In the absence of physical collateral, microfinance relied on the socialisation of members to build social collateral. Socialisation was done through weekly group meetings which acted as social occasions and also business meetings during which repayments were done in public. Through socialisation, groups are formed and run, that is, screening and monitoring are done within the group. Screening and monitoring as social processes, are exposed to various social constructs.

There are some social constructs that are believed to affect people's behaviour. Understanding the impact of these social constructs in capability enhancement helps, at least, in developing the individuals possessing special attributes as perceived by the society and at most, harvesting those special characteristics for the benefit of the group's entirety. In the context of this research, some social constructs that may have a bearing on microfinance were investigated to identify their role in capability enhancement.

Firstly, in Zimbabwean society, firstborn children are said to be more responsible and productive than those that follow. The birth order theory attempts to explain the effects of birth order (Adler, 1964). The birth order theory asserts that birth order exerts a strong influence on decisions regarding career and personality traits of an individual. According to Alder (1964), firstborn children enjoy more attraction, care and esteem from parents than those who are born later. Parents tend to offer guidance to firstborns, thus, building them to become strong people. Because of that, the firstborns are likely to form their own businesses and stick to professional

ethics. Nhandi (2017) discovered that later-born children do not enjoy special attention and guidance as to the firstborns and usually feel less appreciated, leading them to have low self-esteem and less ability. In addition, the confluence model argues that as members are added into the family, the centre of attention decreases on other children and remain only on firstborns and last borns (Zajonc and Markus, 1975).

Secondly, family history is said to be influential in the lives of children. Crant (1996) shows that an individual raised in a family with experience in business is likely to be an entrepreneur. Several studies point out that children of entrepreneurs learn about business issues and are likely to consider forming a business as an occupation choice (Cooper *et al.*, 1994). In addition, children of entrepreneurs may view the parents as role models and having role models is crucial in determining entrepreneurial intention (Birley and Westhead, 1994). Mathews and Moser (1995) argue that having self-employed parents provides guidance and mentorship for children to establish their own businesses. Papadaki *et al*. (2002) reveal that entrepreneurial parents act as role models in developing business know-how in individual entrepreneurs. Children of entrepreneurs are likely to be entrepreneurs (Chaudhary, 2017). Many other studies confirm a positive relationship between family business background and entrepreneurial intention (Fairlie and Robb, 2007; Alsos *et al.*, 2011; Chaudhary, 2017)

In a nutshell, the literature shows the potential of social constructs in influencing the economic behaviour of individuals. Since social capital is central to the success of microfinance, it is

imperative to investigate social construct roles within microfinance as they are used in reducing and defeminising poverty.

To appreciate the concept of microfinance as applied in developing nations, it is deemed necessary to understand the Grameen model. Furthermore, the Self-Help Group (SHG) model as a form of microfinance was developed by NGOs in India and was then adopted by numerous microfinance institutions and banks worldwide (Thapa, 2007). Admittedly, Seibel (2003) documented that every developed country has got a history of microfinance. For instance, interest-free repayments for loan funds emerged in the 1720s in Ireland due to extreme poverty during the 16th Century (Seibel, 2003). With respect to Germany, co-operatives for savings as well as credit, and also community savings funds emerged as two different forms of microfinance (Seibel, 2003). Notably, microfinance is regarded as a more efficient and effective mechanism rather than state-owned enterprise to offer loans and insurance in low-income markets (Adams and Von Pischke, 1992; Lipton, 1996; Hulme and Mosley, 1996). Notably, it is well accepted that microfinance programmes lend predominantly to needy women engaging in informal activities. It is clear that women are viewed as excluded in the credit market.

In a nutshell, microfinance is believed to reduce poverty by supporting the formation of microenterprises and also women empowerment. As a result, curiosity is building on the topic of microfinance and poverty reduction. In addition, United Nations pronounced 2005 a year dedicated to microcredit.

2.1.3 Microenterprise Development and Capability enhancement among women

Since microfinance is believed to encourage the formation of microenterprises, it is important to review some of the theories on entrepreneurship. In addition, the understanding of the nexus

between microfinance and women empowerment can be enhanced by reviewing some approaches to women empowerment.

2.1.3.1 Theories of Entrepreneurship

A myriad of opinions exists in the literature regarding the character and role of entrepreneurs in development. Approaches to entrepreneurship can be classified into two groups: the Functional Approach and the Indicative Approach. The Functional Approach outlines the functions of entrepreneurs while the Indicative Approach describes entrepreneurs.

After identification of entrepreneurs, the main issue becomes how the supply of entrepreneurs can be increased. There is no consensus on how entrepreneurs can be increased but two schools of thought exist on the promotion of entrepreneurship in a country. The schools of thought are "psychologists" and "sociologists". According to Kilby (1971), theories of entrepreneurship supply emanate from either psychological or sociological elements, that is, they try to identify social and psychological factors influencing the development of entrepreneurs.

Theories of entrepreneurship include the following:

1. Richard Cantillion: Entrepreneur, the Risk Taker

Cantillion (1959) is believed to be one of the first people to use the word entrepreneurship. The Cantillion framework was developed in the early 18th Century. Cantillion classified the population of a country, except royal families and landowners, into two groups, namely, (i) entrepreneurs, comprising of farmers, traders, among others, (ii) hired people. In this framework, the entrepreneur buys services and goods at certain prices while he/she will sell his/her services and goods at uncertain prices, that is, he is a risk-taker.

2. Jean Baptiste Say: Entrepreneur, the Combiner of factors of Production

Say (1824) outlined the functions of an entrepreneur and claimed that the function of an entrepreneur is combining the factors of production and to assume the risk. The success of the entrepreneur would be influenced by the judgement of future demand, estimation of inputs, costs, prices and times, administration and supervision. Because the combination of these is scarce, entrepreneurs are scarce.

3. Leon Walras: Entrepreneurship, Coordinator of Production

Walras (1954) classified entrepreneurship as the fourth factor of production which hires other factors. The entrepreneur is regarded as the central point in the production and is a profit maximiser who will expand production to equilibrium, that is, increase output as long as the selling price is higher than the price of productive services.

4. Frank Knight: Entrepreneur, Decision maker under Conditions of Uncertainty

According to Kinght (1921), the entrepreneur takes non-insurable risk and uncertainties and receives profit as a reward. Insurable risk can be statistically calculated and precautions taken. Non-insurable risk cannot be statistically calculated and no precautions can be taken. The entrepreneur is faced with insurable risk and his/her success or failure is influenced by foresight and judgement.

In a situation of uncertainty (where there is perfect knowledge of the future), there are no entrepreneurs but only labourers doing routine functions of responding to what is already known of the future.

The existence of uncertainty makes entrepreneurs relevant. Knight (1921) argues that people who have control in the firm also bear the risk.

5. Adam Smith: Combining Entrepreneurial and Capitalist Function

Smith (1912) classified people into three groups: those who live by rent, those who live by wages and those who live by profits. He grouped entrepreneurs and capitalist functions under employers. He argued that each individual would improve his/her wealth and welfare by pursuing selfish ends. The theory did not isolate the theory of entrepreneurship.

6. Joseph Schumpeter: Entrepreneur as an Innovator

Schumpeter (1939) redefined the concept of entrepreneurship and its functions. His theory of entrepreneurship is an integral component of his theory of development. According to Schumpeter (1939), development refers to carrying out of new combinations which covers 5 areas, namely,

(i) Provision of new goods and services.

(ii) Coming up with new techniques in production.

(iii) Covering new markets

(iv) Employing new sources for raw materials.

(v) Development of new organisations.

Schumpeter (1939) named the carrying out of the above activities "enterprising". He claimed that an entrepreneur usually finances entrepreneurial activities through bank credit. In addition, an

entrepreneur does unaccustomed activity, being motivated by the will and joy of creating things and exercises energy and ingenuity. Critics point out that Schumpeter's theory does not explain the supply of entrepreneurship, and is valid in capitalist economies and cannot be tested empirically (Kilby, 1971).

7. Peter Kilby: Economist's Model of Entrepreneurship

Kilby (1971) explained entrepreneurship in terms of the supply and demand functions of entrepreneurship. In addition, he argued that the supply of entrepreneurship depends on socio-psychological variables and some past entrepreneurial training. The demand for entrepreneurial series is a function of the price of all cooperating factors of production, the stock of technology and the level of managerial organisation. Kilby (1971) used to output as a proxy for entrepreneurship and the rate of return on investments as the entrepreneur's wage and highlighted the environmental economic variables as the demand side driving entrepreneurship while overlooking the supply side.

8. Harvey Liebenstein: Input-completing with Gap-filling function

Under this approach, entrepreneurs have only a small role to play in an economic model which assumed complete certainty. Liebenstein (1968) classifies entrepreneurial activity into two groups, namely, 'routine' entrepreneurship which goes hand in hand with managerial activities of the enterprise as well as 'bewform' entrepreneurship associated with innovation.

Liebenstein (1968) describes an entrepreneur as an individual with four characteristics:

(i) Connection of various markets

(ii) Ability to cover deficiencies in the market i.e. gap-filling

(iii) 'Input-completing'

(iv) Formation and growth of productive entities (firms)

He identifies as crucial the 'gap-filling' characteristic as it gives rise to 'input-completing'. The production function is regarded as specific and perfectly known in economic theory. However, it is silent on who keeps the knowledge of the production function. In reality, because of the deficiencies in the knowledge of the production function, the entrepreneur arises to cover that gap. Input-filling refers to the marshalling of all the inputs to achieve the final product.

Liebenstein (1968) argues that 'input-completing', enough motivational state and training are determinants of entrepreneurship supply.

9. Maurice Dobb: Entrepreneur as Innovator, Risk-taker and Monopolist

Dobb (1926) views an entrepreneur as an innovator, risk-taker and monopolist. He argued that a capitalist usually obtains a profit as a result of some monopoly advantage. He claimed that monopoly results from ability, superior information, and greater access to training and education, greater firm size and barriers entry. In other words, this monopoly is caused by possession of wealth and position. He argued that capitalist undertaking in some monopoly privilege support growth as no person can face uncertainty in an environment where they have little control.

10. David McClelland: Entrepreneurship, the function of High Achievement

McClelland (1971) claimed that the supply of entrepreneurship depends on the desire for achievement among people and the promotion of an achievement-oriented ideology in children can result in increased supply.

11. Everett Hagen: Entrepreneurship and 'status withdrawal'

Another theory is by Hagen (1962) who describes an entrepreneur as a creative personality with a passion for achievement and comes about as a response to social transition. Hagen (1962) claims that a social transition may result in the withdrawal of a 'social status' for some people resulting in the adopting of any of the following four personalities as a response:

(i) Retreat: This person continues to work as before without displaying changes;

(ii) Ritualist: This person adopts defensive behaviour and behaves in a way acceptable without hoping for a change;

(iii) Reformist: This person brews rebellion and tries to renew society; and

(iv) Innovator: This person becomes creative as well as entrepreneurial.

In short, a person becomes an entrepreneur as a result of status withdrawal.

12. John Kunkel: Entrepreneur and structures

Kunkel (1970) claims that entrepreneurship depends on the following four structures which exist in the community:

(i) Limitation Structure

Kunkel (1970) claimed that all societies are characterised by restrictions on the behaviour pattern of a population limiting specific activities of certain members of the community. The entrepreneur is seen as a 'deviant' restricted by these limitations.

(ii) Demand structure

It is influenced by the economic situation. Kinkel (1970) claimed that demand structure is influenced by the economic environment and government actions and can be increased by the provision of material rewards. As a result, the manipulation of demand structure can increase entrepreneurship in a country.

(iii) Opportunity structure

The structure determines entrepreneurial activity. It constitutes the existence of capital, technological skills, management and knowledge, labour and commodity markets.

(iv) Labour structure

Kinkel (1970) separated the supply of labour from structure three. He claimed that the supply of labour is controlled by the availability of alternative means of livelihood, culture and life expectations.

The entrepreneurs' supply depends on the presence and the degree to which the four structures are found in society.

13. Hoselitz: Entrepreneurship and skills

Hoselitz (1952) argues that marginalised men are best suited to make creative adjustments in periods of change and in the process, develop true innovations in social behaviour. In addition, the industrial entrepreneur should have managerial and leadership abilities. Hoselitz emphasises the importance of culture, social process and practical skills in the development of entrepreneurship.

14. Frederick Harbison: Entrepreneurship and Organisation Building

Harbison (1956) defines entrepreneurship as a skill to develop a productive entity. He claims that an entrepreneur is an organisation composed of people doing entrepreneurial functions. He argues that entrepreneurship should be viewed as a resource with both qualitative and quantitative attributes and classified entrepreneurship function as follows:

(i) Handling of risk and economic uncertainty;

(ii) Planning and innovation;

(iii) Coordination and Control; and

(iv) Routine Supervision.

The approach allows the development of the new organisation as innovation.

15. Frank Young: Entrepreneurship and Group pattern

Young (1971) claims that entrepreneurship is a function of clusters not individuals. According to Young (1971), the entrepreneur does not work single-handed but is just the most visible member from an economic point of view of what is typically a group of households whose actions are mutually reinforced and coordinated by a common world view.

This concept of solidarity claims that entrepreneurial functions arise as the group reconfigures its world view. This results in the recombination of factor input and a search for new resources, technology, markets, management styles and higher standards of labour.

Young's theory argues that the sub-groups in society engage in entrepreneurship when three conditions coincide which are:

(i) demotion to low status;

(ii) restriction from social networks, and

(iii) when a group acquires better organisational resources than others.

16. Thomas Conchran: An Entrepreneur, a society's model personality

Cochran (1971) claimed that the supply of entrepreneurship is determined by cultural values, expectations and social sanctions. According to Cochran (1971), an entrepreneur is a society's model personality, not a deviant person or super-normal being. He argued that the performance of an entrepreneur is influenced by his own behaviour towards the job, expectations and operational requirements of the job with the first two determinants shaped by the society's values. The last determinant is shaped by variables such as population, technology, consumer demand, etc.

17. Max Weber: Entrepreneurship, A function of Religious Beliefs

Weber (1958) argues that entrepreneurship is developed by exogenously supplied religious beliefs, especially Protestantism. This is witnessed by the indigenous apostolic sect which provides a significant number of entrepreneurs as a result of their teaching. The Pentecostal sect

also emphasises forming their own businesses. In general, Christianity promotes entrepreneurship.

18. Resource-based entrepreneurship

This theory by Alvarez and Busenitz (2001) asserts that the availability of resources is a crucial determinant which drives the creation of new ventures. They argue that the availability of various resources improves a person's capacity to identify and exploit opportunities.

Resources based entrepreneurship theories can be grouped into three classes, namely:

i) Financial Capital/ Liquidity Theories

The theories claim that individuals with available funds can set up new firms.

ii) Social Capital/ Social Network Theories

The theories claim that individuals with more powerful social links to resource givers are the most likely to exploit opportunities.

iii) Human Capital Entrepreneurship

These claim that education and experience help in the formation of enterprises.

2.1.3.2 Relevant theory to the current study

The current study is premised on the resource-based theory. Through access to financial capital, rural folk can identify and exploit discovered opportunities. Also, the social aspects such as marital status and household size are taken into account. In addition, human capital characteristics like education are considered.

2.1.4.2 Women empowerment approaches

Maholtra *et al.* (2002) define empowerment as the freedom and ability of people to make strategic decisions in all aspects of their lives and they identify two central factors in the process of empowerment which is control over resources (conditions for empowerment) and agency (the ability to formulate choices).

The approaches to women empowerment clarify how development affects women and also why the effects differ between men and women.

2.1.4.2.1 Women in Development (WID)

Under the WID there is equity approach, anti-poverty approach and efficiency approach.

Equity Approach

It is sometimes termed an integrationist approach. It emphasizes a shift from women's reproductive roles to productive roles. It focuses on the economic independence of women. In that vein, the approach asserts equality within the market and also the household. Participation of women in the public sphere is also emphasised. The drawback of this approach is that its tenets make it difficult to implement.

Anti-poverty Approach

The approach moved the focus from reducing inequalities between women and men to reducing income inequalities. The emphasis of the approach is poverty reduction. As a result, the thrust was on basic needs, roles of women in the household's wellbeing and the fight against poverty,

income generation projects resulting from access to credit and other productive resources. The weaknesses of this approach are that it overlooks reproductive roles while it emphasises the productive roles. Women are usually burdened by domestic work and usually do have control over family income.

The Efficiency Approach

It is based on the Neo-classical Model. This approach views women as an untapped resource base. Through participation in microfinance projects, women can be active participants in the development process and they can increase their productivity. The main weakness of this approach is that it ignores other dimensions of development like cultural and social effects. In addition, feminists argue that women are already active participants in development.

2.1.4.2.2 Women and Development (WAD) Approach

The approach asserts that women have always been in development but the issue is on the imbalanced interaction between women and the development process. According to this approach, it is necessary to focus on the strategies to integrate women into development.

The WAD approach views the integration of women in development as one of the factors that have served to sustain gender inequalities. To achieve desired development, WAD recommends the acknowledgement of the roles of women in reproduction and production and the international structures to be equitable.

2.1.4.2.3 Gender and Development (GAD)

The model focuses on the effects of development on both women and men. It emphasises equitable participation and benefits for both men and women in development. It acknowledges the possibility of women participating in development without benefiting from it. GAD emphasises gender relations and how specific roles, responsibilities and expectations between men and women are shared. GAD recommends changes in social relations to achieve meaningful development.

GAD suggests an address of access and control over resources and power. As a result, it promotes women to organise themselves to form a strong political voice to augment their rights and increase the number of women in decision making.

2.1.4.2.4 Empowerment Approach

The Empowerment Approach is the most recent one. It emanates from writings and organisational experience of women from the third world.

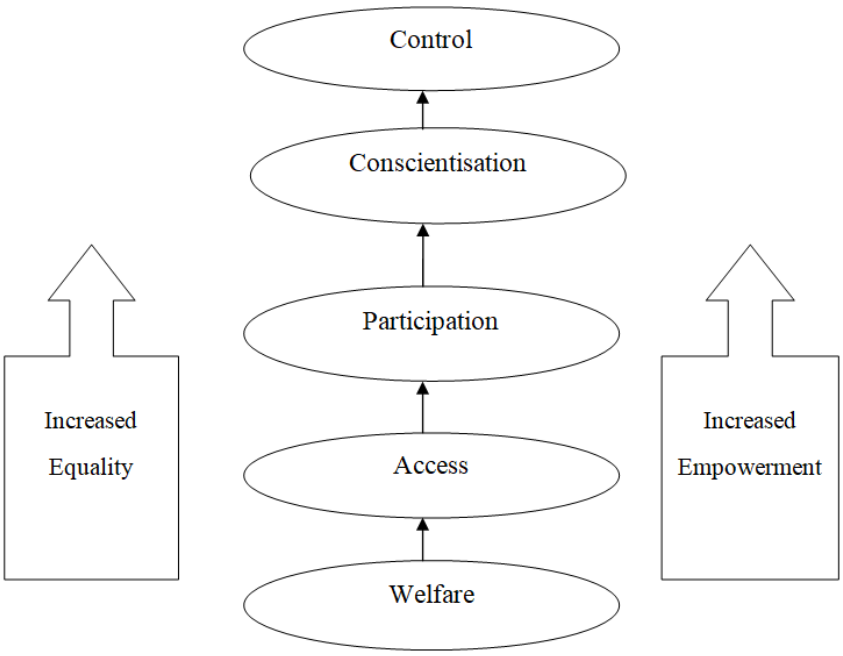
Empowerment refers to power over resources which may include intellectual, ideological, and material. The power is drawn from control or ability to influence the resources both in public and also in private life. The extent of the power depends on the variegation of resources controlled and the way they shape societal, religious and political ideologies. According to the empowerment approach, women are empowered when they control appropriate resources to have self-reliance, the ability to influence their change and determine their own choices in life.

One of the empowerment approaches is the empowerment framework developed by Sara Longwe, a consultant from Zambia. Sara Longwe's Women Empowerment Framework aims at

provoking the meaning of women's empowerment and equality in real life and the extent a development project is improving this empowerment (Wallace and Manh, 1991). Longwe defines women empowerment as helping women to be at an equal footing with men in the development process to achieve equality in the control of factors of production.

According to Longwe, the level of women empowerment is influenced by the extent to which the five levels of equality are present in one's life. The framework can also be adopted when analysing the level of commitment of an organisation towards women's equity and empowerment (Manh *et al.*, 1999). The levels of equality in Longwe's empowerment framework are hierarchical (Wiliams, 1994).

Figure 3: Longwe's Women Empowerment Framework



Source: Wallace and Manh, 1991

A developmental intervention which addresses higher-order levels is more likely to achieve women empowerment than those that focus on lower levels (Wallace and Manh, 1991). The five levels are:

Welfare: This focuses on whether women have equal access to material welfare (income, medical care, etc) as men.

Access: This looks at whether women have equal access to the factors of production as men. This is supported by the provision of equality of opportunities which is possible through the removal of discrimination against women. Discrimination can be removed by administrative and law reforms.

Conscientisation: This is a belief that the sexual division of labour should be fair and acceptable to all parties. This is the basis of gender consciousness and equal participation in the process of women's development.

Participation: This focuses on whether women have equal participation in the decision-making process, policy formulation and related processes. This means that women should be involved in decision making of the community in a proportion that matches their population in the community.

Control: This focuses on the balance of control over the factors of production and distribution systems between men and women. In the presence of this level of equality, neither side dominates.

2.1.4.2.5 Relevant Approach to Current Study

The current study borrows the definition and measure of women empowerment from the Sarah Longwe Women Empowerment Framework. The measure of women empowerment adopted in the study is the control over the household productive resources which is the highest level of equality in Longwe's empowerment framework. The approach was developed in Southern Africa which makes it relevant to the current study.

2.1.5 Migration and Tsholotsho District

Remittances into Tsholotsho have a multiplier effect on its local economy, benefiting not only local recipients and non-recipients but trigger investments inflows from those foreign to the locality. Ncube and Gomez (2015) studied the impact of remittances on Tsolotsho and revealed that the majority of entrepreneurs in Tsholotsho were not locals but strangers who identified opportunities in the local economy arising from remittances. The locals who are non-recipients of remittances are also benefiting as receiving households support for their businesses through increased demand. Ncube and Gomez (2015) went on and argue that migrant remittances support the local economy of Tsholotsho district through sustaining income increases directly or indirectly for receiving and non-receiving households in the like manner. As a result, the Tsholotsho economy provides opportunities for the promotion of microenterprises and employment generation. The current study assumes migrant remittances to be a factor affecting microfinance participants and non-participants in like manner.

2.1.6 Theoretical Framework

To acquire a deeper appreciation of microfinance, it is beneficial to use the approach by Sen due to the reality that, in his remarkable publications, Sen offered a valuable and applicable

background to poverty and how development initiatives can work towards poverty reduction. With the aid of the approach by Sen, the aim of developments should be the expansion of individuals' freedom, that Sen defined in two ways, that is, freedom concerning the opportunities that individuals face (freedom of choice or the capabilities) and the other is about the processes that they command (freedom of processes or the agency). Functioning is being what you desire, for example, being happy, being active in societal life or possessing self-respect (Alkire, 2005; Sen, 1999b). Capability means the ability of a person to attain a functioning (Sen, 1985). Following the approach by Sen, the objective of reducing poverty ought to be the expansion of people's capabilities and the increase in the freedoms or opportunities and choices to acquire desired things (Sen, 1999b). Agency is another core concept of Sen's Capability Approach. According to Sen (1999b), an agent can be defined as somebody who delivers change. In this respect, the agency is of great importance for the assessment of a person's freedom (Alkire, 2005).

Moreover, freedom is another important concept in the Capability Approach. Freedom can be valued for two reasons: opportunity aspect and process aspect. According to Sen (2009), the opportunity side of freedom relates to the ability to realise specific functionings irrespective of the method used whereas the process side of freedom relates to the processes associated with freedom (Sen, 1999b). In other words, it is the process by which things happen (Alkire, 2005). Sen (1999b) managed to identify two kinds of freedom, that is, constitutive freedom as well as instrumental freedom. According to Sen (1999b), constitutive freedom refers to the primary goal of development. He identified freedom from hunger and early death, the opportunity for political participation and freedom of speech as factors that could increase the necessities of life.

However, instrumental freedom refers to the principal means of development (Sen, 1999b). Interestingly, the microfinance programmes can fall under instrumental freedom category as they are widely accepted as the means for poverty reduction to those who are financially excluded.

2.1.6.1 Evaluation of microfinance's efficacy of capability enhancement

To have a deeper understanding of the influence of microfinance in reducing and defeminising poverty, it is worth mentioning that the Capability Approach plays an important role in poverty analysis (Knecht, 2012). In this regard, the basic characteristic of this approach is that it looks at what the person can do effectively and be, that is, in his or her capability. Sen used the Capability Approach to analyse concrete poverty phenomena. He developed ideas for measuring welfare based on the ability to execute actions of interest and also the scope of these actions. Sen managed to label this scope as *"capabilities"*. In the context of poverty analysis, the Capability Approach gives a framework for our understanding of concerns about poverty.

It is crucial to note that the primary aim of microfinance as a development tool is to reduce poverty since microfinance programmes can overcome obstacles that prevent the poor from getting credit needed. It is common knowledge that microfinance plays a vital role in uplifting the poor from extreme poverty by smoothing their consumption or funding their microenterprises. According to Yunus (1999), microfinance programmes are of great importance when it comes to poverty reduction. This necessitates the need for a deeper analysis of whether microfinance contributes to poverty reduction using the Capability Approach. Despite the criticism of microfinance, it is well accepted that microfinance programmes can reduce poverty concerning increasing people's basic capabilities such as education and health. Moreover, microfinance can expand people's freedom to access financial services.

This means that defining poverty as a lack of income is questionable. According to Sen (1999a), poverty is defined as the deficiency of essential capabilities. As noted already, Sen underscored that the primary objective of development intervention tools is to expand a person's capabilities or freedoms and poverty is one of the forms of 'unfreedom'. The adoption of microfinance programmes for poverty reduction through the lens of the approach by Sen can be viewed as a strategy to remove the barriers to freedom; therefore, it increases access to freedoms or basic capabilities. By lending money to poor households, microfinance institutions can create a wider space for the poor to overcome the obstacles to economic freedom. In this context, the evaluation of microfinance effects should not be based on income only but is also based on basic capabilities. Sen mentioned that microfinance can be a powerful tool for poverty reduction. Access to economic assets through microfinance can lead to poverty reduction. In this regard, Sen highlighted that those lifted from poverty had more access to micro-financial products and services than the remnants. Some studies were done to examine microfinance effects.

Existing literature shows many empirical studies that were conducted to examine the association linking microfinance to poverty reduction. Most of the studies concluded that microfinance has the potential for poverty reduction (Bakhtiari, 2006; Gibbons and Meehan, 2002). The issue of microfinance is high on the development agenda nowadays, especially after the United Nations Year of Microcredit in 2005 (Miled and Rejeba, 2015). Nevertheless, the research on the relationship between microfinance and poverty reduction has yielded mixed findings. Concerning the relationship between microfinance and poverty reduction, many studies have postulated a positive correlation between microfinance programmes and consumption expenditure, particularly when loans are borrowed by women (Khandker, 2005; Pitt and Khandker, 1998).

Interestingly, Pitt and Khandker (1998) carried out a study to examine the relationship among microcredit, labour supply and schooling by girls and they found out that microcredit has a positive effect on women's labour supply. Moreover, their findings revealed that participation in the Grameen Bank credit programme has a positive effect on schooling by girls. This shows that microcredit can expand people's capability and agency freedom to economic opportunities. Furthermore, the studies conducted by Khandker (2005), Berhane and Gardebroek (2011) and Imai and Azam (2012) reveal that microfinance has positive effects on consumption. Nonetheless, Hoque (2004) found that the impact of microfinance on consumption is insignificant. Another study on capability and microfinance was conducted by Gertler *et al.* (2003) and they found a positive relationship among microfinance, health and household consumption. However, other studies (Morduch, 1998; Coleman, 1999; Aportela, 1998) have yielded mixed results.

Another study was conducted by Yusuf *et al*. (2009) in Nigeria on informal financial institutions and poverty reduction in the informal sector of Offa town using a case study of Rotating Savings and Credit Associations (ROSCAs) and they found that ROSCAs play an important role in reducing poverty. Moreover, Liton, Sadekin and Muzib (2014) carried out a study on microcredit as a tool for poverty reduction in Bangladesh using secondary data and they found that microcredit has a positive effect on poverty alleviation among rural people. They also recommended that the government should ensure that rural people have access to affordable microcredit. Another study was conducted by Simataa (2013) in Namibia on microfinance and poverty alleviation found that Savings and Credit Associations (SCAs) have positively

contributed to poverty alleviation through improved health, and food status, improved healthcare and education, and enhancement of enterprise training and skills development among women.

The assessment of microfinance towards poverty reduction and defeminisation through the lens of Sen's capability approach means that more emphasis should be placed on the participants and less emphasis should be placed on the means of development. In this respect, microfinance organisations must be in tune with the needs and values of each individual to adjust lending strategies appropriately. By highlighting the association between Sen's Capability Approach and microfinance, the capability approach can provide a deeper understanding of how people can be deprived beyond a lack of material goods. A development approach that looks at the numerous ways in which a person can be deprived can orient programmes towards those ways that enrich a person's agency freedom and well-being freedom to attain the kind of life that they value and have reason to value. Consequently, giving poor people access to microfinance is seen as the right strategy for tackling poverty among women.

In short, as discussed above, Amartya Sen's approach provides valuable and applicable insights for the emerging microfinance towards capability enhancement. This framework does not only highlight the importance of capability enhancement but also reinforces the strong need for enhancing people's freedom and choices. Despite the mixed results related to the nexus between microfinance and capability enhancement, microfinance is well accepted as a distinctive programme for poverty alleviation and for uplifting the poor and needy people through microenterprise development and women empowerment. It is worth mentioning that poverty reduction initiatives should go beyond income by focusing on the enhancement of a person's capabilities. Notably, there are many microfinance initiatives currently developed by both not-

for-profit organisations and the corporate sector to offer financial products and service for people in poverty. Moreover, most of the studies conducted on the nexus between microfinance and capability enhancement reveal that microfinance has a positive effect on capability enhancement. Although microfinance has received much praise as a powerful capability enhancement tool, other scholars remain sceptical about the positive effect of microfinance. Consequently, more studies are needed for greater evidence so that donors, policymakers, government and other stakeholders can make well-informed decisions about the effects of microfinance intervention programmes.

Since the effects of microfinance intervention programmes can be assessed by looking at how they expand people's freedoms through microenterprises development and women empowerment, it is imperative to review theories and approaches to microenterprises and also women empowerment.

2.2 Empirical Review of Literature

This part covers the empirical literature on the association connecting microfinance to women empowerment, the link connecting microfinance to poverty reduction, and the association between microfinance and microenterprises. Several studies were conducted but have yielded mixed results. Given the very mixed results from prior studies, the further scholarly examination is needed to advance our understanding of the connection linking microfinance with women empowerment, microfinance with poverty reduction, microfinance with microenterprises. The following is the empirical evidence related to the above-mentioned variables:

2.2.1 Drivers of adoption of microfinance as a poverty reduction and defeminising tool

Bhoj*et al.* (2013) conducted a study in Uttarakhand to identify the determinants significantly affecting participation in microfinance projects (Dairy Self Help Groups) and assessing the effect of membership on their empowerment. The investigation employed the logit model based on a representative group composed of sixty members and thirty who are not members. Findings show that the individuals' age, level of education, non-farm income source, individual's herd size as well as market distance were variables that significantly influence membership in microfinance projects. The probability of participation in the microfinance project increased with the increase in the individuals' age, individual's level of education and the individual's herd size. The increase in non-farm income decreased the probability of membership in microfinance Dairy Self Help Groups.

A study by Anjugam & Ramasamy (2007) on the determinants of membership in microfinance programmes in Tamil Nadu uses multi-stage purposive and random sampling method before applying the probit model. Results show that the less privileged in society and those without land are more likely to be involved in microfinance programmes. Those with more livestock as well as consumer goods were found to be less likely to participate. In addition, the findings discovered that the individual's age as well as productive assets exerts a strong negative effect on membership. On the other hand, social backwardness, presence of other microcredit programmes and indebtedness were discovered to have a significant positive influence on membership.

Welikhe (2014) investigated the factors that influence women participation in community-based microfinance programmes. The main objective was to examine the effects of socio-cultural and demographic factors on women participation in community-based microfinance programmes at

Catholic Diocese of Eldoret. The study used the survey research design and stratified sampling technique to come up with a sample composed of 74 respondents. Data collection using questionnaires was conducted. The results show a significant association between the Socio-cultural and demographic factors and the women participation in community-based microfinance programmes while the study shows the absence of significant association linking interest rates with women participation in microfinance programmes. The amount of savings was found to be unrelated to participation. The research recommended training and improving awareness of the need for participation in microfinance programmes by women.

A study by Nguyen (2007) analysed the factors determining credit market participation in Vietnam. The findings revealed that household size and agricultural work determine participation. Education and distance to the bank branch did not have a significant impact on participation.

Mohapatra and Sahoo (2016) conducted a study to gain an understanding of the microfinance programme in India's 2 different areas. The study employed stratified random sampling to come up with a sample of 300 households. Interviews as well as focus group discussions were used. Probit regression was applied to investigate the determinants of participation in Self Help Group–Bank Linkage scheme. Findings revealed that the individual, household and environmental characteristics have a positive effect on participation.

Anyiro *et al.* (2014) analysed factors determining women's participation in self-help groups in Abia State of Nigeria. Using the multistage random sampling technique, a sample of 120 women was chosen. The primary data was collected using a structured questionnaire, followed by an analysis using descriptive statistics, Likert scale type and probit regression. Findings show that

membership in SHGs was determined by the number of household members, several years since joining, availability of credit, occupation, type of entrance along with the annual contribution. In addition, the study recommended rotational leadership positions within self-help groups among long-serving members to improve commitment towards group success.

Kangogo, *et al.* (2013) conducted a study in Uasin Gishu County, Kenya, to analyse the determinants affecting participation in microfinance groups. The study employed purposive as well as random sampling methods in choosing a sample. Results show that those with low social status, and with small land sizes are more likely to participate while those with more cattle and consumer goods were discovered to participate less.

A study by Mahadeva (2009) which adopted the probit model in identifying determinants of women membership in microfinance programmes showed that high social status, age and ownership of productive goods have considerable negative effects on membership. In addition, low social status, indebtedness as well as membership in other programmes exerted positive effects on women participation in this programme.

2.2.2 Relationship between microfinance and poverty reduction

Studies exist on the association linking microfinance with poverty reduction. Samer *et al*. (2015) investigated the nexus connecting microfinance to poverty reduction in Malaysia. The researchers aimed to ascertain the effect of Amanah Ikhtiar Malaysia (AIM) microfinance on the household income. They used income as the proxy for poverty. A cross-sectional survey was utilised on a sample comprising 780 clients to collect data from rural and urban districts. The stratified random method was used as the sampling technique. For the researchers to establish the effect of

AIM microfinance, Multinomial Logistic analysis was performed. The findings showed that AIM microfinance has a positive effect on the household income of women borrowers.

A study conducted in Nigeria by Abubakar, Mbasua and Yusuf (2015) examined the relationship between microfinance loans and poverty reduction among women in Gombe Metropolis. The study employed both secondary and primary data. 90 respondents were drawn from a target population of 4917 to form a sample. To determine the connection linking microfinance loans to poverty alleviation, the chi-square test was performed. The results of the study revealed that microfinance has a considerable role in poverty reduction and income generation. The researchers recommended the promotion of more microfinance organisations and the expansion of the existing rural and urban microfinance to reduce women poverty.

Usman (2015) investigated the nexus linking microfinance loans to poverty reduction within Pakistan. The main objective was to investigate microfinance's contribution to poverty reduction. A case study was employed for this study. The researcher designed a close-ended questionnaire to collect primary data. Findings from the study confirmed that microfinance loans have a positive effect on the reduction of the poverty level. The researcher concluded that microfinance can be described as a powerful strategy for reduction of the poverty level and recommended that the size of loans ought to be improved so as to meet borrowing requirements of poor people.

In India, Ravinda and Tiwari (2016) examined the association between SHGs and poverty reduction. Secondary data was used for statistical analysis. The researchers utilised the Rank Correlation analysis to determine the correlation between women empowerment, poverty reduction and SHGs. They found that there is a nexus between SHGs and poverty reduction.

Specifically, they found a high-rank positive correlation between SHGs and poverty reduction. The researchers concluded that SHGs are important tools for poverty alleviation.

A study conducted in Tanzania by Gelan and Nigussie (2016) examined the impact of Savings and Credit Cooperative Societies (SACCOS) on poverty reduction using Mbozi District as a case study. A cross-sectional study on a sample of 160 respondents was conducted. The sample consisted of 80 SACCO's participants and 80 non-participants. The results of Independent Sample T-test analysis showed high statistical differences among the two groups. To determine the influence of SACCOS on poverty reduction, Linear Regression analysis was performed with the assistance of SPSS. The gender of respondent, respondent's age, household size, education level of respondent, the habit of saving, number of training received, the main source of income, membership to SACCOS, loan received, and access to entrepreneurship training were included as independent variables. The findings indicated that SACCOS have a positive and significant influence on income poverty reduction. The study concluded that SACCOS play a key role in improving the conditions of the poor and needy people.

In Ethiopia, Beyene (2018) investigated the impacts of Village Savings and Loan Associations (VSLAs) on poverty reduction in Hawassa city. The aim was to investigate the impacts of women involvement in VSLAs on poverty reduction. The study used mixed methods and employed a sample size of 254 women (127 VSLAs members, and 127 non-members). The Propensity Score Matching (PSM) was used in the study to estimate the effect of women involvement in VSLAs on household income. Results established that women involvement in VSLAs has a statistically significant positive impact on poverty reduction measured by household income. More interestingly, by comparison, findings indicated that women involvement in VSLAs has a

statistically significant positive impact on household health, diet, and children's education. The study recommended that government and NGOs should offer capacity building training for VSLAs members and the conducting of follow-ups with all concerned stakeholders.

Maity and Sarania (2017) investigated the connection between microfinance and poverty reduction in India using SHGs in Bodoland area of Assam. The results from the study indicate a statistically significant positive effect of microfinance on the monthly income of SHG programme members, compared to non-participants. Similarly, Shakina (2017) conducted a study on microfinance influence on rural poverty reduction within the context of Bangladesh. The study intended to establish the effects of microcredit in reducing poverty within Chittagong District with particular focus on Mirsharai, Hathazari and Sitakunda Upazilla. The study adopted a cross-sectional survey and primary data was sourced through a highly structured questionnaire used on a sample composed of 150 respondents (100 women borrowers and 50 non-borrowers). To establish the relationship between microcredit and poverty reduction, the researchers used Chi-Square test and ANOVA as statistical tools. The results of the study established that microcredit has a statistically significant impact on income, dwelling house, expenditure, health, education and decision-making ability of the women borrower household who spent five years as participants compared with the non-borrower. The study further established that microcredit disbursed play a key role in the reduction of poverty level by stimulating income-generating activities and improving the living standard of female borrowers.

In the central region of Ghana, Ampah *et al.* (2017) studied the connection between micro-savings and poverty alleviation. The researchers used explanatory research design and questionnaires were employed in data collection. After using regression analysis to establish the

impact of micro-savings on poverty reduction, results indicated that micro-savings had a relatively weak positive and significant effect on consumption expenditure as an indicator of poverty. However, the findings indicated that micro-savings have a positive and significant impact on the acquisition of business assets and income growth. The study concluded that micro-savings are possibly the most powerful microfinance intervention which leads to poverty reduction as compared to other methods of interventions. The study also recommended that microfinance institutes should strengthen their mobilisation programmes to inspire the informal sector which continues to be unbanked to save.

In addition, Banerjee and Jackson (2017) investigated the connection linking microfinance with poverty reduction in rural Bangladesh and found that microfinance programmes have led to the indebtedness of needy people and exacerbated environmental, social and economic vulnerabilities. The researchers concluded that their results contribute to budding literature related to the effects of social capital on capabilities associated with entrepreneurship.

In another study, Kasili, Ahmad and Lim (2015) analysed the role played by microfinance in reducing poverty in Nigeria. The researchers used primary data from 1134 respondents (loan recipients and non-recipient) collected through a structured questionnaire. Poverty reduction was considered as a binary endogenous variable: Y=1, when the respondent is poor and Y=0, otherwise. The Binary Logistic Regression model captured eight independent variables: microfinance, education level, male, age, marital status, health standard, living standing, and household size. Both Descriptive Statistics and Binary Logistic Regression analyses were performed. The study confirmed that participation impacted positively on recipients which led to poverty alleviation. The study recommended that the government should create a conducive

environment which promotes the effectiveness of microfinance operations. The study also recommended microfinance organisations to come up with flexible conditions for accessibility and create more awareness programmes related to their operations.

As noted above, it appears that previous studies have yielded conflicting results regarding the association link between microfinance programmes and capability enhancement. Most studies show a positive connection linking microfinance programmes to capability enhancement (Beyene, 2018; Ampah, 2017; Maity and Sarania, 2017; Shakina, 2017; Gelan and Nigussie, 2016; Ravindra and Tiwari; 2016; Abubakar *et al.*., 2015; Kasili, 2015; Samer *et al.*., 2015; Usman, 2015) while other studies (Banerjee and Jackson, 2017; Karim, 2011; Roodman, 2011) show a negative effect on capability enhancement. Given the inconclusive empirical evidence, more research is needed to advance our knowledge of the association connecting microfinance to poverty reduction.

2.2.3 The relationship between microfinance and microenterprise among women

Many previous studies focused on determining the relationship between microfinance and microenterprise. Naeem *et al.* (2015) sought out to analyse the impact of microfinance on microenterprises of women using the Quetta District in Pakistan as a case study. The primary objective was to explore the microfinance effect on women microenterprises in the district. The study employed the survey design and utilised primary data from 80 respondents (60 female loan beneficiaries, and 20 new customers of BRAC in Quetta district) collected through structured interviews. The study employed the stratified random sampling method for the selection of participants from the two groups. The findings established that microfinance has a positive effect

on microenterprises creation. The study further established a positive microfinance effect on average fixed assets, average net working capital, and creditworthiness of the loan beneficiaries. The study recommended microfinance institutes to offer entrepreneurial skills training before approval of the credit facilities for business start-up or expansion.

In Sri Lanka, Bernard *et al*. (2017) performed an analysis of the effect of microfinance services on women entrepreneurial success. From a sample of 464 women who were beneficiaries of microfinance services from Non-Bank Financial Institutions (NBFIs), structured questionnaires were employed to gather data from the respondents. Variables were measured using a Likert scale. Regression was performed to establish the influence of microfinance on entrepreneurial accomplishment and ANOVA was performed to test hypotheses. Results exposed that microcredit and micro-savings had a positive nexus with the entrepreneurial success of women. However, the findings indicated that microinsurance has a negative association with the entrepreneurial success of women.

Atmadja *et al*. (2016) investigated the effect of microfinance on the performance of microenterprise in Indonesia. The study intended to establish the association linking microfinance to the performance of micro-enterprises owned by women. The study adopted the survey research design and the Ordered Probit technique was applied to estimate the impact of microfinance on the performance of women-owned microenterprises. The results showed a negative association between microfinance and performance. However, the study further showed positive relationships between performance-social capital and performance-human capital. Atmadja, Su and Sharma (2016) concluded that microfinance is not advisable for improving the performance

of enterprises if it does not increase returns. The study recommended the involvement of recipients in the design of credit facilities.

A study conducted in Ghana by Samuel (2017) investigated the association linking microfinance to microenterprises to establish the nexus between the provision of microfinance services and the development of microenterprise. The results revealed a significant nexus between the provision of microfinance services and positive outcomes of microenterprise projects. In another similar study conducted by Wekesa, Makokha and Makokha (2017), the relationship between microfinance services and microenterprises performance in Kenya was examined. The researchers employed survey design and collected primary data from 45 respondents through questionnaires. The Multiple Regression Model was employed to determine the influence of microfinance on the performance of microenterprises. The outcome showed that microfinance services contribute significantly to microenterprise performance. Specifically, the outcome confirmed that saving facilities had statistically significant positive effects on microenterprise performance. The study recommended microfinance organisations to reinforce or restructure their operations in a manner that promotes efficient and effective service delivery to micro-entrepreneurs.

A recent study conducted by Atmadja *et al*. (2018) examined the nexus between microfinance and the performance of microenterprise in Indonesia. The study employed survey research design and primary data was gathered from 556 respondents across five microcredit providers in Surabaya city. The Ordered Probit technique was applied to estimate the effect of microfinance on the performance of microenterprises. The results showed a negative association connecting microfinance to microenterprise performance. The study concluded that microfinance may not

matter for the performance of microenterprise in Indonesia. The study recommended policymakers to consider non-monetary factors like money separation, spousal inclusion, and human capital as key factors for enhancing enterprise performance with less concentration on microcredit.

Attanasio *et al*. (2015) investigated the microfinance effects in Mongolia using a randomised field experiment. The results of the study confirmed a positive impact of microcredit on female entrepreneurship. In a similar study, Chowdhury, Amin and Farah (2016) investigated to investigate the association between microcredit and women entrepreneurship in Bangladesh. The study utilised secondary data from Household income and Expenditure Survey (HIES) 2010 dataset which covers 12 240 households. To achieve the objective, descriptive statistics and multivariate techniques were employed. Given the endogeneity in the microcredit programme involvement of women, the study employed an Instrument Variables technique. After the endogeneity adjustment, the study findings indicated a statistically significant positive microcredit impact on women entrepreneurship. The study further indicated a positive effect of microcredit on men entrepreneurship.

A study conducted by Mahmood *et al.* (2016) focused on examining the impact of microfinance on income generation and living standards in Pakistan. The researchers employed survey design and collected data from four hundred respondents. The Linear Regression model was applied to determine the association connecting microfinance to income generation. Findings of the study indicated that microcredit has a positive effect on income generation projects and poor people's consumption level. The findings further revealed that positive effect on microfinance on

productive activities is higher than the consumption. The study concluded that microfinance credit contributes more to income-generating projects than just consumption.

Eusebio *et al*. (2016) studied microcredit effects on family farming agricultural business in Brazil. The study intended to analyse the impact of the Program to Support Family Farming (PRONAF) microcredit programme on small farm agricultural production. The study utilised secondary data covering 5.2 million small farmers in Brazil. Both Multiple Linear Regression analysis and Propensity Score Matching were applied for data analyses. The results from regression analysis confirmed that the access to the PRONAF microcredit programme has a statistically significant positive effect on the production value of the family farming agricultural business. The Propensity Score Matching results of the study indicated similar evidence to those obtained from multiple regression analysis. The study concluded that PRONAF microcredit is positively associated with production values of family farming.

A study carried out by Wijewardana and Dedunu (2017) focuses on examining the impact of microfinance on the performance of female entrepreneurs in Sri Lanka. A sample size of two hundred respondents was used in this study. They collected primary data through close-ended questionnaires and regression analysis was used to analyse collected data. The results of the study indicated that repayment procedure, accessibility of loans and non-financial services had statistically significant effects on the performance of women entrepreneurs.

Rathiranee and Semasinghe (2016) carried out an investigation in Sri Lanka on microfinance and performance of women entrepreneurs. The study intended to investigate the effect of savings, credit, and training on the performance of women entrepreneurs. The performance of the entrepreneurship as a dependent variable was measured by survival, income or profit, and

growth. The study employed data gathered through highly structured questionnaires and in-depth interviews. The regression analysis was performed in SPSS to determine the effects of savings, credit, and credit on business performance. The results of the study confirmed statistically significant positive effects of microfinance factors on business performance. The study suggested that the monitoring and skill facilities play a vital role when it comes to survival and growth of an enterprise.

A recent study done by Akingunola *et al*. (2018) analysed the association linking microfinance to microenterprises in Nigeria. The researchers adopted both purposive and stratified sampling techniques to select 408 respondents. To estimate the impact of microfinance on small enterprises, the researchers performed a simple regression analysis. The research findings exposed a negative nexus between intermediary financial services (credit disbursement) and micro and small enterprises. In addition, the study results exposed a positive association linking microcredit to business expansion. The study concluded that micro-enterprises can enhance and maintain the business due to the activities of microfinance institutions.

A mixed-methods study carried out in Sierra Leone by Ngegba, Kassoh and Sesay (2016) analysed the impact of VSLA on-farm productivity. The researchers used a sample of 350 farmers (250 VSLA members, and 100 non-members). The data was gathered from respondents through highly structured questionnaires. The results of the study showed that VSLA positively impacted farmer's income level, saving capacity, storage facility and cultivation of different crop varieties. The study recommended the government and NGOs to effectively support VSLA to attain food security.

In short, it has been noted that previous studies have yielded conflicting results on the association linking microfinance programmes to microenterprises among women. Notably, most studies show the positive impact of microfinance programmes on microenterprises among women (Chowdhury *et al*., 2016; Eusebio *et al*., 2016; Mahmood *et al*., 2016; Ngegba *et al*.., 2016; Rathiranee and Semasinghe, 2016; Attanasio *et al*., 2015; Naeem *et al*., 2015) while other studies (Atmadja *et al*., 2018; Bernard *et al*., 2017; Atmadje *et al*., 2016) show that microfinance harms microenterprises among women. Given the conflicting empirical evidence, more research is needed to advance the understanding of the relationship between microfinance and capability enhancement through microenterprises.

2.2.4 The association linking microfinance with women empowerment

Previous studies on the association connecting microfinance to women empowerment have yielded mixed results. Rahman, Khanam and Nghiem (2017) conducted an investigation in Bangladesh on the effect of microcredit concerning women empowerment. They utilised a survey design for the collection of primary data from households in the four districts (Chandpur, Comilla, Narshingdi, and Narayangonj) in rural Bangladesh. Notably, a total of 364 households from 20 villages in the four districts were randomly selected. To determine the effect of microfinance on women empowerment, they adopted the logistic regression model. They found a positive association linking microfinance with women empowerment and concluded that microfinance is regarded as a strong tool in empowering women. However, their study did not consider control groups and baseline data. Based on findings, they recommended stakeholders to embrace appropriate policies that encourage women to participate in the development projects

and microfinance initiatives. The strengths of the study by Rahman *et al*., (2017) include the adoption of the fixed-effects estimator as a strategy to mitigate the potential selection biases, the use of a large sample (364 households) as a way to ensure robust statistical inferences, and the use of most updated primary data.

In India, Kapila *et al*. (2016) analysed the influence of microcredit in empowering women in the Punjab State. Their investigation aimed to analyse the influence of microcredit by adopting Self Help Groups (SHGs) on women empowerment. Primary data was gathered from 424 people (318 members and 106 leaders of SHGs) from rural areas of Punjab in India using questionnaires and personal interviews. The variables were measured by scores ranging from one to five and then summed up into an aggregate index. In the case of the dependent variable, an individual with a high index score of empowerment was regarded to be more empowered as compared to an individual with a low index score of empowerment. However, secondary data was extracted from numerous published documents of central and state government. To assess the effect of microcredit concerning women empowerment, the collected data were examined using a linear regression model. They found a positive association between microcredit and women empowerment. This means that an increase in women mobilisation towards SHGs will result in women empowerment. They concluded that microcredit has considerably contributed towards women empowerment. Strengths of their study include the employment of secondary as well as primary data that ensures data triangulation and the adoption of the linear regression model for robust statistical inferences. However, the linear regression models adopted by Kapila *et al*. (2016) consider only one independent variable, namely, microcredit.

Another study on the association linking microcredit programme with women empowerment was undertaken in Bangladesh by Hossain *et al*. (2016). Six leading microfinance institutions and non-governmental organisations which focussed on microcredit programmes were included in their study. A sample of 406 microcredit-receivers was randomly selected from 26 villages in eight districts of Bangladesh, namely, Sherpur, Netrokona, Mymensingh, Sylhet, Lalmonirhat, Dhaka, Narsingdi, and Kishoregonj. Women empowerment as a dependent variable was measured as a dichotomous variable, that is, Y=1, if there is a positive change in women empowerment and Y=0, otherwise. By utilising the binary logistic regression model, they found a positive link connecting microcredit to women empowerment. This means that the change in microcredit had positive nexus with the perceived change in women's empowerment.

However, the same study by Hossain *et al*., (2016), in multinomial logistic regression analysis, found microcredit to be negatively related to women empowerment. This means that the change in microcredit harms estimated change in women empowerment situation. This contradiction necessitates a further scholarly examination of the nexus between microcredit and women empowerment conceivably at different component levels of women empowerment.

In Ghana, Addai (2017) investigated to analyse the nexus between microfinance and women empowerment. Purposive sampling was adopted and a sample comprised of 500 Ghanaian women from Greater Accra, Ashanti, Eastern, Central and Western regions of Ghana was adopted. Primary data was gathered using a highly structured questionnaire. The primary data about economic empowerment was collected in form of variables such as access to credit, women's financial control, increased household ownership of assets and properties, and contribution to family support. In addition, primary data about social empowerment was gathered

in the form of variables such as the ability to make childbearing decisions, commitment to educating daughters, control over marriage timing and spouse selection, protection from violence, as well as participation in the domestic decision-making process. In his study, both STATA and SPSS were utilised in data analysis. The Ordered Probit Model was used as an estimation model to investigate the effect of microfinance services on the empowerment of Ghanaian women. He found a positive association linking microfinance with women empowerment for both social and economic empowerment. The strengths of the investigation by Addai (2017) are that it incorporated both economic as well as social empowerment as well as utilisation of a large sample (500 people) which ensured robust statistical inferences. Moreover, the respondents' age, educational as well as marital statuses were used as control variables. However, this study adopted non-probability sampling techniques which are more prone to sample selection errors.

In another study by Gangadhar and Malyadri (2015), the association linking microfinance to women empowerment in India was examined using cross-sectional research. A sample size of 215 women who were associated with SHGs in the State of Andhra Pradesh was used. They used a structured questionnaire in sourcing primary data. To statistically analyse data, exploratory factor analysis was performed to test the hypotheses. They found microfinance to be a strong tool in enhancing women empowerment concerning indicators such as legal awareness and economic decision making within the household.

A recent study undertaken by Akhter *et al*. (2018) examined the effect of microcredit schemes in empowering women in rural Bangladesh. The researchers adopted a field survey of six villages (Basil, Ghatail, Madhupur, Mirzapar, Kalihati, and Nagarpur) in Tangail district of Bangladesh. The female respondents who were using microfinance services as from 2004 to 2014 were

targeted. On sample 324 rural women borrowers, highly-structured questionnaires were used as data collection instruments. The questions were set on a 1 to 5 measurement scale. To analyse the collected data, SPSS software was utilised. Moreover, Logit Regression analysis was performed to analyse the effect of microcredit schemes on the empowerment of women. The results of the study confirmed a statistically positive influence microcredit on the empowerment of women. The researchers concluded that microcredit schemes are successful in empowering women. The strength of the study by Akhter *et al*. (2018) is based on the fact that the researchers managed to utilise the latest data collected through a field survey. However, the researchers did not highlight the sampling technique that was used in their study.

A study conducted by Wijewardana and Dedunu (2017) focused on examining the association linking microfinance to the empowerment of female entrepreneurs in Sri Lanka. A sample size of two hundred respondents was used in this study. They collected primary data through close-ended questionnaires and regression analysis was employed to examine collected data. The results of the study indicated that microfinance has a positive and significant effect on women empowerment.

Gelan and Nigussie (2016) investigated women empowerment through microfinance services in Ethiopia. They employed secondary as well as primary data. The researchers used the stratified sampling method to draw sample subjects. The study used Ordered Logit Model to analyse data. The empowerment index was used as the proxy for women empowerment. The independent variables used in the model are the level of formal education, years of membership in the microfinance institution, the cumulative amount of loan, marital status, achievement motivation, contact with development agent, level of aspiration, distance from district town, and years of

experience in income generation. The results confirmed that years of membership in the microfinance institution, contact with development agent, and years of experience in income generation have a positive effect on women empowerment.

In Ethiopia, Alemu *et al*. (2018) investigated the relationship existing between women SHG membership and empowerment of women in Chencha District. The researchers employed a cross-sectional survey strategy among non-members of SHG and SHG members. They used a total sample of 192 couples (94 SHG members, and 98 non-members). The researchers collected primary data using questionnaires and focus group discussions. They utilised Propensity Score Matching (PSM) to determine the impact of women SHG membership on women empowerment. The findings indicated that SHG membership influences women empowerment positively. The researchers concluded that women SHG membership effectively enhances women empowerment at the community level. The researchers suggested that SHGs is considered to be a powerful tool which offers an effective room for women to raise awareness and share information about their rights.

Karlan *et al*. (2017) conducted a study on savings groups' effects on poor people's lives with a particular focus on developing countries, namely, Malawi, Ghana, and Uganda. The researchers carried out a randomised assessment of Village Savings and Loans Association (VSLA) scheme in Malawi, Ghana, and Uganda using a sample of 561 clusters (282 clusters that participated in the VSLA and 279 non-participants). The independent ordinary least squares regression analysis was performed. The results revealed that community-based savings groups result in the enhancement of women's empowerment and microenterprise activity.

The mixed-methods study by Rani and Yadeta (2016) examined the empowerment of rural women through microfinance in Dendi District of Ethiopia. The researchers collected primary data from 142 households by utilising a systematic random sampling method. For data collection, they employed semi-structured questionnaires, interview guides, and focus group discussions. Binary Logit Regression analysis was performed to estimate the effects of microfinance on the empowerment of rural women. The researchers considered the dependent variable (women empowerment) as a dummy: Y=1 if the woman is assumed to be empowered and Y=0, otherwise. The results confirmed that educational status, age, mobility, utilisation of loan, and mobility had positive and significant effects on the empowerment of women. They concluded that women participation in rural saving and credit cooperative had positive effects on the empowerment of women.

The mixed-methods systematic review by Brody *et al*. (2017) studied the influence of women's SHGs on women's economic, psychological, political, and social empowerment. The researchers found that economic SHGs for women have positive impacts on political and economic empowerment, women's control over family planning, women's mobility. The qualitative results also revealed that the positive impacts of SHGs on women empowerment run through mechanisms such as familiarity in handling money, social network, solidarity, respect from other community members, and independence in financial decision-making. The strength of the investigation was that the triangulation of findings was assured by complementing quantitative findings with qualitative findings.

Nandhini *et al*. (2017) investigated women empowerment resulting from SHGs in Coimbatore District. To find the effect of SHGs on women empowerment, researchers adopted a descriptive

research design. Questionnaires were employed in collecting primary data from 150 respondents. To examine the link between SHGs and women empowerment, ANOVA was performed. The results indicated a significant difference between women empowerment after joining SHGs. The researchers concluded that initiatives of SHGs are quite effective towards women empowerment.

Fernando and Azhagaiah (2015) studied women empowerment through SHGs in India. The researchers used the cross-sectional survey as well as structured interviews to collect primary data from one hundred respondents. To examine the effect of becoming a participant in the SHG when it comes to economic empowerment, the researchers employed a Wilcoxon signed-rank test. The findings proved that a positive link connecting SHGs to economic empowerment of SHGs women members existed.

In India, Ravinda and Tiwari (2016) examined the association between SHGs and women empowerment. Secondary data was used for statistical analysis. The researchers utilised the Rank Correlation analysis to determine the correlation between SHGs and women empowerment. They found that there is a nexus between SHGs and women empowerment. Specifically, they found a high-rank positive correlation between SHGs and women empowerment (0.70). The researchers concluded that SHGs are a better tool for women empowerment.

In short, this section has covered the empirical literature on the association connecting microfinance with women empowerment. Based on the above critical review of the empirical literature, it has been noted that prior studies have yielded mixed results. Several studies show a positive association linking microfinance to women empowerment (Akhter *et al*., 2018; Alemu *et al*., 2018; Rahman *et al*., 2017; Addai, 2017; Wijewardana and Dedunu, 2017; Brody *et al*., 2017; Karlan *et al*., 2017); Nandhini *et al*., 2017; Kapila *et al*., 2016; Rani and Yadeta, 2016; Loth and

Jeckoniah, 2015; Gelan and Nigussie, 2016; Fernando and Azhagaiah, 2015) while others (Hossain *et al*., 2016) reveal a negative association linking microfinance to women empowerment. Given the inconsistent results from prior studies, further scholarly examination is needed to advance the appreciation of the association between microfinance and women empowerment.

2.3 Chapter Summary

Chapter 2 has presented a critical evaluation of the literature related to research variables under study. It has been noted that previous studies yielded conflicting results. Several studies depict the positive effect of microfinance programmes on capability enhancement. Nonetheless, a few studies find a negative microfinance effect on capability enhancement. This state of affairs may be due to different research contexts associated with different socio-economic and cultural settings. Given the contradictory results, it is justifiable to analyse microfinance impact on capability enhancement. Consequently, it is of great importance to analyse the association connecting microfinance programmes to capability enhancement for the benefit of scholars, policymakers and development practitioners. Unfortunately, it appears from the literature that there are limited studies conducted in Zimbabwe which capture the effects of microfinance programmes on capability enhancement. To fill this literature gap, therefore, it is vital to evaluate the link connecting microfinance with capability enhancement since the "one-size-fits-all" approach must be taken with caution. The next chapter presents the research methodology.

Chapter 3

METHODOLOGY

3.0 Introduction

How research is done can best be understood by looking at the research philosophy subscribed to, the strategy used and instruments employed in an attempt to achieve a goal - the research objective and the zeal to seek answers to an issue - the research problem. Chapter 3 aims at discussing the research philosophies and the strategy adopted. It presents the research design, studied area and methods of coming up with a sample and data. It also elaborates on how the data is going to be analysed.

3.1 Research Philosophy

It is important to define the research philosophy. It refers to an understanding of how data on a situation can be collected, analysed, as well as utilised. Research philosophy is characterised by the concepts of ontology, epistemology and methodology. Taylor and Edgar (1999) linked the three concepts and asserted that the view on the nature of the world (ontology) held by a researcher will influence the view on the nature of knowledge in the world (epistemology) which also affect the researcher's view on how that knowledge may be drawn (methodology).

Various philosophies are included in epistemology (that which is understood as true) and doxology (that which is viewed as true). Therefore, science aims at converting what is viewed as true into what is understood as true. According to Gallier (1991), there are two prominent philosophies in the scientific tradition of the West, that is, positivism and interpretivism (antipositivism).

3.1.1 Positivist philosophy

Positivism assumes a static, observable reality which can be depicted objectively without interfering with the situation under the study (Levin, 1988). Lincoln and Guba (1994) argue that positivism is anchored on the principles of ontology, espinology and axiology. Ontology assumes that reality is independent of human influence and anything else is false. Espinology assumes a correlation between object and subject of research. Axiology assumes that facts and values are independent of each other.

3.1.2 Interpretivism

Adler and Adler (2005) argue that interpretivism is based on the day to day experiences, interests and experimental learning of those under study. In addition, Adler and Adler (2005) state that interpretivism rejects the positivist view that meaning exists in the world independent from consciousness. Under interpretivism, the researcher becomes integrated into the social setting he/she is researching on. Myers (2008) outlines the beliefs on which the interpretivism is based, namely, that reality is subjective and attached to people's experiences and traditional knowledge.

Table 5: Philosophical Paradigms

Assumptions	Positivism	Interpretivism
Nature of reality	Objective, tangible, single	Socially constructed, multiple
Goal of research	Explanation, strong prediction	Understanding, weak prediction
Focus of interest	What is general, average and representative	What is specific, unique and deviant
Knowledge generated	Laws	Absolute (time, context, and value free) meanings

Source: Ncube (2017)

3.1.3 The Philosophy adopted

The current study adopts positivism research paradigm. The study will rely on quantitative observations that will be used in statistical analysis. Table 6 below outlines the main thrust of the study.

Table 6: Research Philosophy

Ontology	Epistemology	Axiology	Typical Methods
-One true reality -Researcher is independent of the study.	-observable and facts which can be quantified.	-an objective standing is adopted.	-Quantitative analysis.

3.2 Research Approach

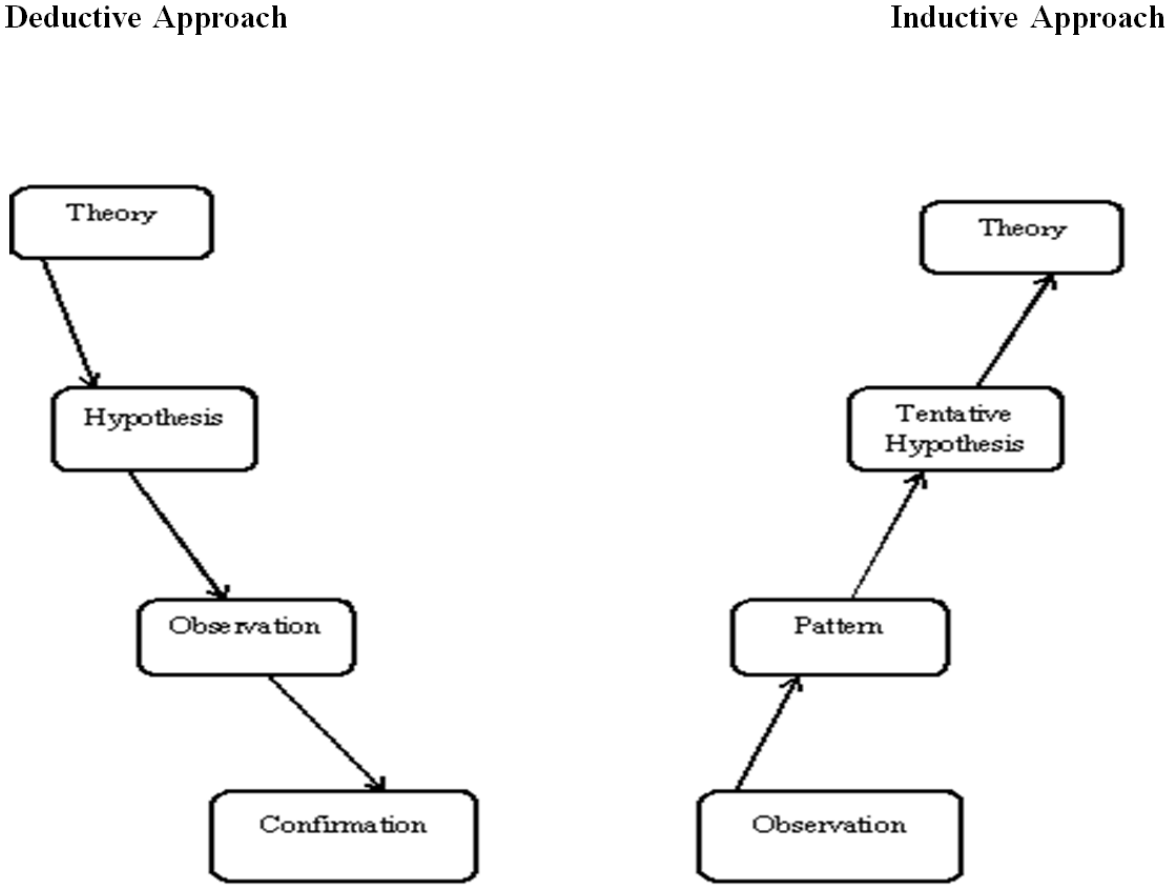
To effectively undertake the current study following the positivism research philosophy, it was deemed necessary to follow the accurate research approach, that is, the deductive research approach. It is widely accepted that developmental researchers must pay considerable attention to research approach as a way to ensure the rigour of the research methodologies. The research approach is a predetermined course of action that provides direction for a study to be undertaken efficiently and systematically (Creswell, 2009). It is worth mentioning that following the correct research approach permits the researcher to define and apply methodologies effectively.

In the context of development research, two research approaches are common; these are the deductive approach as well as the inductive approach. The two approaches are different in the sense that the deductive approach is positivist while the inductive is interpretivist (Saunder *et al*.,

2009). Given the difference between the two approaches, the researcher needed to focus on the accurate approach to ensure the rigour of methodology used. In particular, the deductive approach mainly focuses on the formulation of a hypothesis to address the research problem of interest to the researcher and tests out the hypothesis based on empirical observation whereas the inductive approach focuses on analysing specific issues in a generalised manner (Burney, 2008; Locke, 2007; Nola & Sankey, 2007).

The following Figure 2 shows the different steps involved in deductive and inductive research approach:

Figure 4: Different steps of deductive and inductive research approach



Source: Burney (2008)

As shown in Figure above, there is a difference in steps that are involved in the two approaches. The steps for the deductive research approach are pre-determined theory, formulation of hypothesis, observation, and confirmation. However, the steps for the inductive approach are observing, pattern identification, hypothesis formulation as well as theory building. It is crucial to note that these research approaches can be perfectly adapted in the same study to complement each other (Creswell, 2009). In the current study, the main research approach adopted by the

researcher is the deductive research approach which is perfectly associated with positivism research approach. Nonetheless, to ensure triangulation in this study, the researcher also utilised the inductive approach in some places. The following section covers the deductive approach and its justification for this study.

3.2.1 Deductive Approach to Research

This study mainly employed the deductive research approach. The deductive researcher moves from general to specific, that is, from theory to hypothesis, and to data that can contradict or add to the theory. Indeed, the deductive researcher believes in a single reality and separates himself or herself from research elements (Onwuegbuzie and Leech, 2005). Accordingly, the deductive researcher believes in objectivity (Onwuegbuzie and Leech, 2005). As already highlighted in the above section, the researcher adopted the deductive research approach to effectively determine the relationship between the variables under the study.

Due to the quantitative nature of the objectives, the adoption of the deductive research approach was justified. With this in mind, the deductive research approach permitted the study to address guiding objectives through the determination of the relationships among variables under the study. In this quantitative research, the deductive approach allows the researcher to deductively search for sufficient empirical evidence to either accept or to reject the hypotheses. In this regard, the researcher focused on assessing cause-effect relationships among variables under study in a manner that ensures effective attainment of objectives.

Moreover, the approach was adopted as it permits the use of statistical analysis to establish the relationships among variables. In quantitative research, it is necessary to collect and analyse data

using quantitative strategies for generalisation of sample findings to the population (Trochim, 2006). In this study, the collected data from a sample of 200 respondents were analysed using inferential statistics. With the deductive research approach, the researcher can make conclusions based on evidence, logic, and argument (Trochim, 2006). It is worth mentioning that the deductive research approach allowed the researcher to statistically analyse the collected data to determine the relationships among variables under study.

3.3 Research Design

A research design is a blueprint for a study (Kothari, 2004). The study used an ex-post-facto design which studies variables that are beyond the researcher's direct control since they have already occurred (Kerlinger, 1964). Ex-post-facto was adopted because the variables presumably had already happened and there existed no opportunity to influence any variable.

The research design can also be said to be a cross-sectional study. It is a one-shot study under which data was collected once. The current study is cross-sectional both in the study population and the time of the investigation.

3.4 Study Area

The study was carried out in Tsholotsho District in Matabeleland North Province. It is found about 64 kilometres from Nyamandlovu and 114 kilometres from Bulawayo. In 2012, Tsholotsho District had 115 119 individuals. Agriculture is the fundamental source of livelihood in the Tsholotsho area and is a region which is inclined to streak surges and serious dry seasons. The soils in the whole area are not good for crops except for the dark earth near Gwayi River.

However, the soil in Tsholotsho is conducive for animal husbandry through investments in water and disease avoidance are a requirement. Tsholotsho is characterised by many female-headed and child-headed households due to the enormous migration of individuals to neighbouring countries. Many people in the district engage in illegal cross border trading. Tsholotsho was a good choice as an area of study because of its active microfinance groups and it has the highest number of members as revealed by ORAP, the non-governmental organisation promoting microfinance in the region.

3.5 Targeted Population

Population refers to the whole list of items or people under investigation (Moses *et al*., 2012). The target population for the study was 2 233 women under ORAP's Amalima programme. As indicated by ORAP, Tsholotsho had 246 VS & L groups composed of 227 men as well as 2 233 women at the period of investigation.

3.6 Sampling and data collection methods

(i) Sampling design

The study adopted a simple random sampling design. Sharma (2017) defines it as a sampling design technique under which all items or people in the population stand equal chances to be in the representative group. The main benefit of this technique is that it is fair as it gives equal opportunities for being selected to all members. Equal chances make the sample drawn a good representative of the population. Because of the representativeness of such samples, it is possible to generalise the results of simple random samples to cover the whole population. However,

simple random sampling has its limitation, the major one being its need for a whole list of items or people in the population (Singh, 2015).

Since the complete and up-to-date list of all participants in the district was available at Amalima, it was possible to employ simple random sampling. Therefore, the study adopted a simple random sampling design.

(ii) Size of the Sample

The size of the sample was calculated by adopting Yamane's approach (Yamane, 1967). Yamane's approach uses the following formulae:

$$n = \frac{N}{1 + N(e)^2}$$

Where n = size of the sample, N= population size, e= level of precision

The investigation used a population figure of 2 233, VS & L participants in Tsholotsho District and assuming a 10% level of precision, the following sample size was obtained:

$$\begin{aligned} n &= \frac{N}{1 + N(e)^2} \\ &= \frac{2233}{1 + 2233(0.10)^2} \\ &= 100 \ (\textit{rounded to the nearest } 10\textit{th}) \end{aligned}$$

By employing Yamane's (1967) approach the sample size was 100 individuals. The researcher looked for the same number of non-participants.

3.7 Data Collection

Data is defined as raw information assembled for investigation (Bernard, 2002). The researcher used primary data collected from ORAP's microfinance groups' members as well as non-members. The researcher was given a list of all VS & L participants in Tsholotsho District. Interviews were conducted with Amalima field agents, participants and non-participants of VS & L Groups.

In the end, a structured questionnaire was employed by the researcher to obtain data from microfinance groups' members and non-members. The questionnaire was compiled with the expectation of getting quantifiable data on the efficacy of VS & L as a tool to reduce and defeminise poverty in Tsholotsho District. The advantage of a questionnaire as a data collection instrument is that it permits respondents to consider their responses before filling in the spaces provided in the document.

3.7.1 Criteria for Good Questionnaire

According to Taherdoost (2016), the quality of a study is based on the reliability and validity of data collection instruments. It is very crucial to consider reliability as well as the validity of data before and after undertaking research. Ghauri and Gronhaug (2005) reveal that validity shows the extent to which collected data capture the targeted area being studied. In other words, validity refers to measuring what should be measured (Field, 2005). However, reliability is all about repeatability (Taherdoost, 2016). In other words, any test is considered reliable provided the same outcome can be obtained by it after a repeat measurement without changing the conditions. Taherdoost (2016) argues that reliability is not sufficient unless it is done alongside validity.

3.7.1.1 Validity

Content Validity Ratio (CVR) was adopted for the study. Boudreau *et al*. (2004) defined content validity as a measure of the extent the questionnaire depicts content population. In conducting content validity, Taherdoost (2016) outlines the following steps:

1. An exhaustive review of the literature to come up with relevant items.
2. Assessment of each item in the questionnaire as unnecessary, useful but not important or important. The assessment is done by consulting experts in the same field of research.

3. For each item in the questionnaire a CVR is then calculated. Lawshe (1975) informs that CVR is a measure of agreement among panellists who ranked a specific component as important. The calculation of CVR is as follows:

$$CVR = \frac{n_e - (\frac{N}{2})}{\frac{N}{2}}$$

Where it is the number of panellists who rated a component as important

N is the aggregate number of panellists.

1. Items/components that are not significant at 5% are dropped. Minimum CVR at 5% critical level was outlined by Lawshe (1975) as follows:

Table 7: Minimum CVR values at 5% level of significant

Number of Panels	Minimum Value
5	0.99
6	0.99
7	0.99
8	0.75
9	0.78
10	0.62

Source: Lawshe (1975)

3.7.1.2 Pilot Study and Reliability of Questionnaire

After the validation process, questionnaires were issued to 20 respondents (10 participants and 10 non-participants). Connelly (2008) argued that the sample for a pilot study should be 10% of the sample size. In addition, many scholars claim that the minimum number for a pilot study is 10 (Saunders et. al, 2016). As a result, 20 respondents were randomly selected as the sample for the pilot study.

To measure reliability, Cronbach's alpha was adopted. It is the most popular measure of a questionnaire's reliability. Cronbach's alpha measures the internal consistency of a questionnaire, that is, the extent of association among items which measure a common aspect. Cronbach's alpha is calculated as a function of

$$\alpha = \frac{N \cdot \bar{c}}{\bar{v} + (N-1) \cdot \bar{c}}$$

Where α = Cronbach

N = the total of items

$\bar{c}$ = mean covariance between paired items

$\bar{v}$ = mean-variance

Hinton *et al*. (2004) proposed four groups for reliability comprising of excellent (0.9 and above), high (between 0.7 and 0.9), moderate (between 0.5 and 0.7) and low (0.5 and less).

3.8 Analytical Framework

The research was directed by research objectives and questions. Data analysis was done using SPSS and E-views software packages. Below is the objective analysis:

Table 8: Objectives Analysis

Research Objectives	**Research Questions**	**Analysis Methods**
To investigate drivers of adoption of microfinance by women as a tool for capability enhancement among women in Tsholotsho District.	Which factors drive adoption of microfinance for capability enhancement by women in Tsholotsho District?	Logit Model

To analyse the impact of microfinance on capability enhancement among women through microenterprise development in Tsholotsho District.	What is the impact of microfinance on women's capabilities as represented by microenterprise development in Tsholotsho District?	Logit Model
To analyse the perceived impact of microfinance on women empowerment in Tsholotsho District.	What are the factors determining the perceived impact of microfinance on women empowerment among participants in Tsholotsho District?	Tobit Model

3.9 Econometric Analysis

An econometric analysis of the capability enhancement effects of microfinance among women was conducted using the logit model and the Tobit model. Capabilities are latent variables which cannot be directly observed and measured. However, functionings can be measured. The two broad variables representing capabilities in this study are women microentrepreneurship and women empowerment. Women empowerment is a capability enhancement process for women (Bhattacharya and Banerjee (2012).

Some scholars identify health, knowledge and autonomy as central capabilities for women empowerment. In this study, several functionings are considered, namely, income, savings, amount of Household assets, amount of Productive assets, employment opportunities, power of decision making, confidence to face problems, better awareness, knowledge about banking

operations, social status, level of education for children, nutrient and health of household, employability skills and participation in community activities. The study investigated what respondents believe about the impact of microfinance on women empowerment. A perceived impact on each of the functionings is ranked on a Likert scale ranging from 1 to 5. As a result, the study conducted descriptive statistics, namely, finding the central tendency which implies what most respondents believe as well as the spread/dispersion of the responses i.e how strongly respondents agree with each other. Since the Likert Scale produces ordinal data, the median and the Inter-Quartile Range (IQR) for each item becomes relevant. The median which is a number found exactly in the middle of a distribution, measures the central tendency i.e it depicts the perception of the 'average' respondent or the 'likely' response. The IQR which is a measure of spread depicts whether responses cluster or scatter over the range of possible responses. The scores of the respondent on each of the functionings are added together and compared to the total possible score on all the functions to derive a ratio. The derived ratio represents the perceived impact of microfinance on empowerment measure for the respondent. The variable for the perceived impact was labelled PI.

3.9.1 Logit Model

Binomial Logistic Regression, (popularly known as Binary logistic regression or simply logit regression), estimates the likelihood of observation to fall into any of the two groups of a categorical endogenous variable based on a set of exogenous variables which may be continuous or categorical. In this study, Binomial logistic regression will be adopted to identify factors that influence the decision to adopt microfinance as a tool for capability enhancement among women. In addition, Binomial Logistics regression was used to assess whether microentrepreneurship can

be estimated based on a set of independent variables that include participation in microfinance activities

A most common model is the multiple regression model which can be expressed as follows:

$$Y = b_1 X_{1i} + b_2 X_{2i} + ... + b_n X_{ni} + \varepsilon_i ....1$$

Where Y_i is the outcome

X is the predictor

ε_i is the error term

The main assumption for multiple regression models is linearity. According to Berry (1993), the assumption of linearity is violated if the endogenous variable is categorical. Berry and Fieldman (1985) argue that one way to deal with the issue is converting data by employing logarithmic transformation. The conversion aims to represent a non-linear model linearly. In other words, a logit model represents a multiple linear regression using logarithmic terms. Instead of predicting a variable Y basing on exogenous variables, X_i, logit model predict the likelihood of Y happening based on given values of X_i.

$$P(Y) = \frac{1}{1 + e^{-(\alpha_0 + \beta_1 X_{1i} + \beta_2 X_{2i})}} ....2$$

Where P(Y) is the probability of Y occurring

e is the base of the natural log

The bracketed part is the form of simple linear regression

There are many versions of the logistic regression equation. The one above represents the model in terms of the likelihood of Y happening. The outcome ranges from 0 to 1. The nearer to 1 the values is, the more likely the event will occur. In the bracketed linear equation, the parameters are calculated based on the maximum likelihood estimation method.

3.9.1.1 Description of variables in the Logistic Models

Table 9: Description of Variables for Logit Models

Variable	**Description**	**Type of variable**
Microfinance membership (MF)	The variable is binary and nominal. If the individual is a member of VS& L, the variable assumes the value of 1, otherwise, it is 0.	Dependent Variable
Microentrepreneurship (ME)	The variable is binary and nominal. If the individual is a micro-entrepreneur, the variable assumes the value of 1, otherwise, it is 0.	Dependent Variable
Age	Age is a continuous exogenous and scale variable representing the age of the respondent.	Independent Variable
Diversification of Sources of Income (DSY)	Diversification of sources income is a categorical and nominal variable showing whether the respondent relies on a single source of income or multiple sources.	Independent Variable
Land size (LANSIZ)	Land Size is a continuous and scale variable showing the size of land owned by the household.	Independent Variable
Marital Status (MSTAT)	Marital status is a categorical and nominal variable showing the marital status of the respondent.	Independent Variable
Membership in other social groups (MEM)	It is a categorical and nominal variable showing whether or not the respondent is a member of other social groupings. The variable takes the value of 1 if	Independent Variable

	the respondent holds membership of other social groupings and 0 otherwise.	
Family business background (FBNS)	It is a categorical and nominal variable showing whether or not the respondent comes from a family with business history. The variable takes the value of 1 if the respondent has a family business background and 0 otherwise.	Independent Variable
Position in the family of business (PSTN)	It is a categorical and nominal variable showing whether or not the respondent is a firstborn in the family of birth. The variable takes the value of 1 if the respondent is a firstborn in the family of birth and 0 otherwise.	Independent Variable
Spouse income (SPOUY)	Spouse Income is a continuous, exogenous and scale variable representing the income of the respondent's spouse.	Independent Variable
House size (HSES)	Household size is a continuous, exogenous and scale variable representing the number of within the respondent's household.	Independent Variable
Cattle number (CATNO)	Cattle number is a continuous, exogenous and scale variable representing the cattle herd size owned by the respondent's household.	Independent Variable
Education (Edu)	The study treated Education as a categorical and ordinal variable assuming the value of 1 for the respondents with secondary education and above while it takes the value of 0 for respondents with primary education and below.	Independent Variable

3.9.1.2 Equations

a) Model on Microfinance participation

$$Y = \alpha_0 + \alpha_1 ME + \alpha_2 TOT + \alpha_3 FBNS + \alpha_4 SPOUY + \alpha_5 CATNO + \alpha_6 AGE + \alpha_7 MEM \text{ .....3}$$

b) Model on Microentrepreurship

$$Y = \beta_0 + \beta_1 MF + \beta_2 TOT + \beta_3 FBNS + \beta_4 PSTN + \beta_5 SPOUY + \beta_6 HSES + \beta_7 AGE + \beta_8 CATNO + \beta_9 MEM + \beta_{10} LANSIZ \text{ .....3}$$

3.9.2 Tobit Model

$$Y_i^* = \alpha_i x_i + \mu_i \text{ .....3}$$

$$Y_i \begin{cases} L & \text{if } Y^* \le L \\ Y^* = \alpha_i x_i + \mu_i & \text{if } L \le Y^* \prec U \\ U & \text{if } Y^* \ge L \end{cases}$$

Where Y_i is the dependent variable

Y_i^* is the latent variable

X_i is the independent variable

L and U are lower and upper limits (L=0 and U=1)

α_i are the unknown parameters

μ_i are the residuals

The log-likelihood for the 2-limit Tobit Model adopted is given as:

$$Log\ L = -\frac{1}{2}\sum_{j=L}\omega_j\left[\left(\frac{Y_i = x_i\alpha}{\sigma}\right)^2 + \log 2\pi\sigma^2\right] + \sum_{j=L}\omega_j \log\phi\left(\frac{Y_{Lj} - x\alpha}{\sigma}\right)$$
$$+ \sum_{j=L}\omega_j \log\left[1-\phi\left(\frac{Y_{Rj} - x\alpha}{\sigma}\right)\right] + \sum_{j=L}\omega_j \log\left[\phi\left(\frac{Y_{2j} - x\alpha}{\sigma}\right) - \phi\left(\frac{Y_{1j} - x\alpha}{\sigma}\right)\right]$$

Where L represents the left-censored observations

I represent intervals

ω_j represents the normalised weight for jth observation

The model cannot give the actual marginal effects of the respective exogenous variables on the perceived impact on women empowerment. The signs of the coefficients denote the direction of change in the likelihood of high perceived impact (1) or non-perceived impact (0).

McDonald and Moffit (1980) as outlined by Itaile (2012) gives the procedure of computing marginal effects of the variables which are as follows:

The change in probability of the perceived impact as an exogenous variable, x_i changes is:

$$\frac{\delta\Phi(\sigma)}{\delta x_i} = \Phi(\sigma)\frac{\alpha_i}{\sigma} \quad \text{.....4}$$

$$\frac{\partial E(Y_i / U \succ Y_i^* \succ L, X)}{\partial x_i} = \alpha_i\left(1 + \frac{\delta_L\phi(\delta_L) - \delta_U\phi(\delta_U)}{\Phi(\delta_U) - \Phi(\delta_L)} - \left[\frac{\phi(\delta_U) - \phi(\delta_U)}{\Phi(\delta_U) - \Phi(\delta_L)}\right]^2\right) \quad \text{.....5}$$

The marginal effect of an exogenous variable on the dependent variables is:

$$\frac{\delta E(Y/X_i)}{\delta X} = \alpha_i\left(\Phi(\delta_u) - \Phi(\delta_L)\right) \quad \text{.....6}$$

Where,

X_i = independent variable

$\Phi(\delta)$ = cumulative normal distribution

$\delta = \frac{\beta_i X_i}{\sigma}$ The z score for the area under the normal distribution

α_i = a vector of maximum likelihood estimates

$$\delta_L = \frac{L - X_i\alpha}{\sigma}$$

$$\delta_L = \frac{U - X_i\alpha}{\sigma}$$

L and U being the left-hand limit and right-hand limit respectively (L=0 and U=1). ϕ and Φ are probability density and cumulative density functions and standard normal distribution respectively.

3.9.2.1 Description of Variables

The Tobit model on perceived women empowerment had 12 variables described in the table below.

Table 10: Description of Variables for Tobit Model

Variable	Description	Type of variable
Perceived Impact of Microfinance on Women Empowerment (PI)	PI is a limited variable representing the ratio of an individual's total score on the Likert scale questions on women empowerment to the total score possible on all the questions on women empowerment. The variable is a continuous variable which is limited between 0 and 1.	Dependent Variable
Age	Age is a continuous exogenous variable representing the age of the respondent.	Independent Variable
Land size (LANSIZ)	Land Size is a continuous variable showing the size of land owned by the household.	Independent Variable
Marital Status (MSTAT)	Marital status is a categorical variable showing the marital status of the respondent.	Independent Variable
Membership in other social groups (MEM)	It is a categorical variable showing whether or not the respondent is a member of other social groupings. The variable takes the value of 1 if the respondent holds membership of other social groupings and 0 otherwise.	Independent Variable
Family business background (FBNS)	It is a categorical variable showing whether or not the respondent comes from a family with business history. The variable takes the value of 1 if the respondent has a family business background and 0 otherwise.	Independent Variable
Position in a family of business (PSTN)	It is a categorical variable showing whether or not the respondent is a firstborn in the family of birth. The variable takes the value of 1 if the respondent is a firstborn in the family of birth and 0 otherwise.	Independent Variable
Spouse income (SPOUY)	Spouse Income is a continuous exogenous variable representing the income of the respondent's spouse.	Independent Variable

House size (HSES)	Household size is a continuous exogenous variable representing the number of within the respondent's household.	Independent Variable
Cattle number (CATNO)	Cattle number is a continuous exogenous variable representing the cattle herd size owned by the respondent's household.	Independent Variable
Education (Edu)	The study treated Education as a categorical variable assuming the value of 1 for the respondents with secondary education and above while it takes the value of 0 for respondents with primary education and below.	Independent Variable
Training (TRAIN)	It is a categorical variable showing whether or not the respondent received training on microfinance issues	Independent Variable

3.9 Diagnostic Tests

Diagnostic tests were performed to examine the validity of the model technique that was used in this study. To avoid spurious regression results, it was deemed necessary to perform regression diagnostic checks. With regression diagnostic checks, the researchers can avoid erroneous and misleading conclusions since robust regression diagnostic checks unmask both the problem and the possible solution of an analysis (Nurunnabi and Imon, 2009). Accordingly, robust regression diagnostic checks are regarded as important for establishing unbiased predictive nexus between the endogenous and exogenous variables in this research. Notably, the main purpose of checking robustness is to avoid deviations from regression assumptions and the main purpose of regression diagnostic checks is to identify deviation from regression assumptions (Nurunnabi, Nasser and Imon, 2007; Rousseeuw and Leroy, 2003). With this in mind, it is crucial to underscore that regression diagnostic plays a fundamental role in validating regression relationship.

3.9.3 Diagnostic Tests

3.9.3.1 Goodness of Fit Tests

The wald test is usually employed to analyse the null hypothesis that all coefficients of the independent variables within the model are simultaneously equal to zero. For the logit model, the output from stata shows a chi-squared figure for the Wald test and the respective p-value with degrees of freedom related to the number of exogenous variables in the model.

In this study, the p-value is compared with the critical value of 5%. If the p-value is less than the critical value it implies that the null hypothesis can be rejected since the introduction of exogenous variables can result in improvements which are statistically significant (Statistical Consulting Group, 2006).

3.9.3.2 Multicollinearity

The multicollinearity test was conducted to ensure robust statistical inferences. Regression analysis is a commonly employed statistical technique in development research when multiple explanatory variables are considered to estimate the relationship with study measurements. Nevertheless, the quality of regression relies on correlations within the exogeneous variables of interest since inference for regression analysis assumes non-correlation among exogenous variables (Wooldridge, 2015; Yoo *et al.*, 2014). If exogenous variables are correlated, multicollinearity issues arise leading to spurious results and a loss of power (Yoo *et al.*, 2014).

Multicollinearity occurs when 2 or more predictors are associated with one another (Wooldridge, 2015). Perfect multicollinearity exists when the nexus between two explanatory variables is equal to -1 or 1. The existing stream of literature provides numerous suggestions to check for multicollinearity. For instance, the analysis of the correlation matrix of the explanatory variables, calculating the coefficients of determination, computing of the Variance Inflation Factor (VIF), and the condition index (CI) (Yoo *et al*., 2014).

To check multicollinearity, the researcher utilised the correlation matrix. The researcher checked for explanatory variables with correlations of -1 or 1. Existence of such correlations implies a multicollinearity problem.

3.9.3.3 Heteroscedasticity

The heteroscedasticity test was performed to ensure robust statistical inferences. The heteroscedasticity problem exists when the error term's variance is not constant. It is worth mentioning that the homoscedasticity of errors is one of the assumptions of regression analysis (Yoo *et al*., 2014; Greene, 2012). It is generally accepted that heteroscedasticity may result in misspecification. In regression analysis, the distribution of the residuals in regression analysis depends on the heteroscedasticity of the errors and the selection of explanatory variables to be captured by the equation (Greene, 2012).

In the existing stream of literature on heteroscedasticity, there are many different ways to examine heteroscedasticity in regression models which include model-based heteroscedasticity tests and residual-based heteroscedasticity tests. The model-based heteroscedasticity tests include three well-known tests: Lagrannge multiplier test, likelihood ratio test, and Wald test (Klein et

al., 2016; Greene, 2003; Engle, 1984; Wald, 1943). More interestingly, for both continuous and categorical explanatory variables, two tests can be employed the White test and Breusch-Pagan (Greene, 2012). In this research, the White test was conducted to test for heteroscedasticity. The White test was used because the current study employed both continuous and categorical explanatory variables.

3.10 Chapter Summary

Chapter 3 discussed how the investigation was done by looking at the research philosophy subscribed to, the strategy used and instruments employed in an attempt to achieve a goal - the research objective and the zeal to seek answers to an issue - the research problem. It presents the research design, studied area and methods of coming up with a sample and data. It also elaborates on how the data is going to be analysed.

Chapter 4

DATA PRESENTATION, ANALYSIS, INTERPRETATION AND DISCUSSION

4.0 Introduction

Chapter 4 presents the empirical data collected, how it is analysed and finally reported. The reported results are then discussed.

4.1 Criteria for Good Questionnaire

According to Taherdoost (2016), the quality of a study is based on the reliability and validity of data collection instruments. It is very crucial to consider reliability as well as the validity of data before and after undertaking research. Ghauri and Gronhaug (2005) reveal that validity shows the extent to which collected data capture the targeted area being studied. In other words, validity refers to measuring what should be measured (Field, 2005). Reliability is all about repeatability (Taherdoost, 2016). In other words, any test is considered reliable provided the same outcome can be obtained by it after a repeat measurement without changing the conditions.

4.1.1 Validity

Content Validity Ratio (CVR) was adopted for the study. Assessment of each item in the questionnaire was done. The assessment was done by consulting experts in the same field of research. For each item in the questionnaire, a CVR was then calculated. Items/components that were not significant at 5% were dropped.

4.1.2 Reliability of Questionnaire

To measure reliability, Cronbach's alpha was adopted. It is the most popular measure of a questionnaire's reliability. The data from the pilot study were analysed using SPSS software. The researcher made use of the 'correlation matrix and 'view alpha if item deleted.' The benchmark for Cronbach's alpha was 0.5. The items with 0s, 1s and negatives were rejected and 'alpha if item deleted' was observed to assess whether alpha can be improved by eliminating the items. The study employed the rule of thumb and eliminated no more than 20% of items (Radhakrishna, 2007).

All the sections were assessed, namely, the background, past year economic changes and perceptions on microfinance.

4.2 Descriptive Statistics

4.2.1 Frequencies

Table 11: Measures of central tendency for continuous variable

	Age	Household Size	Spouse Income	Cattle herd Size	Land Size
Mean	42	6	97	8	1.6
Median	39	6	40	9	1.5
Mode	39	6	00	9	1.5

According to the measures of central tendency, the sample was mainly composed of middle-aged women whose average household size is 6 people. Most of the women had no spouses with regular incomes but they possess sizeable cattle number and an average of 1.6 acres of land.

Table 12: Frequencies for microfinance participation and microentrepreneurship

		Microentrepreneurship		Total
		Not Owner of microentreprise	Owner of microenterprise	
Microfinance Participation	Non-participant	30	70	100
	Participant	6	94	100
Total				200

The table above shows that out of those who participated in the study, the majority of microfinance members were owners of microenterprises. On the other hand, the majority of non-members were not microenterprise owners.

Table 13: Frequencies for a family business background and microentrepreneurship

		Microentrepreneurship		Total
		Not Owner of microentreprise	Owner of microenterprise	
Family Business Background	Not from an entrepreneurial family	26	12	38
	From entrepreneurial family	10	152	162
Total				200

The table above depicts that out of those who participated in the study, the majority of those with a family business background were owners of microenterprises. However, a few of those who come from non-entrepreneurial families own microenterprises.

Table 14: Frequencies of birth order and microentrepreneurship

		Micro entrepreneurship		Total
		Not Owner of microenterprise	Owner of microenterprise	
Position in a family of Birth	Not First Born	23	36	59
	First Born	13	128	141
Total				200

The table above depicts that out of those who participated in the study, the majority of the firstborns were owners of microenterprises. On the other hand, a few of the non-firstborns were owners of microenterprises.

Table 15:Frequencies on technical skills and microentrepreneurship

		Micro entrepreneurship		Total
		Not Owner of microenterprise	Owner of microenterprise	
Technical Skills	No Technical skills	10	26	36
	Possess Technical skills	26	138	164
Total				200

The table above depicts that out of those who participated in the study, the majority of those with technical skills were owners of microenterprises. On the other hand, a few of those with no technical skills were owners of microenterprises.

4.2.2 Association of Categorical Variables and Microentrepreneurship

Table 16: Chi-square Tests

Microentrepreneurship and:	Pearson Chi-Square		
	Value	Df	Asymp. Sig. (2-sided)
Microfinance Participation	19.512	1	0.000
Family Business Background	80.805	1	0.000
Position in a family of Birth	24.964	1	0.000
Technical Skills	2.844	1	0.000

As shown by the Chi-square Tests table, the p-values of the chi-square statistics were below 0.05 for all the variables. As a result, the null hypothesis that asserts that microenterprise is independent of the indicated variables was rejected. The result is significant and suggests that micro entrepreneurship is associated with microfinance participation, family business background, position in the family of birth and Technical Skills.

4.2.3 Descriptive Statistics for Perceived Impact of Microfinance

Table 17: Measures of central tendency for perceived impact

Variable	Observations	Mean	Standard deviation	Min	Max
PI	100	0.7751429	0.134344	0.3428572	0.9714286

The variable, Perceived Impact (PI), is a ratio of total individual scores to the total possible score on all the functions. The mean of the variable is near to 1 showing that there is a high perceived impact of microfinance on women empowerment among the participants.

Table 18: Measures of central tendency for continuous exogenous variables

Variable	Observations	Mean	Standard deviation	Min	Max
Age	100	42.29	14.10229	20	79
Household size	100	5.57	1.401695	2	11
Spouse Income	100	111.87	161.6468	0	600
Land size	100	1.775	1.018453	1	8
Cattle number	100	7.24	2.151438	2	9

Table 19: Median and interquartile ranges on Likert Scale items

Element of Perception	**Median**	**Interquartile range (IQR)**
Participation in microfinance increases income	5	1
Participation in microfinance increases savings	4	2
Participation in microfinance increases the number of household assets	4	2
Participation in microfinance increases the number of productive	4	2

assets		
Participation in microfinance provides employment opportunities	4	2
Participation in microfinance increases the power of decision making	4	2
Participation in microfinance increases confidence to face problems	4	2
Participation in microfinance creates better awareness	4	2
Participation in microfinance creates knowledge about banking operations	4	2
Participation in microfinance improves social status	4	2
Participation in microfinance improves the level of education for children	4	2
Participation in microfinance improve nutrient and health of the household	4	2
Participation in microfinance improves employability skills	4	2
Participation in microfinance improves participation in community activities	4	2

Table 20: Frequencies by response scale

Element of Perception	Frequency by Response Scale				
	1	**2**	**3**	**4**	**5**
Participation in microfinance increases income	0	4	15	14	67
Participation in microfinance increases savings	2	12	31	23	32
Participation in microfinance increases the number of household assets	1	8	29	22	40
Participation in microfinance increases the number of productive assets	2	13	21	20	44
Participation in microfinance provides employment opportunities	1	17	21	22	39
Participation in microfinance increases the power of decision making	2	11	28	23	36
Participation in microfinance increases confidence to face problems	3	8	21	23	45
Participation in microfinance creates better awareness	2	11	27	23	37
Participation in microfinance creates knowledge about banking operations	2	9	27	22	40
Participation in microfinance improves social status	3	10	26	21	40
Participation in microfinance improves the level of education for	3	8	25	29	35

children					
Participation in microfinance improve nutrient and health of the household	1	13	25	23	38
Participation in microfinance improves employability skills	2	10	44	24	20
Participation in microfinance improves participation in community activities	2	10	14	24	20

Response Scale: Strongly Agree -5, Agree – 4, Neutral – 3, Disagree – 2, Strongly Disagree- 1

4.3 Objective One Results: Determinants of Microfinance Participation

4.3.1 Building the Model

Building the Model: Hierarchical Regressions of the outcome, Microfinance participation

The participation model was built hierarchically (adding one independent variable at a time) and the deviance was used to compare different models.

The improvement of the models can be computed as follows:

$$\chi^2 = \left[-2LL(baseline)\right] - \left[-2LL(new)\right]$$
$$= 2LL(new) - 2LL(baseline)$$

$$df = k_{new} - k_{baseline}$$

Table 21: Hierarchical regressions of the outcome, microfinance participation

Model	Independent Variables	$\chi^2_{current} - \chi^2_{previous}$ $df_{current} - df_{previous}$	**Improvement**
1	Diversified sources of income	33.528 1	33.528 1
2	Diversified sources of income, technical skill	34.614-33.528 2-1	1.086 1
3	Diversified sources of income, technical skill, family business	40.030-34.614 3-2	5.416 1
4	Diversified sources of income, technical skill, family business, spouse_income	44.102-40.030 4-3	4.072 1
5	microenterprise_development, technical skill, family business, spouse_income, cattle	50.347-44.102 5-4	6.245 1
6	Diversified sources of income, technical skill, family	50.911-50.347 6-5	0.564 1

	business, spouse_income cattle, age		
7	Diversified sources of income, technical skill, family business, spouse_income cattle heard size, age, membership in other social groups	55.143-50.911 7-6	4.232 1

The study settled for a model that included diversified sources of income, family business background, spouse income, cattle herd size, age, membership in other groups and technical skill.

Table 22: Fitted microfinance participation model

Dependent Variable: Microfinance Participation (MF)						
Variable	B	Se	Wald	Df	sig.	exp(b)
DSY	-1.359	.519	6.842	1	.009	.257
TES	.233	.582	.160	1	.689	.792
FBNS	1.465	.661	4.918	1	.027	.231
SPOUY	-.004	.002	6.419	1	.011	1.004
CATNO	-.381	.128	8.816	1	.003	.683

AGE	.006	.015	.150	1	.699	1.006
MEM	-4.479	.872	26.4	1	.800	0.011
Constant	3.760	1.257	8.954	1	.003	42.96

Table 23: Variables and probabilities

Variable	**Odds Ratios**	**Probabilities**
DSY	.257	0.20
FBNS	.231	0.19
SPOUY	1.004	0.50
CATNO	0.683	0.41

In (Odds) = 3.760 – 1.359DSY + 0.233TES + 1.465FBNS– 0.004SPOUY-0.381CATNO + 0.006AGE + 4.479MEM

Where MF = Microfinance Participation

DSY = Diversification of Income Sources

MEM= Membership in other social groups

FBNS = Family business background

SPOUY = Spouse income

CATNO = Cattle number

AGE = age

TES = Technical skill

4.3.2 Diagnostic Tests

4.3.2.1 Multicollinearity

Multicollinearity test was conducted to ensure robust statistical inferences. Regression analysis is a commonly employed statistical technique in development research when multiple explanatory variables are considered to estimate the relationship with study measurements. Nevertheless, the quality of regression relies on correlations within the exogeneous variables of interest since inference for regression analysis assumes non-correlation among exogenous variables (Wooldridge, 2015; Yoo, Bae, Qinghua, &Lillard, 2014). If exogenous variables are correlated, multicollinearity issues arise leading to spurious results and a loss of power (Yoo, Bae, Qinghua, &Lillard, 2014).

Multicollinearity occurs when 2 or more predictors are associated with one another (Wooldridge, 2015). Perfect multicollinearity exists when the nexus between two explanatory variables is equal to -1 or 1. To check multicollinearity, the researcher utilised the correlation matrix. The researcher checked for explanatory variables with correlations of -1 or 1. Existence of such correlations implies a multicollinearity problem.

Table 24: Multicollinearity Test- Correlation matrix

	DYS	TES	FBNS	SPOUY	CATNO	AGE	MEM
DYS	1.000000	0.190362	0.665059	0.143908	0.106000	-0.003529	0.466861
TES	0.190362	1.000000	0.336058	0.146036	0.239387	-0.050215	0.525653
FBNS	0.665059	0.336058	1.000000	0.076676	0.059089	-0.075894	0.559241
SPOUY	0.143908	0.146036	0.076676	1.000000	0.041405	-0.093256	0.069970
CATNO	0.106000	0.239387	0.059089	0.041405	1.000000	-0.000848	0.130648
AGE	-0.003529	-0.050215	-0.075894	-0.093256	-0.000848	1.000000	-0.032066
MEM	0.466861	0.525653	0.559241	0.069970	0.130648	-0.032066	1.000000

From the table above, there are no perfectly correlated variables. When variables do not have correlations of -1 or +1, there is no problem of multicollinearity (Wooldridge, 2015; Yoo, Bae, Qinghua, & Lillard, 2014).

4.3.2.2 Heteroscedasticity

The heteroscedasticity test was performed to ensure robust statistical inferences. The heteroscedasticity problem exists when the error term's variance is not constant. It is worth mentioning that the homoscedasticity of errors is one of the assumptions of regression analysis (Yoo, Bae, Qinghua, &Lillard, 2014; Greene, 2012). It is generally accepted that heteroscedasticity may result from misspecification. In regression analysis, the distribution of the residuals in regression analysis depends on the heteroscedasticity of the errors and the selection of explanatory variables to be captured by the equation (Greene, 2012).

In the existing stream of literature on heteroscedasticity, there are many different ways to examine heteroscedasticity in regression models which include model-based heteroscedascitytests and residual-based heteroscedascity tests. The model-based heteroscedasticity tests include three well-known tests: Lagrannge multiplier test, likelihood ratio

test, and Wald test (Klein, Gerhard, Büchner Diestel and Schermelleh-Engel, 2016; Greene, 2003; Engle, 1984; Wald, 1943). More interestingly, for both continuous and categorical explanatory variables, two tests can be employed; the White test and Breusch-Pagan (Greene, 2012).

In this research, the white test was conducted to test for heteroscedasticity. The white test was used because the current study employed both continuous and categorical explanatory variables. Under the White Test, Homoscedasticity is the null hypothesis. In rejecting the null hypothesis, we have heteroscedasticity. The most common level of significance for the white test is 5% (Wooldridge, 2015).

Table 25: Multicollinearity Test- White Test

Heteroskedasticity Test: White			
F-statistic	1.508482	Prob. F(31.168)	0.0531
Obs*R-squared	43.54843	Prob. Chi-Square(60)	0.0667
Scaled explained SS	27.77242	Prob. Chi-Square(60)	0.6329

In Table above, the p-value is 0.0531 which is above 0.05. Therefore, we assume homoscedasticity since we failed to reject the null hypothesis.

4.3.2.3 Goodness of Fit Tests

1. **The Omnibus Tests of Model Coefficients**

It shows the model chi-square and the significance levels for the test of the null hypothesis that the coefficients preset are not different from zero.

Table 26: Omnibus Tests of Model Coefficients

Omnibus Tests of Model Coefficients			
Step	55.143	8	,000
Block	55.143	8	,000
Model	55.143	8	,000

The table above shows that the p-value of the model chi-square is significant (less than 0.05 significant level) meaning that the inclusion of explanatory variables improved the predictive ability of the model.

2. Model Summary

The model summary shows how good the model fits the data. The smaller the -2log likelihood in the model summary, the better the model. The Cox and Snell R^2 is an equivalent to the R^2 in multiple regression though it does not reach 1. The Nagelkerke R^2 adjusts the Cox and Snell R^2 so that it is between 0 to 1. The two measures can be interpreted concurrently.

Table 27: Model Summary

Model Summary			
Step	-2 Log likelihood	Cox & Snell R Square	Nagelkerke R Square

1	205.052	.241	.331

In the table above, the -2log likelihood is fairly low. The Cox and Snell R^2 of 0.241 and Nagelkerke R^2 of 0.331 implies that the fitted model explains 24.1 % to 33.1% of the data which is fairly good.

3. Hosmer and Lemeshow Test

The test compares the predicted probabilities and the observed probabilities. If the p-values are above 0.05, the model fits the data well (Hosmer and Lemeshow, 2000). The table below shows that the p-value is 0.981 which is above 0.05 implying that the model fits the data well.

Table 28: Hosmer and Lemeshow Test

Hosmer and Lemeshow			
Step	Chi-square	Df	Sig.
1	11.593	8	.170

4.3.3 Discussion and Interpretation of Results

4.3.3.1 Effects of diversified sources of income on microfinance participation

The coefficient of the predictor, diversified sources of income is negative as well as significant (0.009 p-values) implying that an increase in exogenous variable decreases the probability of microfinance participation.

The variable is significant in determining Microfinance participation as shown by the p-value of 0.009 (which is smaller than 0.05). The odds ratio of 0.257 is smaller than 1, implying that the odds are decreasing. For every unit increase in an exogenous variable, odds of microfinance participation decreased by factor 0.257. The model predicts that there is a 20% probability that those with multiple sources of income are less likely to participate in microfinance projects.

The outcome contrasts findings of a study by Bhoj *et al*. (2013) conducted in Uttarakhand to identify women's participation in microfinance project (dairy Self Help Groups). The findings show that the non-farm income source influence membership in microfinance project. The probability of participation in the microfinance project increased with increase in non-farm income.

4.3.3.2 Effects of Technical skill on microfinance participation

The variable is insignificant in determining the effects of technical skill as shown by the p-value of 0.2 (which is bigger than 0.05).

4.3.3.3 Impact of family business history on microfinance participation

The coefficient of family business history is positive and significant (0.034 p-values) implying that the increase in the predictor variable increases the probability of microfinance participation. The odds ratio of 2.874 is bigger than 1, implying that the odds are increasing. For every unit

increase in this exogenous variable, odds of microfinance participation increase by factor 2.874. The model predicts that 74% of those with family business history are likely to participate in microfinance projects.

4.3.3.4 Effects of spouse income on microfinance participation

The coefficient of the predictor, spouse income is negative and significant implying that increasing spouse income decreases the likelihood of microfinance participation. The variable is significant in determining microfinance participation as shown by the p-value of 0.019. The odds ratio of 0.997 is smaller than 1, implying that the odds are decreasing. For every unit change in spouse income, odds of microfinance participation decreased by factor 0,997. The model predicts that increasing spouse income by a unit reduces the likelihood of participation by 49.9%.

4.3.3.5 Effects of cattle herd size on microfinance participation

The coefficient of the predictor, cattle number is negative and significant implying that increasing cattle number decreases the likelihood of Microfinance participation. The variable is significant in determining Microfinance participation as shown by the p-value of 0.021.

The odds ratio of 0.789 is smaller than 1, implying that the odds are decreasing. For every unit increase in cattle number, odds of Microfinance participation decreased by factor 0.789. The model predicts that increasing the number of cattle owned by an individual by a unit reduces the likelihood of participation by 44%.

The outcome of this study is in line with findings of a study by Bhoj *et al.* (2013) conducted in Uttarakhand to identify determinants of women's participation in microfinance project (Self Help Groups). The findings show that the respondent's herd size significantly influences membership in microfinance project. The probability of participation in the microfinance project increased with the increase in herd size.

The results are supported byAnjugam and Ramasamy (2007) who investigated determinants of participation in microfinance programme in Tamil Nadu using probit model and results show that those with lower social status and without land are likely to participate more in microfinance programme. Those with a larger cattle herd size found to be less likely to participate.

The results also confirm findings of Kangogo *et al.* (2013) who conducted a study in Uasin Gishu County to analyse determinants of microfinance participation and the findings show that those with more livestock and consumer goods were found to participate less.

4.3.3.6 Effects on of age on microfinance participation

The variable, age, is insignificant in determining microfinance participation as shown by the 0.344 p-values.

This outcome is in opposition to findings by Bhoj *et al.* (2013) who conducted a study in Uttarakhand to identify the determinants of participation in microfinance project and findings show that the respondent's age significantly influences membership in microfinance project. The probability of participation in the microfinance project increased with increase in the respondent's age.

Anjugam and Ramasamy (2007) yielded similar results to those of the current study. Anjugam and Ramasamy (2007) reveal that the age of women is negatively related to participation based on the probit model.

4.3.3.7 Effects of educational level on microfinance participation

The variable, education level is insignificant in determining microfinance participation as shown by the p-value of 0.753. The outcome of the current study is in opposition to findings by Bhoj*et al.* (2013). Bhoj *et al.* (2013) reveal a significant relationship between the level of education and membership in the microfinance project. However, Nguyen (2007) analysed Vietnam's rural credit market to explain the determinants of credit participation and discovered that education does not have a significant impact on participation.

4.4 Objective Two Results: Effect of Microfinance on Microentrepreneurship

4.4.1 Building the Model

Building the Model: Hierarchical Regressions of the outcome, Microentrepreneurship

The microenterprise development model was built hierarchically (adding one independent variable at a time) and the deviance was used to compare different models.

The improvement was of the model can be calculated as follows:

$$\chi^2 = [-2LL(baseline)] - [-2LL(new)]$$
$$= 2LL(new) - 2LL(baseline)$$

$$df = k_{new} - k_{baseline}$$

Table 29: Hierarchical regressions of microentreprises development model

Model	Independent Variables	$\chi^2_{current} - \chi^2_{previous}$ $df_{current} - df_{previous}$	Improvement
1	microfinance participation	33.528 1	33.528 1
2	microfinance participation, technical skill	33.528-37.188 2-1	3.66 1
3	microfinance participation, technical skill, family business background	90.548-37.188 3-2	53.36 1
4	microfinance participation, technical skill family business background, position family birth	107.332-90.548 4-3	16.784 2
5	microfinance participation, technical skill, family business background, position family birth, spouse income	110..848 – 107.332 5-4	3.517 1

6	microfinance participation, technical skill, family business background, position family of birth, spouse income, household size	111.752-110.848 6-5	0.904 1
7	microfinance participation, technical skill family business background, position family of birth, spouse income, household size, age	112.308-111.752 7-6	0.556 1
8	microfinance participation, technical skill family business background, position family of birth, spouse income, household size, age, cattle	112.619-112.308 8-7	0.311 1
9	microfinance participation, technical skill family business background, position family of birth, spouse income, household size, age, cattle, membership in other social groups	112.632-112.619 9-8	0.013 1
10	microfinance participation, technical skill familybusiness_background,	118.127-112.632 10-9	5.495 1

	position family of birth, spouse income, household size, age, cattle, membership in other social groups, land size		

The study settled for a model with microfinance participation, technical skill, family business background, position family birth, spouse income, household size, age, cattle, membership in other social groups and landsize as variables.

4.4.2 Fitted Model

Table 30: Microenterprises model results

Dependent Variable: Microenterprises Development (ME)						
Variable	B	Se	Wald	Df	sig.	exp(b)
MF	1.428	.746	3.664	1	.050	4.172
TES	1.419	.811	3.059	1	.018	3.242
FBNS	3.728	.674	30.595	1	.000	41.606
PSTN	2.647	.865	9.367	1	.002	14.118
SPOUY	.003	.003	1.407	1	.236	1.003
HSES	.112	.265	.177	1	.674	1.118
AGE	-.004	.020	.041	1	.840	.996
CATNO	.060	.167	.130	1	.718	1.062
MEM	-1.442	.924	2.432	1	.119	.237

LANSIZ	-.778	.275	7.987	1	.005	.459
Constant	-.856	2.218	.149	1	.700	.425

Table 31: Variables and probabilities

Variable	**Odds Ratios**	**Probabilities**
MF	4.172	0.81
TES	3.242	0.76
FBNS	41.606	0.977
PSTN	14.118	0.934
LANSIZ	.459	0.315

In (Odds) = -.856 + 1.428MF + 1.419TES + 3.728FBNS + 2.647PSTN +0.003SPOUY + 0.112HSES +0.004AGE +0.060CATNO -1.442MEM – 0.778LANSIZ

Where ME = Microfinance Enterprises Development

MF = Microfinance Participation

MEM = Membership in other social groups

FBNS = Family business background

PSTN = Position in family of business

SPOUY = Spouse income

HSES = House size

AGE = Age

CATNO = Cattle number

TES = Technical skill

LANSIZ = Land size

4.4.3 Diagnostic Tests

4.4.3.1 Multicollinearity

Multicollinearity test was conducted to ensure robust statistical inferences. Regression analysis is a commonly employed statistical technique in development research when multiple explanatory variables are considered to estimate the relationship with study measurements. Nevertheless, the quality of regression relies on correlations within the exogeneous variables of interest since inference for regression analysis assumes non-correlation among exogenous variables (Wooldridge, 2015; Yoo, Bae, Qinghua, &Lillard, 2014). If exogenous variables are correlated, multicollinearity issues arise leading to spurious results and a loss of power (Yoo, Bae, Qinghua, &Lillard, 2014).

Multicollinearity occurs when 2 or more predictors are associated with one another (Wooldridge, 2015). Perfect multicollinearity exists when the nexus between two explanatory variables is equal to -1 or 1. To check multicollinearity, the researcher utilised the correlation matrix. The

researcher checked for explanatory variables with correlations of -1 or 1. Existence of such correlations implies a multicollinearity problem.

Table 32: Correlation matrix

	MF	TES	FBNS	PSTN	SPOUY	HSES	AGE	CATNO	MEM	LANSIZ
MF	1.000000	0.145866	0.405029	0.204004	-0.071470	0.015107	0.036956	-0.096127	0.280172	0.071597
TES	0.145866	1.000000	0.336058	0.556847	0.146036	-0.142726	-0.050215	0.239387	0.525653	0.022527
FBNS	0.405029	0.336058	1.000000	0.435417	0.076676	-0.020271	-0.075894	0.059089	0.559241	0.064373
PSTN	0.204004	0.556847	0.435417	1.000000	0.155696	-0.088492	-0.009991	0.258933	0.795300	0.035377
SPOUY	-0.071470	0.146036	0.076676	0.155696	1.000000	-0.045383	-0.093256	0.041405	0.069970	0.017198
HSES	0.015107	-0.142726	-0.020271	-0.088492	-0.045383	1.000000	-0.051164	0.152104	-0.062805	0.009964
AGE	0.036956	-0.050215	-0.075894	-0.009991	-0.093256	-0.051164	1.000000	-0.000848	-0.032066	-0.107375
CATNO	-0.096127	0.239387	0.059089	0.258933	0.041405	0.152104	-0.000848	1.000000	0.130648	-0.007977
MEM	0.280172	0.525653	0.559241	0.795300	0.069970	-0.062805	-0.032066	0.130648	1.000000	0.057042
LANSIZ	0.071597	0.022527	0.064373	0.035377	0.017198	0.009964	-0.107375	-0.007977	0.057042	1.000000

From the above table, there are no perfectly correlated variables. When variables do not have correlations of -1 or +1, there is no problem of multicollinearity (Wooldridge, 2015; Yoo, Bae, Qinghua, & Lillard, 2014).

4.4.3.2 Heteroscedasticity

The heteroscedasticity test was performed to ensure robust statistical inferences. The heteroscedasticity problem exists when the error term's variance is not constant. It is worth mentioning that the homoscedasticity of errors is one of the assumptions of regression analysis (Yoo, Bae, Qinghua, &Lillard, 2014; Greene, 2012). It is generally accepted that heteroscedasticity may result from misspecification. In regression analysis, the distribution of the

residuals in regression analysis depends on the heteroscedasticity of the errors and the selection of explanatory variables to be captured by the equation (Greene, 2012).

In the existing stream of literature on heteroscedasticity, there are many different ways to examine heteroscedasticity in regression models which include model-based heteroscedascitytests and residual-based heteroscedascity tests. The model-based heteroscedasticity tests include three well-known tests: Lagrannge multiplier test, likelihood ratio test, and Wald test (Klein, Gerhard, Büchner Diestel and Schermelleh-Engel, 2016; Greene, 2003; Engle, 1984; Wald, 1943). More interestingly, for both continuous and categorical explanatory variables, two tests can be employed the White test and Breusch-Pagan (Greene, 2012).

In this research, the White test was conducted to test for heteroscedasticity. The White test was used because the current study employed both continuous and categorical explanatory variables. Under the White Test, Homoscedasticity is the null hypothesis. In rejecting the null hypothesis, we have heteroscedasticity. The most common level of significance for the white test is 5% (Wooldridge, 2015).

Table 33: Multicollinearity Test- White test

Heteroskedasticity Test: White			
F-statistic	1.009419	Prob. F(60,139)	0.4714
Obs*R-squared	60.69711	Prob. Chi-Square(60)	0.4506
Scaled explained SS	137.4786	Prob. Chi-Square(60)	0.0000

In Table 13 above, the p-value of the F-statistic is 0.4714 which is above 0.05. As a result, the null hypothesis is not rejected and homoscedasticity is assumed.

4.4.3.3 Goodness of Fit Tests

1. **The Omnibus Tests of Model Coefficients**

It shows the model chi-square and the significance levels for the test of the null hypothesis that the coefficients preset are not different from zero.

Table 34: Omnibus Tests of model coefficients

Omnibus Tests of Model Coefficients			
Step	118.127	10	,000
Block	118.127	10	,000
Model	118.127	10	,000

The table above shows that the p-value of the model chi-square is significant (less than 0.05 significant level) meaning that the inclusion of explanatory variables improved the predictive ability of the model.

2. **Model Summary**

The model summary shows how good the model fits the data. The smaller the -2log likelihood in the model summary, the better the model. The Cox and Snell R^2 is an equivalent to the R^2 in

multiple regression though it does not reach 1. The Nagelkerke R^2 adjusts the Cox and Snell R^2 so that it is between 0 and 1. The two measures can be interpreted concurrently.

Table 35: Model summary

Model Summary			
Step	-2 Log likelihood	Cox & Snell R Square	Nagelkerke R Square
1	102.305	.446	.668

In the table above, the -2log likelihood is fairly low. The Cox and Snell R^2 of 0.446 and Nagelkerke R^2 of 0.668 implies that the fitted model explains 44.6 % to 66.8% of the data which is fairly good.

3. Hosmer and Lemeshow Test

The test compares the predicted probabilities and the observed probabilities. If the p-values are above 0.05, the model fits the data well (Hosmer and Lemeshow, 2000). The table below shows that the p-value is 0.981 which is above 0.05 implying that the model fits the data well.

Table 36: Hosmer and Lemeshow Test

Hosmer and Lemeshow

Step	Chi-square	Df	Sig.
1	2.016	8	.981

4.4.4 Discussion and Interpretation of Results

This section focuses on the interpretation and discussion of the variables that were found to be significant.

4.4.4.1 Effects of microfinance participation in microenterprise development

The coefficient of Microfinance participation (MF), a predictor in the model, is positive as well as significant implying that, the increase in the predictor variable increases the probability of Microenterprise development (ME). The odds ratio of 4.172 is bigger than 1, implying that the odds are increasing. The model predicts that 81% of the microfinance participants are likely to be microenterprise owners.

The results are consistent with some studies in the literature. Naeem *et al.* (2015) sought out to analyse the impact of microfinance on microenterprises of women using the Quetta District in Pakistan as a case study. The findings established that microfinance has a positive effect on microenterprises creation. The study further established a positive microfinance effect on average fixed assets, average net working capital, and creditworthiness of the loan beneficiaries.

In Sri Lanka, Bernard, Kevin and Khin (2017) performed an analysis of the effect of microfinance services on women entrepreneurial success. Results exposed that microcredit and

micro-savings had a positive nexus with the entrepreneurial success of women. However, the findings indicated that micro insurance has a negative association with the entrepreneurial success of women.

Atmadja, Su and Sharma (2016) investigated to examine the effect of microfinance on the performance of microenterprise in Indonesia. The study adopted a survey research design and Ordered Probit technique was applied to estimate the impact of microfinance on the performance of women-owned microenterprises. The results showed a negative association between microfinance and performance. However, the study further showed positive relationships between performance-social capital and performance-human capital. Atmadja, Su and Sharma (2016) concluded that microfinance for improving the performance of enterprises is not advisable if it does not increase returns.

A study conducted in Ghana by Samuel (2017) investigated the association linking microfinance to microenterprises to establish the nexus between the provision of microfinance services and the development of microenterprise. The results revealed a significant nexus between the provision of microfinance services and positive outcomes of microenterprise projects.

In another similar study conducted by Wekesa, Makokha and Makokha (2017), the relationship between microfinance services and microenterprises performance in Kenya was examined. The outcome showed that microfinance services contribute significantly to microenterprises performance. Specifically, the outcome confirmed that saving facilities had a statistically significant positive effect on microenterprise performance.

A recent study conducted by Atmadja, Sharma and Su (2018) examined the nexus between microfinance and performance of microenterprise in Indonesia. The results showed a negative association connecting microfinance to microenterprise performance. The study concluded that microfinance may not matter for the performance of microenterprise in Indonesia.

Attanasio, Augsburg, De Haas, Fitzsimons and Harmgart (2015) investigated the microfinance effects in Mongolia using a randomised field experiment. The results of the study confirmed a positive impact of microcredit on female entrepreneurship. In a similar study, Chowdhury, Amin and Farah (2016) investigated to investigate the association between microcredit and women entrepreneurship in Bangladesh. After the endogeneity adjustment, the study findings indicated a statistically significant positive microcredit impact on women entrepreneurship.

A study conducted by Mahmood *et al.* (2016) focused on examining the impact of microfinance on income generation and living standards in Pakistan. The findings of the study indicated that microcredit has a positive effect on income generation projects and poor people's consumption level. The findings further revealed that positive effect on microfinance on productive activities is higher than the consumption.

Eusebio, Maia and Silveira (2016) studied microcredit effects on family farming agricultural business in Brazil. The results from regression analysis confirmed that the access to the PRONAF microcredit programme has a statistically significant positive effect on the production value of the family farming agricultural business. The Propensity Score Matching results of the study indicated similar evidence to those obtained from multiple regression analysis.

A study carried out by Wijewardana and Dedunu (2017) focuses on examining the impact of microfinance on the performance of female entrepreneurs in Sri Lanka. The results of the study indicated that repayment procedure, accessibility of loans and non-financial services had statistically significant effects on the performance of women entrepreneurs.

Rathiranee and Semasinghe (2016) carried out an investigation in Sri Lanka on microfinance and performance of women entrepreneurs nexus. The study intended to investigate the effect of savings, credit, and training on the performance of women entrepreneurs. The results of the study confirmed statistically significant positive effects of microfinance factors on business performance.

A recent study done by Akingunola, Olowofela and Yunusa (2018) analysed the association linking microfinance to microenterprises in Nigeria. The research findings exposed a negative nexus between intermediary financial services (credit disbursement) and micro and small enterprises. In addition, the study results exposed a positive association linking microcredit to business expansion.

A mixed-methods study carried out in Sierra Leone by Ngegba, Kassoh and Sesay (2016) analysed the impact of VSLA on-farm productivity. The results of the study showed that VSLA positively impacted farmer's income level, saving capacity, storage facility and cultivation of different crop varieties.

In summary, it has been noted that previous studies have yielded conflicting results on the association linking microfinance programmes to microenterprises. Most studies show the positive impact of microfinance programmes on microenterprises (Chowdhury *et al*., 2016; Eusebio *et al*.,

2016; Mahmood *et al*., 2016; Ngegba *et al*.., 2016; Rathiranee and Semasinghe, 2016; Attanasio*et al*., 2015; Naeem *et al*., 2015) while other studies (Atmadja *et al*., 2018; Bernard *et al*., 2017; Atmadje *et al*., 2016) show that microfinance harms microenterprises. Given the inconclusive empirical evidence in the literature, this research advanced knowledge regarding the relationship between microfinance and microenterprises in Tsholotsho District.

4.4.4.2 Effects of technical skill on microenterprise development

Coefficient of Technical skill is positive as well as significant implying that those without technical skills are likely to own a microenterprise and having a technical skill increases the probability of Microenterprise development. The odds ratio of 3.242 was bigger than 1, implying that the odds are decreasing. For every unit increase in an exogenous variable, odds of Microenterprise development decrease by factor 3.242. The model predicted that 76% of the ones with technical skills are likely to own a microenterprise.

4.4.4.3 Effects of family business background on microenterprise development

The coefficient of family business background is positive as well as significant implying that the increase in exogenous variable improves the probability of microenterprise development. The odds ratio of 41.606 is bigger than 1, implying that the odds are increasing. For every unit increase in an exogenous variable, odds of microenterprise development increase by factor 41.606. The model predicts that 97.7% of those who come from families that were in business are likely to be microenterprise owners.

The results are consistent with studies that support the positive influence of family business background on entrepreneurial intention. Crant (1996) shows that an individual raised in a family

with experience in business is likely to be an entrepreneur. Several studies point out that children of entrepreneurs learn about business issues and are likely to consider forming a business as an occupation choice (Cooper *et al.*, 1994). In addition, children of entrepreneurs may view the parents as role models and having role models is crucial in determining entrepreneurial intention (Birley and Westhead, 1994). Mathews and Moser (1995) argue that having self-employed parents provides guidance and mentorship for children to establish their businesses. Papadaki *et al.* (2002) reveal that entrepreneurial parents act as role models in developing business know-how in individual entrepreneurs. Children of entrepreneurs are likely to be entrepreneurs (Chaudhary, 2017). Many other studies confirm a positive relationship between family business background and entrepreneurial intention (Fairlie and Robb, 2007; Alsos *et al.*, 2011; Chaudhary, 2017)

4.4.4.4 Effects of position in the family of birth on microenterprise development

The coefficient of position in the family of birth is positive as well as a significant implying increase in exogenous variable improves the probability of microenterprise development. The odds ratio of 14.118 is bigger than 1, implying that the odds are increasing. For every unit increase in an exogenous variable, odds of Microentreprise development increase by factor 14.118. The model predicts that 93.4 % of the firstborns are likely to be microenterprise owners.

The result is in line with the Birth Order theory (Adler, 1964). The Birth Order theory asserts that birth order exerts a strong influence on decisions regarding career and personality traits of an individual. According to Alder (1964), firstborn children enjoy more attraction, care and esteem

from parents than those who are born later. Parents tend to offer guidance to firstborns, thus, building them to become strong people. Because of that, the firstborns are likely to form their businesses and stick to professional ethics. Nhandi (2017) discovered that later-born children do not enjoy special attention and guidance as to the firstborns and usually feel less appreciated, leading them to have low self-esteem and less ability.

In addition, the result is also in line with the confluence model (Zajonc and Markus, 1975). Confluence Model argues that as members are added into the family, the centre of attention decreases on other children and remain only on firstborns and last borns. In this study, it is clear that firstborns receive great care and attention that prepare them for life's challenges.

4.4.4.5 Effects of land size on microenterprise development

Coefficient of land size is negative implying that the larger the piece of land owned by an individual the less likely he/she is to own a microenterprise. The odds ratio of 0.459 is smaller than 1, implying that the odds are decreasing. For every unit increase in land size, the odds of microenterprise development decrease by factor 0.459. The model predicts that increasing the land size by a unit reduces the likelihood of forming a microenterprise by 31.5%.

The result is against the claims of Resource-Based approach to entrepreneurship which asserts that availability of resources is a crucial determinant which drives the creation of new enterprises. Alvarez and Busenitz (2001) reveal that the availability of various resources improves the ability of an individual to identify and exploit newfound opportunities. The results of this study show that land, a resource, decreases the likelihood of forming a microenterprise.

4.4.4.6 Effects of spouse income on microenterprise development

The variable is insignificant in determining microenterprise development as shown by a 0.236 p-value (which is bigger than 0.05).

4.4.4.7 Effects of household size on microenterprise development

The variable is insignificant in determining microenterprise development as shown by a 0.674 p-value (which is bigger than 0.05).

4.4.4.8 Effect of age on microenterprise development

The variable is insignificant in determining microenterprise development as shown by a 0.840 p-value (which is bigger than 0.05).

4.4.4.9 Effects of cattle herd size on microenterprise development

The variable is insignificant in determining microenterprise development as shown by a 0.718 p-value (which is bigger than 0.05).

4.4.4.10 Effects of membership in other social groups on microenterprise development

The variable is insignificant in determining microenterprise development as shown by a 0.119 p-value (which is bigger than 0.05).

4.4.4.11 Results and Theories of Entrepreneurship

Cantillion (1959) classified the population of a country, except royal families and landowners, into two groups, namely, (i) entrepreneurs, comprising of farmers, traders, among others, (ii) hired people. In this framework, the entrepreneur buys services and goods at certain prices while he/she will sell his/her services and goods at uncertain prices, that is, he is a risk-taker. The results reveal that microfinance is encouraging people to engage in buying and selling of goods. Therefore, microfinance encourages entrepreneurship.

Say (1824) outlined the functions of an entrepreneur and claimed that the function of an entrepreneur involves combining factors of production and assume the risk. The success of the entrepreneur being influenced by the judgement of future demand, estimation of inputs, costs, prices and times, administration and supervision. Because the combination of these is scarce, entrepreneurs are scarce. It is evident from the findings that participation in microfinance increased the probability of individuals to engage in the assumption of risk and combining factors of production.

According to Walras (1954), entrepreneurship is the fourth factor of production which hires other production factors. The entrepreneur is regarded as the central point in the production and is a profit maximiser who will expand production to equilibrium, that is, increase output as long as the selling price is higher than the price of productive services. As microfinance participants coordinate production, being the fourth factor of production, aiming to make a profit, they become entrepreneurs.

Kinght (1921) defined an entrepreneur as a decision-maker under Conditions of Uncertainty. In other words, the entrepreneur is one who takes non-insurable risk and uncertainties and receives profit as a reward. Insurable risk can be statistically calculated and precautions taken. Non-

insurable risk cannot be statistically calculated and no precautions can be taken. The microfinance participants take credit from the group fund and are faced with non-insurable risk and their success or failure is influenced by foresight and judgement as they engage in business. Therefore, Tsholotsho microfinance participants who are taking credit and assume non-insurable risk can be classified as entrepreneurs.

Smith (1912) classified people into three groups: those who live by rent, those who live by wages and those who live by profits. He grouped entrepreneurs and capitalist functions under employers. Most microfinance participants in Tsholotsho District are pursuing activities that will improve their wealth and welfare. In conducting income-generating projects, the microfinance participants are becoming employers. As a result, they can be classified under entrepreneurs.

Schumpeter (1939) defined an entrepreneur as an innovator. His theory of entrepreneurship is an integral component of his theory of development. Microfinance is helping participants in introducing new commodities, new techniques in production, employing new sources of supply of raw materials and development of new organisations. The above activities were named 'enterprising' by Schumpeter (1939). In other words, the results of this study show that participating in microfinance increases the probability of "enterprising". Schumpeter (1939) claimed that an entrepreneur usually finances the entrepreneurial activities through credit and that makes participation in microfinance crucial for entrepreneurs. In addition, an entrepreneur does unaccustomed activity, being motivated by the will and joy of creating things and exercises energy and ingenuity.

Kilby (1971) gave an economist's model of entrepreneurship. Kilby (1971) explained entrepreneurship in terms of supply and demand functions of entrepreneurship. In addition, he

argued that the supply of entrepreneurship depends on socio-psychological variables and some past entrepreneurial training. On the other hand, demand for entrepreneurial series is a function of the price of all cooperating factors of production, the stock of technology, level of managerial organisation. In Zimbabwe, the supply for entrepreneurship is less than demand for entrepreneurship. As a result, there is a high reward for entrepreneurship and microfinance participants in Tsholotsho are opting for entrepreneurship.

Liebenstein (1968) defined entrepreneurship as an input-completing and gap-filling function and argues that entrepreneurs have only a small role to play in an economic model which assumed complete certainty. Some microfinance participants are pursuing 'routine' entrepreneurship which goes hand in hand with managerial activities of enterprises while others 'before' entrepreneurship associated with innovation. The characteristics of those who are pursuing microentrepreneurship in Tsholotsho District include connection of various markets, ability to serve market gaps (gap-filling), creation and expansion of productive entities (firms) as well as 'input-completing'. These characteristics are also in line with those outlined by Liebenstein (1968).

Hagen (1962) describes an entrepreneur as a creative personality with a passion for achievement and comes about as a response to social transition. Hagen (1962) claims that a social transition may result in the withdrawal of a 'social status' for a certain group of people resulting in the adopting of innovative characters. This theory may explain entrepreneurship in Tsholostsho District as some people claim that Matabeleland area has been neglected by the government.

A very important theory relevant to microfinance groups is one by Young (1971). Young (1971) claims that entrepreneurship is a function of clusters, not individuals. According to Young (1971), the entrepreneur does not work single-handed, but just the most visible member from an

economic point of view of what is typically a group of households whose actions are mutually reinforced and coordinated by a common world view. This concept of solidarity claim that entrepreneurial functions arise as the group reconfigures its world view and that results in recombination of factor input and a search for new resources, technology, markets, management styles and higher standards of labour. In the same fashion, microentrepreneurial behaviour of microfinance participants in Tsholotsho District tends to be a function of the group-level pattern. In addition, the results confirm claims by Young's theory which argues that the sub-groups in society engage in entrepreneurship when three conditions coincide which are; demotion to low status, restriction to access to important social networks and when a group acquire better institutional resources than others.

Alvarez and Busenitz (2001) supported the Resource-Based Theory of entrepreneurship and argue that access to resources is a crucial determinant which drives the creation of new ventures. They argue that access to financial, social and human resources enhances the individual's ability to identify and act upon newfound opportunities. The resources based entrepreneurship theories are composed of the Financial Capital/ Liquidity Theories, the Social Capital/ Social Network Theories and the Human Capital Entrepreneurship. Financial Capital/ Liquidity Theories claim that individuals with access to financial capital are equipped to exploit opportunities and set up new firms. The Social Capital/ Social Network Theories claim that individuals with stronger social ties to resource providers are the most able to acquire resources and are also likely to exploit opportunities. The Human Capital Entrepreneurship claim that education and experience help in opportunity identification and exploitation.

4.5 Objective Three Results: Perceived Impact of Microfinance on Women Empowerment

4.5.1 Fitted Tobit Model

Results were obtained for the regression model testing the perceived impact of microfinance on women empowerment among participants.

Table 37: Tobit model

Variable	Coef.	STD ERR	T	P> I t I	95% Confidence Interval		Marginal Effects
ME	0.2255	0.412403	5.47	0.000	0.1435951	0.3075081	0.2255
AGE	0.0005	0.00066	0.82	0.413	-0.0007725	0.0018636	0.0005
MSTAT	0.0272	0.0224479	1.22	0.2227	0.0173132	0.719077	0.0272
HSES	0.533	0.0068	7.81	0.000	0.0397494	0.0668904	0.533
EDU	0.025	0.0239198	-1.05	0.298	-0.07258	0.0224874	0.025
SPOUY	0.0001	0.0000599	-2.48	0.015	-0.00027	-0.00003	0.0001
LANSIZE	0.0083	0.0093473	0.90	0.372	-0.01019	0.0269613	0.0083
CATNO	0.00156	0.004373	-0.36	0.722	-0.010253	0.0071281	0.00156
TRAIN	0.06979	0.689698	-1.01	0.314	-0.2068592	0.0672668	0.06979

FBNS	0.12085	0.0445109	2.72	0.008	0.032395	0.2093073	0.12085
PSTN	0.8364	0.0299991	2.79	0.006	0.0240266	0.1432604	0.8364
MEM	0.039166	0.0345222	-1.13	0.260	-0.1077717	0.0294396	0.039166
Constant	0.1392	0.1098805	1.27	0.209	-0.079159	0.3575698	0.1392054
Sigma	0.0894301	0.0063237			0.0768631	0.101997	

Number of observations = 100 LR Chi2(12) = 80.38 Prob > chi2 = 0.000

Pseuo R2 = -0.6773 log likelihood = 99.535997

The table above shows the results of the Tobit model of the perceived impact of microfinance on women empowerment. Five variable, namely, microentrepreneurship (p=0.000), household size (p=0.0000), spouse income (p=0,015), family business background (0.008) and position in the family of birth (0.006) were found to be significant in affecting the perceived impact of microfinance on women empowerment as their p-values are all below 0.05. On the other hand, age (p=0.413), marital status (p=0.2227), education (p=0.298), land size (p=0.372), Cattle number (p=0.722) and Training (p=0.314) are insignificant as shown by the p-values which are above 0.05.

4.5.2 Diagnostic Tests

4.5.2.1 Goodness of Fit Tests

The log-likelihood chi2 test is usually employed to analyse the null hypothesis that all coefficients of the independent variables within the model are simultaneously equal to zero. For the Tobit model, the output from stata shows a chi-squared figure for the log-likelihood and the

respective p-value with degrees of freedom related to the number of exogenous variables in the model.

The log-likelihood chi2 of 80.38 with 12 degrees of freedom has a p-value of 0.0000 and that implies that the model fit significantly better than the empty model with only a constant and no predictors. Also the p-value for the Wald test was below 0.05 implying that the model was a good fit.

4.5.3 Discussion and Interpretation of Results

4.5.3.1 Perceived impact of microfinance on women empowerment

Perceptions are in favour of a positive impact of microfinance on income (Median=5; IQR=1). The median of 5 shows that the perception of the 'average' respondent is strongly agreed on which the majority of responses (N=67, 67%) cluster as indicated by the interquartile range of 1. Many of the respondents (N=55, 55%) were in agreement with the perception that microfinance increases savings as the most likely response was 'agree' (Median=4; IQR=2). However, a relatively large number of respondents were indifferent (31%) regarding the perceived impact of microfinance on savings.

Perceptions are in favour of a positive impact of microfinance on household assets (Median=4; IQR=2). The median of 4 shows that the perception of the 'average' respondent is 'agree' with many responses (N=40, 40%) indicating that they strongly agree with the perception that microfinance increases the number of household assets. Regarding the impact of microfinance on productive assets, many respondents (N=64, 64%) hold the perception that a positive impact

exists. The likely response among respondents is 'agree' (Median=4, IQR=2) implying that there is a positive perceived impact of microfinance on productive assets.

Perceptions are in favour of a positive impact of microfinance on employment opportunities (Median=4; IQR=2). The median of 4 shows that the perception of the 'average' respondent is 'agree' with many responses (N=61, 61%) indicating that they strongly agree with the perception that microfinance provides employment opportunities. Many of the respondents (N=59, 59%) were in agreement with the perception that microfinance increases the power of decision making as the most likely response was 'agree' (Median=4; IQR=2). However, a relatively large number of respondents were indifferent (28%) regarding the perceived impact of microfinance on the power of decision making.

A large portion of respondents (N=68, 68%) hold the perception that microfinance improves the confidence to face problems (Median=4; IQR=2). Majority of the respondents (N=60, 60%) were in agreement with the perception that microfinance creates better awareness as the most likely response was ‘agree’ (Median=4; IQR=2). However, a relatively large number of respondents were indifferent (27%) regarding the perceived impact of microfinance on awareness.

A sizeable number of the respondents (N=66, 66%) were in agreement with the perception that microfinance creates knowledge about banking operations as the most likely response was 'agree' (Median=4; IQR=2). However, a relatively large number of respondents were indifferent (27%) regarding the perceived impact of microfinance on knowledge about banking operations. Microfinance participants' perceptions are in favour of a positive impact of microfinance on social status (Median=4; IQR=2). The median of 4 shows that the perception of the 'average' respondent is 'agree' with many responses (N=40, 40%) indicating that they strongly agree and

others (N=21, 21%) showed that agree with the perception that microfinance improves social status.

Perceptions are in favour of a positive impact of microfinance on the education of children (Median=4; IQR=2). The median of 4 shows that the perception of the 'average' respondent is 'agree' with many responses (N=35, 35%) indicating that they strongly agree and others (N=29; 29%) showing that they agree with the perception that microfinance provides employment opportunities. Many of the respondents (N=61, 61%) were in agreement with the perception that microfinance improves nutrient and health of household as the most likely response was 'agree' (Median=4; IQR=2). However, a relatively large number of respondents were indifferent (25%) regarding the perceived impact of microfinance on the nutrient and health of the household.

A large portion of respondents (N=54, 54%) hold the perception that microfinance improves the employability of skills (Median=4; IQR=2). However, a relatively large number of respondents were indifferent (44%) regarding the perceived impact of microfinance on employability skills. Perceptions are in favour of a positive impact of microfinance on participation in community activities (Median=4; IQR=2). The median of 4 shows that the perception of the ‘average’ respondent is ‘agree’ with many responses (N=67, 67%) indicating that they strongly agree and others (N=14; 14%) showing that they agree with the perception that microfinance provides employment opportunities.

The mean value on total women empowerment score of 77.5% implies that the majority of the respondents (microfinance participants) scored highly the positive perceived impact of microfinance on the indicated functionings representing various latent capabilities. In other words, the majority of the microfinance participants who were part of the representative sample

indicate that microfinance improves income, savings, amount of household assets, amount of productive assets, employment opportunities, power of decision making, confidence to face problems, better awareness, knowledge about banking operations, social status, level of education for children, nutrient and health of household, employability skills and participation in community activities. This shows that participants believe microfinance empowers them.

4.5.3.2 Perceived impact and microenterpreneurship

Microentrepreneuship has a positive effect on microfinance participant's perception. The increase in microentrepreneurship by a unit improves the perceived impact of microfinance on women empowerment by 22.55%. This is consistent with the assertion that microfinance works well for those who are entrepreneurial. As the microentrepreneur use microfinance services, capabilities are improved and they become empowered.

4.5.3.3 Perceived impact and household size

Household size has a positive effect on microfinance participant's perception. The increase in household size by a unit improves the perceived impact of microfinance on women empowerment by 53.3%.

4.5.3.4 Perceived impact and spouse income

Spouse income has a positive effect on microfinance participant's perception. The increase in spouse income by a dollar improves the perceived impact of microfinance on women

empowerment by 0.01%. This may imply that as the spouse income increases, the women feel the need to be productive also to have power and control within the household.

4.5.3.5 Perceived impact and family business history

The family business background has a positive effect on microfinance participant's perception. Those with a family business history increase the likelihood by 12.08% of having a positive perceived impact of microfinance on women empowerment. This is consistent with the assertion that microfinance works well for those who have a family business history as they have an entrepreneurial mentality.

4.5.3.6 Perceived impact and position in the family of birth (birth order)

Birth order or position in the family of birth has a positive effect on microfinance participant's perception as firstborns have an 83.64% likelihood of having a positive perceived impact of microfinance on women empowerment.

4.4.3.1.3 Study results on perceived impact and literature

This result supports what was discovered in some studies on the association connecting microfinance to women empowerment. Rahman, Khanam and Nghiem (2017) conducted an investigation and found a positive association linking microfinance with women empowerment and concluded that microfinance is regarded as a strong tool in empowering women.

In India, Kapila, Singla and Gupta (2016) analysed the influence of microcredit in empowering women within Punjab State. They found a positive association between microcredit and women

empowerment. This means that an increase in women mobilisation towards SHGs will result in women empowerment.

Another study on association linking microcredit programme with women empowerment was undertaken in Bangladesh by Hossain, Islam and Majumder (2016). By utilising the binary logistic regression model, they found a positive link connecting microcredit to women empowerment. This means that the change in microcredit had positive nexus with the perceived change in women's empowerment.

However, the same study by Hossain *et al*., (2016), in multinomial logistic regression analysis, found microcredit to be negatively related to women empowerment. This means that the change in microcredit harms estimated change in women empowerment situation.

In Ghana, Addai (2017) investigated to analyse the nexus between microfinance and women empowerment. He found a positive association linking microfinance with women empowerment for both social and economic empowerment.

In another study by Gangadhar and Malyadri (2015), the association linking microfinance to women empowerment in India was examined using cross-sectional research. They found microfinance to be a strong tool in enhancing women empowerment concerning indicators such as legal awareness and economic decision making within the household.

A recent study was undertaken by Akhter, Kun and Chukwunonso (2018) examined the effect of microcredit schemes in empowering women in rural Bangladesh. The results of the study confirmed a statistically positive influence microcredit on the empowerment of women. The researchers concluded that microcredit schemes are successful in empowering women.

A study conducted by Wijewardana and Dedunu (2017) focused on examining the association linking microfinance to the empowerment of female entrepreneurs in Sri Lanka. The results of the study indicated that microfinance has a positive and significant effect on women empowerment.

Gelan and Nigussie (2016) investigated women empowerment through microfinance services in Ethiopia. The results confirmed that years of membership in the microfinance institution, contact with development agent, and years of experience in income generation have a positive effect on women empowerment.

In Ethiopia, Alemu, Kempen and Ruben (2018) investigated the relationship existing between women SHG membership and empowerment of women in Chencha District. The findings indicated that SHG membership influence women empowerment positively. The researchers concluded that women SHG membership effectively enhances women empowerment at the community level.

Karlan, Savonitto, Thuysbaert and Udrya (2017) conducted a study on savings groups' effects poor people's lives with a particular focus on developing countries, namely, Malawi, Ghana, and Uganda. The results revealed that community-based savings groups result in the enhancement of women's empowerment and microenterprise activity.

The mixed-methods study by Rani and Yadeta (2016) examined the empowerment of rural women through microfinance in Dendi district of Ethiopia. The results confirmed that educational status, age, mobility, utilisation of loan, and mobility had positive and significant effects on the

empowerment of women. They concluded that women participation in rural saving and credit cooperative had positive effects on the empowerment of women.

The mixed-methods systematic review by Brody *et al*., (2017) studied the influence of women's SHGs on women's economic, psychological, political, and social empowerment. The qualitative results also revealed that the positive impacts of SHGs on women empowerment run through mechanisms such as familiarity in handling money, social network, solidarity, respect from other community members, and independence in financial decision-making. The strength of the investigation was that the triangulation of findings was assured by complementing quantitative findings with qualitative findings.

Nandhini, Usha and Palanivelu (2017) investigated to investigate women empowerment resulting from SHGs in Coimbatore district. The results indicated a significant difference between women empowerment after joined SHGs. The researchers concluded that initiatives of SHGs are quite effective towards women empowerment.

Fernando and Azhagaiah (2015) studied women empowerment through SHGs in India. The findings proved that a positive link connecting SHGs to economic empowerment of SHGs women members existed.

In India, Ravinda and Tiwari (2016) examined the association between SHGs and women empowerment. They found that there is nexus between SHGs and women empowerment. Specifically, they found a high-rank positive correlation between SHGs and women empowerment (0.70). The researchers concluded that SHGs are a better tool for women empowerment.

In conclusion, the empirical literature on the association connecting microfinance with women empowerment shows mixed results. Several studies show a positive association linking microfinance to women empowerment (Akhter *et al*., 2018; Alemu *et al*., 2018; Rahman *et al*., 2017; Addai, 2017; Wijewardana and Dedunu, 2017; Brody *et al*., 2017; Karlan*et al*., 2017); Nandhini *et al*., 2017; Kapila *et al*., 2016; Rani and Yadeta, 2016; Loth and Jeckoniah, 2015; Gelan and Nigussie, 2016; Fernando and Azhagaiah, 2015) while others (Hossain *et al*., 2016) reveal a negative association linking microfinance to women empowerment. Given the inconsistent results from prior studies, this current study represents the advancement of the appreciation of the association between microfinance and women empowerment.

4.6 Capability enhancement effects of microfinance

4.6.1 Results and Implications for Capability enhancement

The main findings depict that participation of women microfinance enhances women's capabilities as it promotes microenterpreneurship and women empowerment. Basing on the definition of poverty as deprivation of capabilities, theories of poverty can help in explaining how the results show capability enhancement.

The Cultural Theory of Poverty states that as unemployment increases due to job losses caused by the movement to capital intensive methods, the retrenched may find themselves grouping in a certain class or geographical area where certain traits arise and can be passed on to children. The grouping may be the result of government welfare programmes or informally, the migration of the unemployed to affordable residential areas. This explains how slums are developed in urban areas. Manjoro (2013) argues that the socialisation of the emerging groups results in the

development of certain behavioural traits to cope with material deprivation. These traits include low aspirations, short-sightedness and impulsive gratification (Shulma, 1990). The traits shape the mindset of the poor, locking them in the vicious cycle of poverty (Lewis, 1968; Shulma, 1990).

The results of this study show that the Culture Theory of Poverty is being reversed as the people's ideologies are being changed. As people interact in microfinance groups ideas of business formation are shared and mindsets changed. Lewis (1968) argues that the alteration of people's ideologies can help enhance capabilities and reduce the culture of poverty.

The causes of poverty under the Neo-Conservative Theory of Poverty are the economic factors emanating from the mismatch between population growth and improvements in production systems. Ways of improving production systems can help in reducing this type of poverty. As microfinance encourages microenterprises development, production systems are improved and that constitutes capabilities enhancement and poverty reduction (Harvey and Reed, 1922).

Social Democratic Theory of Poverty asserts that poverty is a class issue as well as a market issue. In other words, it assumes that poverty arises due to the politics of distribution of goods and services which result in some classes getting poor (Sraffa, 1926; Harvey and Reed, 1992; Sen, 1981). Under this theory, poverty is not based on the means of production and it can be alleviated by distribution justice which entails the equitable distribution of goods and services among the poor. Since under this theory the market forces are not able to correct that unfair distribution of goods, encouraging the formation of microenterprises through financial inclusion can correct the situation. Formation of microenterprises is facilitating Tsholotsho people's participation in the mainstream economy. As entitlements are issued through political processes,

microfinance eliminates unfair distribution of goods while preserving a production system based on profit-making.

Under the Situational Poverty theory, the poor find themselves in a situation in which they do not gain much from hard work and long term view of life (Manjoro, 2012). Introduction of microfinance brings supportive structures like the ability to generate own income and a conducive environment for self-empowerment lifting the poor out of situational poverty.

Structural theories of poverty shift the blame for poverty from the individual to the structures in the social or economic systems such as discrimination, bad grievances, wretched state of infrastructural development in certain geographical areas, sexism and segregation which lead to deprivation of opportunities sufficient to maintain an acceptable living standard (Cobb,1992; Ducan, 1992; Abrecht *et al.,* 2001). Microfinance improves the social and economic systems through financial inclusion of the poor. The results show that the enhancement of the financial systems for the poor improves the ability to meet the basic capabilities through microenterprises formation thereby reducing structural poverty in Tsholotsho.

According to the Membership Theory of Poverty, an individual's poverty status depends on the composition of groups to which he/she is affiliated during his/her course of life. Manjoro (2012) argues that factors through which the influence impact individual outcomes include peer group effects and role model effects. Microfinance creates new groups based on the common goal of lifting members out of poverty. Through peer group effect, microenterprises are formed and women's mindsets changed. The young ones can also look up to microfinance participants due to role model effects.

4.6.2 Results versus Sen's Capability Theory of Poverty

Basing on the approach to poverty introduced by Amartya Sen, capability enhancement effects of microfinance on women were analysed. Sen's approach to poverty looks at assessing how well off people are when it comes to their capabilities to attain lives they have reason to value (Sen, 1979). Sen's capability approach shifts poverty focus away from means to ends, and towards the concept of freedom crucial for the attainment of the ends (Sen, 2009). Therefore, the current study assessed the capability enhancement effects of microfinance on women in terms of microenterprises formation and women empowerment.

a) Microenterprises development

The current study shows that microfinance increases the probability of forming a microenterprise. The findings confirm that microfinance increases individuals' capacity to meet their basic capabilities. These capabilities, according to Sen (1983, 1999b), encompass a plethora of *"beings and doings"* such as escaping avoidable disease, meeting nutritional requirements, to be sheltered, to be clothed, to be educated, to be able to travel, to enjoy self-respect, and to be active in community activities. Consequently, poverty refers to a lack of basic capabilities for a person to function (Sen, 2009). The functionings of interest to this investigation include physical ones such as having adequate food, enough clothing, sufficient shelter and freedom from preventable diseases, as well as complex achievements like participation in community activities (Sen, 1995). In other words, a poor individual lacks an opportunity to attain some minimum functionings. Microfinance in Tsholotsho District is diminishing the poverty, promoting individuals' self-fulfilment and freedom, necessary to lift the capability of the needy and poor (Daojiu, 2014).

Knecht (2012) also argues that the condition of deprived people can be more accurately analysed using their ability to convert resources into consumption and income. Microenterprise development represents the ability to convert resources into consumption, income and capacity to meet basic functionings.

b) Women empowerment

The study also adopted women empowerment as the second measure of poverty reduction based on the proposal of Tseng (2011) who argues that women empowerment should not be left out in assessing microfinance efficacy in reducing poverty. To evaluate well-being, Sen argues, the key issue to consider is what people can do and be (Sen, 2009). With UNIFEM (2012) revealing that 7 out 10 poor people in the world are women, it is important to analyse microfinance effects on women's freedom to be what they want to be and also able to meet basic capabilities. Distribution within the family is emphasised in the Capability Approach to poverty. Sen (2009) refers to issues that are related to the distributional rules in families regarding males and females, for instance, whether or not there is "male preference system" in resource allocation within the family. The majority of the microfinance participants who were part of the representative sample indicate that microfinance improves income, savings, amount of household assets, amount of productive assets, employment opportunities, power of decision making, confidence to face problems, better awareness, knowledge about banking operations, social status, level of education for children, nutrient and health of the household, employability skills and participation in community activities. This shows that participants believe microfinance empowers them.

Chapter 5

THESIS SUMMARY, FINDINGS, CONCLUSIONS AND RECOMMENDATIONS

5.0 Introduction

In this study, the aim was to analyse the capability enhancement effects of microfinance among women in Tsholotsho District. This chapter outlines the thesis summary, findings, conclusions as well as recommendations.

5.1 Summary of Findings

Section 5.2 summarises results. The findings are summarised in tandem with the research questions and objectives. The section starts by presenting the research questions as well as objectives that guided the study.

5.1.1 Research Questions

The research was conducted based on the following questions:

1) Which factors drive adoption of microfinance for capability enhancement by women in Tsholotsho District?
2) What is the impact of microfinance on women's capabilities as represented by microenterprise development in Tsholotsho District?
3) What are the factors determining the perceived impact of microfinance on women empowerment among participants in Tsholotsho District?

5.1.2 Research Objectives

The study aimed at analysing the capability enhancement effects of microfinance among women in Tsholotsho District with specific objectives of:

1) Investigating drivers of adoption of microfinance by women as a tool for capability enhancement among women in Tsholotsho District.
2) Analysing the impact of microfinance on capability enhancement among women through microenterprise development in Tsholotsho District.
3) Analysing the perceived impact of microfinance on women empowerment in Tsholotsho District.

5.1.3 Research Question 1 and Objective 1

Research Question 1: Which factors drive adoption of microfinance for capability enhancement by women in Tsholotsho District?

Research Objective 1: To investigate drivers of adoption of microfinance by women as a tool for capability enhancement among women in Tsholotsho District.

The participation model was built hierarchically (adding one independent variable at a time) and the deviance was used in comparing models. The study settled for a model that included diversification of income sources, membership in other social groups, family business background, spouse income, cattle herd size, age and technical skill.

The fitted model takes the following form:

In (Odds of Microfinance participation) = 3.760 – 1.359DSY + 0.233TES + 1.465FBNS– 0.004SPOUY-0.381CATNO + 0.006AGE + 4.479MEM

Where MF = Microfinance Participation

DSY = Diversification of Income Sources

MEM= Membership in other social groups

FBNS = Family business background

SPOUY = Spouse income

CATNO = Cattle number

AGE = age

TES = Technical skill

Effects of diversified income sources on microfinance participation

The coefficient of the predictor, diversified income sources was negative as well as significant implying that an increase in exogenous variable decreases the probability of microfinance participation. The model predicts that those with diversified income sources are 20% less likely to participate in microfinance projects.

Effects of Technical skill on microfinance participation

The variable, technical skill was insignificant in determining microfinance participation.

Impact of family business history on microfinance participation

The coefficient of family business history was positive and significant implying that the increase in the predictor variable increases the probability of microfinance participation. The model predicts that there is a 19% likelihood that those with family business history are likely to participate in microfinance projects.

Effects of spouse income on microfinance participation

The coefficient of the predictor, spouse income was negative and significant implying that the increase in the predictor variable decreases the probability of microfinance participation. The variable was significant in determining microfinance participation. The model predicts that increasing spouse income by a dollar reduces the likelihood of participation by 50%.

Effects of household cattle herd size on microfinance participation

The coefficient of the predictor, cattle number was negative and significant implying that the increase in cattle herd size improves the microfinance participation likelihood. The model predicts that increasing the number of cattle owned by an individual by 1 reduces the likelihood of participation by 41%.

Effects of age and membership in other social groups on microfinance participation

The variable, age, was insignificant in determining microfinance participation. Also, membership in other social groups was insignificant in determining microfinance participation.

Diagnostics Tests

Diagnostics tests which include multicollinearity, heteroscedasticity and goodness of fit tests were carried out.

Multicollinearity test was conducted in order to ensure robust statistical inferences. There are no variables which are perfectly correlated. When variables do not have correlations of -1 or +1, there is no problem of multicollinearity (Wooldridge, 2015; Yoo, Bae, Qinghua, & Lillard, 2014). The heteroscedasticity test was performed in order to ensure robust statistical inferences. In this study, the White test was conducted to test for heteroscedasticity. The White test was used because the current study employed both continuous and categorical explanatory variables. After the test was done, homoscedasticity was confirmed.

The Goodness of Fit Tests was also carried out. The Omnibus Tests of Model Coefficients which presents model chi-square, as well as significant levels associated with testing whether coefficients in the model are different from zero, was carried out. P-value of the model was significant (less than 0.05 significant level) meaning that the inclusion of explanatory variables increased the predictive ability of the equation.

The Cox and Snell R^2 of 0.241 and Nagelkerke R^2 of 0.331 implies that the fitted model explains 24.1 % to 33.1% of the data which is fairly good. The Hosmer and Lemeshow test that compares predicted probabilities and observed probabilities were also employed. The p-value was found to be 0.981 which is above 0.05 implying a well-fitted model. In addition, the Classification Table that shows how good the model group cases into the 2 categories of the outcome variable, depicted the percentage correct is 92% implying good predictive power of the model.

5.1.4 Research Question 2 and Objective 2

Research Question 2: What is the impact of microfinance on women's capabilities as represented by microenterprise development in Tsholotsho District?

Research Objective 2: To analyse the impact of microfinance on capability enhancement among women through microenterprise development in Tsholotsho District.

The microenterprise development model was built hierarchically (adding one independent variable at a time) and the deviance was used in comparing models. The study settled for a model with microfinance participation, membership in other social groups, family business background, and position in family birth, spouse income, household size, age, cattle, technical skill and land size as variables.

The fitted model takes the following form:

In (Odds) = -.856 + 1.428MF + 1.419TES + 3.728FBNS + 2.647PSTN +0.003SPOUY + 0.112HSES +0.004AGE +0.060CATNO -1.442MEM – 0.778LANSIZ

Where ME = Microfinance Enterprises Development

MF = Microfinance Participation

MEM = Membership in other social groups

FBNS = Family business background

PSTN = Position in a family of business

SPOUY = Spouse income

HSES = House size

AGE = Age

CATNO = Cattle number

TES = Technical skill

LANSIZ = Land size

Effects of Microfinance Participation (MF) on Microenterprise Development (ME)

The coefficient of microfinance participation (MF), a predictor in the model, was found to be positive as well as significant implying that, the increase in the predictor variable increases the probability of microenterprise development (ME). The odds ratio of 4.172 was bigger than 1, implying that the odds are increasing. The model predicted that 81% of the microfinance participants are likely to be microenterprise owners.

Effects of Technical skill (TES) on Microenterprise Development (ME)

Coefficient of Technical skill is positive as well as significant implying that those with technical skills are likely to own a microenterprise and having a technical skill increases the probability of Microenterprise development. The odds ratio of 3.242 was bigger than 1, implying that the odds are increasing. For every unit increase in an exogenous variable, odds of Microenterprise development increase by factor 3.242. The model predicted that 76% of the ones with technical skills are likely to own a microenterprise.

Effects of Family business background (FBNS) on Microenterprise Development (ME)

The coefficient of the family business background was positive as well as significant implying that the increase in exogenous variable improves the probability of microentreprise development. The odds ratio of 41.606 was bigger than 1, implying that the odds are increasing. For every unit increase in an exogenous variable, odds of Microenterprise development increase by factor

41.606. The model predicted that 97.7% of those who come from families that were in business are likely to be microenterprise owners.

Effects of position in the family of birth (PSTN) on microenterprise development (ME)

The coefficient of position in the family of birth was positive as well as a significant implying increase in exogenous variable improves the probability of microenterprise development.

The odds ratio of 14.118 was bigger than 1, implying that the odds are increasing. For every unit increase in an exogenous variable, odds of microenterprise development increase by factor 14.118. The model predicted that 93.4 % of the first borns are likely to be microenterprise owners.

Effects of land size (LANSIZ) on microenterprise development (ME)

Coefficient of land size was negative implying that the larger the piece of land owned by an individual the less likely he/she was to own a microenterprise. The odds ratio of 0.459 was smaller than 1, implying that the odds are decreasing. For every unit increase in land size, the odds of microenterprise development decrease by factor 0.459. The model predicted that increasing the land size by an acre reduces the likelihood of forming a microenterprise by 31.5%.

However, some variables were insignificant. Spouse income, household size, age, cattle herd size and membership in other social groupings were found to be insignificant in determining microentreprise development.

Diagnostics Tests

Diagnostics tests which include multicollinearity, heteroscedasticity and goodness of fit tests were carried out.

Multicollinearity test was conducted in order to ensure robust statistical inferences. There are no variables which are perfectly correlated. When variables do not have correlations of -1 or +1, there is no problem of multicollinearity (Wooldridge, 2015; Yoo, Bae, Qinghua & Lillard, 2014). The heteroscedasticity test was performed in order to ensure robust statistical inferences. In this study, the White test was conducted to test for heteroscedasticity. The White test was used because the current study employed both continuous and categorical explanatory variables. After the test was done, homoscedasticity was confirmed.

The goodness of Fit Tests

were also carried out. The Omnibus Tests of Model Coefficients which presents model chi-square, as well as significant levels associated with testing whether coefficients in the model are different from zero, was carried out. P-value of the model was significant (less than 0.05 significant level) meaning that the inclusion of explanatory variables increased the predictive ability of the equation.

5.1.5 Research Question 3 and Objective 3

Research Question 3: What are the factors determining the perceived impact of microfinance on women empowerment among participants in Tsholotsho District?

Research Objective 3: To analyse the perceived impact of microfinance on women empowerment in Tsholotsho District.

The results show that the majority of the respondents (microfinance participants) scored highly the positive perceived impact of microfinance on the indicated functionings representing various latent capabilities. In other words, the majority of the microfinance participants who were part of the representative sample indicate that microfinance improves income, savings, amount of Household assets, amount of Productive assets, employment opportunities, power of decision making, confidence to face problems, better awareness, knowledge about banking operations, social status, level of education for children, nutrient and health of household, employability skills and participation in community activities. This shows that participants believe microfinance empowers them.

The results of the Tobit model of the perceived impact of microfinance on women empowerment. Five variable, namely, micro-entrepreneurship (p=0.000), household size (p=0.0000), spouse income (p=0,015), family business background (0.008) and position in the family of birth (0.006) were found to be significant in affecting the perceived impact of microfinance on women empowerment as their p-values are all below 0.05. On the other hand, age (p=0.413), marital status (p=0.2227), education (p=0.298), land size (p=0.372), Cattle number (p=0.722) and Training (p=0.314) are insignificant as shown by the p-values which are above 0.05. Microentrepreneurship has a positive effect on microfinance participant's perception. The increase in microentrepreneurship by a unit improves the perceived impact of microfinance on women empowerment by 22.55%. This is consistent with the assertion that microfinance works well for those who are entrepreneurial. As the microentrepreneur use microfinance services, capabilities are improved and they become empowered. Household size has a positive effect on microfinance participant's perception. The increase in household size by a unit improves the

perceived impact of microfinance on women empowerment by 53.3%. Spouse income has a positive effect on microfinance participant's perception. The increase in spouse income by a dollar improves the perceived impact of microfinance on women empowerment by 0.01%. This may imply that as the spouse income increases, the women feel the need to be productive also to have power and control within the household. Family business background has a positive effect on microfinance participant's perception. Those with a family business history increase the likelihood by 12.08% of having a positive perceived impact of microfinance on women empowerment. This is consistent with the assertion that microfinance works well for those who have a family business history as they have an entrepreneurial mentality. Birth order or position in the family of birth has a positive effect on microfinance participant's perception as first born children have an 83.64% likelihood of having a positive perceived impact of microfinance on women empowerment.

Diagnostics Tests

Diagnostics tests which include multicollinearity, heteroscedasticity and goodness of fit tests were carried out.

Multicollinearity test was conducted in order to ensure robust statistical inferences. There are no variables which are perfectly correlated. When variables do not have correlations of -1 or +1, there is no problem of multicollinearity (Wooldridge, 2015; Yoo, Bae, Qinghua, & Lillard, 2014). The heteroscedasticity test was performed in order to ensure robust statistical inferences. In this study, the White test was conducted to test for heteroscedasticity. The White test was used because the current study employed both continuous and categorical explanatory variables. After the test was done, homoscedasticity was confirmed.

The goodness of Fit Tests was also carried out. The Omnibus Tests of Model Coefficients which presents model chi-square, as well as significant levels associated with testing whether coefficients in the model are different from zero, was carried out. P-value of the model was significant (less than 0.05 significant level) meaning that the inclusion of explanatory variables increased the predictive ability of the equation.

5.1.6 Microfinance and Capability Enhancement

Basing on the approach to poverty introduced by Amartya Sen, microfinance efficacy in reducing poverty was analysed in the context of capability deprivation. Sen's approach to poverty looks at assessing how well off people are when it comes to their capabilities to attain lives they have reason to value (Sen, 1979). Sen's capability approach shifts poverty focus away from means to ends, and towards the concept of freedom crucial for the attainment of the ends (Sen, 2009). Therefore, the current study assessed microfinance efficacy in reducing poverty in terms of microenterprises formation and women empowerment.

The current study shows that microfinance increases the probability of forming a microenterprise. The findings confirm that microfinance increases individuals' capacity to meet their basic capabilities. These capabilities, according to Sen (1983, 1999b), encompass a plethora of *"beings and doings"* such as escaping avoidable disease, meeting nutritional requirements, to be sheltered, to be clothed, to be educated, to be able to travel, to enjoy self-respect, and to be active in community activities. Consequently, poverty refers to a lack of basic capabilities for a person to function (Sen, 2009). The functionings of interest to this investigation include physical ones such as having adequate food, enough clothing, sufficient shelter and freedom from preventable diseases, as well as complex achievements like participation in community activities (Sen, 1995).

In other words, a poor individual lacks an opportunity to attain some minimum functionings. Microfinance in Tsholotsho District is diminishing the poverty, promoting individuals' self-fulfilment and freedom, necessary to lift the capability of the needy and poor (Daojiu, 2014). Knecht (2012) also argues that the condition of deprived people can be more accurately analysed using their ability to convert resources into consumption and income. Microenterprise development represents the ability to convert resources into consumption, income and capacity to meet basic functionings.

The study also adopted women empowerment as the second measure of poverty reduction based on the proposal of Tseng (2011) who argues that women empowerment should not be left out in assessing microfinance efficacy in reducing poverty. In order to evaluate well-being, Sen argues, the key issue to consider is what people can actually do and be (Sen, 2009). With UNIFEM (2012) revealing that 7 out 10 poor people in the world are women, it is important to analyse microfinance effects on women's freedom to be what they want to be and also able to meet basic capabilities. Distribution within the family is emphasized in the Capability Approach to poverty. Sen (2009) refers to issues that are related to the distributional rules in families regarding males and females, for instance, whether or not there is "male preference system" in resource allocation within the family. The majority of the microfinance participants who were part of the representative sample indicate that microfinance improves income, savings, amount of Household assets, amount of productive assets, employment opportunities, power of decision making, confidence to face problems, better awareness, knowledge about banking operations, social status, level of education for children, nutrient and health of household, employability

skills and participation in community activities. This shows that participants believe microfinance empowers them.

5.2 Conclusions

Microfinance as a way of reducing and defeminising of poverty was analysed in the context of the Capability Approach. The current study assessed microfinance in terms of microenterprises formation and women empowerment. The findings of this study show that microfinance increases the probability of forming a microenterprise. The findings confirm that microfinance increases a woman's capacity to meet the basic capabilities. Microfinance in Tsholotsho District is diminishing the poverty, promoting individuals' self-fulfilment and freedom, necessary to lift the capability of the needy and poor women. Microenterprise development represents the ability to transform resources into income and capacity to meet basic functionings of women.

The study also adopted women empowerment as the second measure of capability enhancement. Microfinance participation was found to have a positive perceived impact on women empowerment. Major findings of the study that contribute to the expansion of the body of literature and betterment of Tsholotsho's body politic encompass the discovery of a significant impact of technical skill in capability enhancement among women; a significant positive impact of birth order on women entrepreneurship; a positive effect of family business history on a women microfinance participation intend, microcroentreprise development and women empowerment. Technical skills were analysed in relation to the ability to do basketry, weaving, pottery, etc. and those with technical were found to be more likely to own a microenterprise. Firstborns are more likely to form microenterprises than those born later. In addition, those with family business history are more likely to participate in microfinance project, to form

microenterprises and are likely to be empowered. In general, microfinance was found to be a tool that can enhance women's capabilities.

5.3 Recommendations

In order to improve the effectiveness of microfinance in enhancing the capabilities of women and improve the current livelihood status of the studied community based on the findings of the current study, comprehensive steps should be followed by the non-governmental organisations, government, women organisations, and also rural community. Stated below are some of the strategies that can be adapted to respond to the current livelihood situation of the rural folk:

(i) Replication of Tsholotsho's microfinance models within and outside Tsholotsho. In addition, there is a need to ensure community participation in microfinance by considering factors that determine participation and tailor-make microfinance packages to cater to the target population's needs.

(ii) Developing and strengthening VS&L- Bank Linkages. This can be achieved by spreading the branches of the newly formed Women's Microfinance Bank in the rural areas and adopting the models like the Graemeen Bank, SHGs and VS & L.

(iii) Packaging of microfinance in such a way that each member forms her own business through offering training, group business interventions incubation hubs.

(iv) Provision of legal education on enterprise registration, administration as well as legal issues regarding property and women rights, running. Legal information can raise awareness of how women can protect their interests from abusive men.

(v) In order to strengthen women group structures and compliment women's efforts, there is a need for Government and Non-Governmental Organisations (NGOs) to use microfinance groups as channels through which other developmental initiatives can reach women.

5.4 Recommendations for further study

Basing on scope and limitations of the current study, this section puts forward areas which require further study. Some areas which need further study are:

1. The study was carried out in Tsholotsho, Matabeleland North Province. A replica of this study can also be conducted in other districts with similar socio-economic situations to confirm research findings revealed by this study.

2. Models formulated had a limited number of variables. Another study can be carried out looking at other variables that may help in reducing rural poverty.

3. It was discovered that many households in Tsholotsho are female-headed and many income-generating projects are owned by women because of migration of male folk to South Africa. There is a need to conduct a study to assess the economic impacts of male folk migration to South Africa on women empowerment and general poverty alleviation in rural areas, especially in Tsholotsho.

4. The study investigated and discovered a positive microfinance effect on microenterprise development. However, there is a need to study the sustainability of microenterprises in the rural areas, Tsholotsho in particular.

5.5 Summary

Microfinance is identified in the literature as a crucial ingredient in enhancing women's capabilities through helping those living in poverty to cover their basic needs, offering a shield against negative shocks and to improve women participation in economic activities, thereby promoting gender equity. Although many NGOs are implementing microfinance as a capability enhancement strategy, there are issues that are still outstanding, namely, high poverty prevalence in rural areas, marked difference between men and women, low participation in microfinance projects and mixed views on the microfinance effects on microenterprises development. In literature, a knowledge gap exists on microfinance as a way of reducing poverty i.e capability enhancement in Zimbabwe, yet microfinance has become one of the well-acknowledged sustainable development tools in capability enhancement. In addition, according to the researcher's knowledge, there is scarce literature on microfinance and capability enhancement on Tsholotsho, yet many microfinance groups exist in the Tsholotsho District. Generally, literature regarding microfinance as a way of reducing poverty or capability enhancement shows mixed results. The work on poverty reduction in Zimbabwe focused on poverty as measured by income. The current study adopted Amatya Sen's Capabilities Approach which provides a comprehensive measure of poverty. Therefore, there was a need to investigate the capability enhancement effects of microfinance at the household level in Tsholotsho District.

The study adopted Amatya Sen's Capabilities Approach and defined poverty based on capabilities. As a result, the study assessed the capability enhancement effects of microfinance based on two indicators of poverty reduction, namely, the formation of microenterprises and women empowerment. The study objectives were to identify determinants community members'

participation in microfinance projects, to assess relationship that exist between microfinance and development of microenterprises in Tsholotsho and also to analyse the relationship that exists between microfinance participation and the perceived empowerment of rural women.

Based on the objectives, three null hypotheses were tested. Null Hypothesis 1: Individual characteristics do not increase the probability of adoption of microfinance as a tool for capability enhancement by women in Tsholotsho District. Null Hypothesis 2: Microfinance does not enhance women's capabilities as represented by microenterprise development in Tsholotsho District. Null Hypothesis 3: Individual characteristics do not affect the perceived impact of microfinance on women empowerment among participants in Tsholotsho District.

To effectively conduct the current study in a well-defined manner by following the positivist research philosophy, it was deemed necessary to follow the accurate research approach, that is, the deductive research approach. It is widely accepted that developmental researchers must pay considerable attention to research approach as a way to ensure the rigour of the research methodologies. The objectives of the current study are quantitative in nature so the adoption of the deductive approach was justified. With this in mind, the deductive research approach permitted the researcher to address the guiding objectives effectively through the determination of the relationships among variables under the study. In this quantitative research, the deductive approach permitted the researcher to deductively search for sufficient empirical evidence to either accept or to reject the hypotheses. In this regard, the researcher focused on cause-effect relationships among the variables under the study in a manner that ensures effective attainment of research objectives. A cross-sectional design was employed.

The target population for the study was 2 233 women under ORAP's Amalima programme. As indicated by ORAP, Tsholotsho had 246 VS & L groups composed of 227 men as well as 2 233 women amid a period of investigation. The study adopted the simple random sampling technique to come up with the sample. The main advantage of this technique is that it is fair as it gives equal opportunities for being selected to all members. Since the complete and up-to-date list of all participants in the district was available at Amalima, it was possible to employ simple random sampling.

By employing Yamane (1967) approach the sample size that was drawn is 96 individuals. The researcher looked for the same number of non-participants. A structured questionnaire was employed by the researcher to obtain data from the sample. The questionnaire was exposed to the reliability and validity tests to ensure good quality research output. Cronbach's alpha was adopted as a measure of reliability and content validity was employed as a test for validity. The tests for reliability and validity both endorsed the questionnaire as a good instrument to collect data for this study.

From the collected data, three models were fitted with the aid of SPSS and Eviews software packages. Microfinance participation was built hierarchically (adding one independent variable at a time) and included microenterprise development, gender, family business background, spouse income, cattle herd size, age and technical skill as predictor variables. Microentreprise development model was also built hierarchically (adding one independent variable at a time) and microfinance participation, gender, family business background, position family birth, spouse income, household size, age, cattle, technical skill and land size are the selected variables. In addition, women empowerment was modelled hierarchically based on microfinance participation,

microenterprise, household size, family business background, age and cattle herd size as predictors. Because the dependent variables were binary, logistic regression method was adopted as a data analysis tool.

Diagnostic tests were performed so as to examine the validity of the model technique that was used in this study. To avoid spurious regression results, it was deemed necessary to perform regression diagnostic checks. Multicollinearity test and heteroscedasticity test were conducted in order to ensure robust statistical inferences. To check for multicollinearity, the researcher utilised the correlation matrix. The researcher checked for explanatory variables with correlations of -1 or 1. Existence of such correlations implies a multicollinearity problem. In this study, the White test was conducted to test for heteroscedasticity. The White test was used because the current study employed both continuous and categorical explanatory variables. The problems of multicollinearity and heteroscedasticity were not found in all the fitted models.

The fitted microfinance participation model consisted of diversified income sources, family business history, spouse income, cattle herd size, age and membership in other social groups. Effect of diversified income sources on microfinance participation was negative as well as significant implying that an increase in the exogenous variable decreases the probability of microfinance participation. The model predicts that those with diversified income sources are 20% less likely to participate in microfinance projects. The impact of family business history on microfinance participation was positive and significant implying that the increase in the predictor variable increases the probability of microfinance participation. The model predicts that there is a 19% likelihood that those with family business history are likely to participate in microfinance projects. Spouse income was negative and significant implying that the increase in the predictor

variable decreases the probability of microfinance participation. The model predicts that increasing spouse income by a dollar reduces the likelihood of participation by 50%. The effect of household cattle herd size on microfinance participation was negative and significant implying that the increase in cattle herd size improves the microfinance participation likelihood. The model predicts that increasing the number of cattle owned by an individual by 1 reduces the likelihood of participation by 41%. However, technical skill, age and membership in other social groups had an insignificant effect on microfinance participation. Consequently, the alternative hypothesis which states that background characteristics of an individual increase the probability of participation in microfinance activities is accepted.

The fitted model for microenterprise development had the following as variables: microfinance participation, technical skills, family business background, position in the family of birth, spouse income, household size, age, cattle herd size, land size and membership in other social groups. The effect of microfinance participation on microenterprise development was positive as well as significant implying that, the increase in the predictor variable increases the probability of microenterprise development (ME). The odds ratio of 4.172 is bigger than 1, implying that the odds are increasing. The model predicts that 81% of the microfinance participants are likely to be microenterprise owners. Technical skill was positive as well as significant implying that those with technical skills are likely to own a microenterprise and having a technical skill increases the probability of microenterprise development. The model predicted that 76% of the ones with technical skills are likely to own a microenterprise. The effects of family business background on microenterprise development were positive as well as significant implying that the increase in

exogenous variable improves the probability of microentreprise development. The odds ratio of 41.606 is bigger than 1, implying that the odds are increasing. For every unit increase in an exogenous variable, odds of microentreprise development increase by factor 41.606. The model predicts that 97.7% of those who come from families that were in business are likely to be microenterprise owners. Position in a family of birth was positive as well as a significant implying increase in exogenous variable improves the probability of microentreprise development. The odds ratio of 14.118 is bigger than 1, implying that the odds are increasing. For every unit increase in an exogenous variable, odds of microentreprise development increase by factor 14.118. The model predicts that 93.4 % of the firstborns are likely to be microenterprise owners. The land size was negative implying that the larger the piece of land owned by an individual the less likely he/she is to own a microenterprise. The odds ratio of 0.459 is smaller than 1, implying that the odds are decreasing. For every unit increase in land size, the odds of microenterprise development decrease by factor 0.459. The model predicts that increasing the land size by a unit reduces the likelihood of forming a microenterprise by 31.5%. Spouse income, household size, age, cattle herd size, and membership in other social groups were insignificant. In short, the null hypothesis was rejected and the alternative hypothesis which states that microfinance enhances women capabilities through microenterprise development was accepted.

The results from descriptive statistics show that the majority of the respondents (microfinance participants) scored highly the positive perceived impact of microfinance on the indicated functionings representing various latent capabilities. In other words, the majority of the microfinance participants who were part of the representative sample indicate that microfinance

improves income, savings, amount of household assets, amount of productive assets, employment opportunities, power of decision making, confidence to face problems, better awareness, knowledge about banking operations, social status, level of education for children, nutrient and health of household, employability skills and participation in community activities. This shows that microfinance participants believe microfinance empowers them.

The results of the Tobit model of the perceived impact of microfinance on women empowerment. Five variable, namely, micro-entrepreneurship (p=0.000), household size (p=0.0000), spouse income (p=0,015), family business background (0.008) and position in the family of birth (0.006) were found to be significant in affecting the perceived impact of microfinance on women empowerment as their p-values are all below 0.05. On the other hand, age (p=0.413), marital status (p=0.2227), education (p=0.298), land size (p=0.372), Cattle number (p=0.722) and Training (p=0.314) are insignificant as shown by the p-values which are above 0.05. Microentrepreneurship has a positive effect on microfinance participant's perception. The increase in microentrepreneurship by a unit improves the perceived impact of microfinance on women empowerment by 22.55%. This is consistent with the assertion that microfinance works well for those who are entrepreneurial. As the microentrepreneur use microfinance services, capabilities are improved and they become empowered. Household size has a positive effect on microfinance participant's perception. The increase in household size by a unit improves the perceived impact of microfinance on women empowerment by 53.3%. Spouse income has a positive effect on microfinance participant's perception. The increase in spouse income by a dollar improves the perceived impact of microfinance on women empowerment by 0.01%. This may imply that as the spouse income increases, the women feel the need to be productive also to

have power and control within the household. Family business background has a positive effect on microfinance participant's perception. Those with a family business history increase the likelihood by 12.08% of having a positive perceived impact of microfinance on women empowerment. This is consistent with the assertion that microfinance works well for those who have a family business history as they have an entrepreneurial mentality. Birth order or position in the family of birth has a positive effect on microfinance participant's perception as firstborns have an 83.64% likelihood of having a positive perceived impact of microfinance on women empowerment.

The findings confirm that microfinance increases women's capacity to meet their basic capabilities. Microfinance in Tsholotsho District is diminishing the poverty, promoting individuals' self-fulfilment and freedom, necessary to lift the capability of the needy and poor. Microenterprise development represents the ability to transform resources into income and the capacity to meet basic functionings.

The study also adopted women empowerment as the second measure of capability enhancement based on the proposal of Tseng (2011) who argues that women empowerment should not be left out in assessing the capability enhancement effects of microfinance. Microfinance participation was found to have a significant perceived impact on women empowerment.

Major findings of the study that contribute to the expansion of the body of literature and betterment of Tsholotsho's body politic encompass a significant positive impact of birth order on women entrepreneurship; a positive effect of family business history on a women microfinance participation intend, microcroentreprise development and women empowerment. Firstborns were more likely to form microenterprises than those born later. In addition, those with family business

history were more likely to participate in microfinance project, to form microenterprises and were likely to be empowered. In general, microfinance was found to be a tool that can enhance the capabilities of women in the context of capabilities approach as it enhances microenterprise development and women empowerment.

The study recommends increased efforts by stakeholders in ensuring community participation in microfinance by considering factors that determine participation and tailor-making microfinance packages for the target population. This can be achieved by spreading the branches of the newly formed Women's Microfinance Bank in the rural areas and adopting the models such as the Graemeen Bank, SHGs and VS & L. Packaging of microfinance in such a way that each member forms her own business is recommended since empowerment only comes when a participant forms a microenterprise. Offering training interventions among the rural people on legal issues regarding property and women rights, running and forming microenterprises and reinforcing the importance of participating in the mainstream economy should be encouraged. Also delivery of legal information can raise awareness on how women can protect their interests from abusive men.

The study identified areas which require further study, namely, (i) conducting a replica of this study in other districts with similar socio-economic situations so as to confirm this study's findings (ii) carrying out a similar study looking at a wider range of poverty reduction predictors excluded in the current study (iii) assessing the economic impacts of male folk migration to South Africa on women empowerment and general poverty alleviation in rural areas, especially Tsholotsho.

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APPENDICES

APPENDIX 1: Questionnaire for participants and non-participants

QUESTIONNAIRE **No.**

I am Shadreck Matindike, a Doctor of Philosophy Degree in Development Studies candidate. I kindly ask for your help as I gather data for my research entitled, 'An Econometric Analysis of Capability Enhancement Effects of Microfinance among Women in Tsholotsho District, Zimbabwe'. Information provided through this exercise is highly confidential and is collected for academic research purposes only. The purpose of this study is simply to gain a better understanding of the impacts of the VS&Ls, their efficacy and areas that need improvement. The researcher is only interested in analysis of collective feedback not individual respondent information.

Instructions

For part 1 to 3, please tick on the space provided that corresponds to your answer.

For part 4, please provide the answer in any language you are comfortable with

1. Background information

Membership to a VS& L group	Member.....	Non-member....

Gender	Male	Female.....

How old are you?	.....

Marital Status	Single.....	Married.....	Widowed.....	Divorced/Separated.....

Position in the family you were born {firstborn, last born, etc}	.....

Possession of Technical skill (Basketry, Pottery, etc)	YES ….....	NO.....

Religion	.....	.....	.....

Raised in entrepreneurial family		Yes.....	No.....

Family structure	Extended	Nuclear.....

Number of individuals in your household	.....

Education	None.....	Primary.....	Secondary.....	Tertiary.....

Microenterprise ownership/Business	Owner.....	None-owner.....

If you have a business, you deal in what?	.....

Number of cattle owned by household	.....

How many acres of land does your household own?	.....

Relationship to HH head	Self.....	Spouse.....	Parent.....	Child	Other relative....

Distance to the nearest market in kilometres	.....

Do you have any other sources of credit apart from VS&L?	Yes.....	No.....

Sources of income	Single.....	Multiple.....

Are you a member of any other social group than VS&L	Yes……	No....

Household income per annum	.....

Spouse Income per annum	.....

Who makes decisions in your household about how to use productive resources	.....

2. In the past year, did you experience the following (Tick in the box of your chosen answer) :

	Yes	No
Increase in income	.....	.....
Increase in control of productive resources within the household	.....	.....
Increase in savings	.....	.....
Increase in child education expenditure	.....	.....

Formation of a new enterprise or improvements in existing one	.....	.....

3. Self-Perception on microfinance

Give your perception of microfinance by ticking in the box of your choice using the following key

Strongly Agree -5 Agree - 4 Neutral - 3 Disagree - 2 Strongly Disagree- 1

	1	2	3	4	5
Participation in Microfinance increases personal income					
Participation in Microfinance increases personal savings					
Participation in Microfinance increases amount of Household assets controlled					
Participation in Microfinance increases amount of Productive assets controlled					
Participation in Microfinance provides employment opportunities					
Participation in Microfinance increases power of decision making					
Participation in Microfinance increases confidence to face problems					
Participation in Microfinance creates better awareness					
Participation in Microfinance creates knowledge about banking operations					
Participation in Microfinance improves social status					
Participation in Microfinance improves level of education for children					
Participation in Microfinance improve nutrient and health of household					
Participation in Microfinance improves employability skills					
Participation in Microfinance improves participation in community activities					

APPENDIX 2- Research Clearance

MIDLANDS STATE UNIVERSITY

P. Bag 9055

SENGA

GWERU

26-06-18

THE DISTRICT ADMNISTRATOR

TSHOLOTSHO DISTRICT

RE: APPLICATION FOR PERMISSION TO CARRY OUT A FIELD RESEARCH IN TSHOLOTSHO DISTRCT

I am hereby applying for permission to carry out a Dphil research in Tsholotsho entitled, 'An Assessment of the efficacy of Microfinance projects in reducing poverty in rural areas: The case of Tsholotsho District.'

The research project will focus on projects run by ORAP in Tsholotsho.

Your help will be greatly appreciated.

Yours faithfully

Shadreck Matindke

Dphil Candidate [Dept of Development Studies]

27/ 18

Clever Vumani Ndebele
ORAP
District Field Coordinator
27/06/2018

ZIMBABWE REPUBLIC POLICE
OFFICER-IN-CHARGE
TSHOLOTSHO