

Microinsurance - An Evaluation of Investment Determinants from the Perspective of Policyholders' in Kerala

*Thesis
submitted to the University of Calicut
for the award of the Degree of*

DOCTOR OF PHILOSOPHY IN COMMERCE

By

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Under the guidance of

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Declaration

I, hereby declare that the work presented in the thesis entitled **“Microinsurance - An Evaluation of Investment Determinants from the Perspective of Policyholders’ in Kerala”** is based on the original work done by me under the guidance of **Dr. M. A. Joseph**, Professor (Retd.), Department of Commerce and Management Studies, University of Calicut, and has not been included in any other thesis submitted previously for the award of any degree. The contents of the thesis are undergone plagiarism check using ‘iThenticate’ software at C.H.M.K. Library, University of Calicut, and the similarity index found within the permissible limit. I also declare that the thesis is free from AI generated contents.



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Certificate

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Dedicated to

My Parents

**Together, you have created an abode of love
and support that has nurtured my dreams and aspirations.**

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BINIL E.

Abstract

This study investigates the determinants influencing microinsurance investment in Kerala, from the perspective of policyholders in the state, focusing on understanding the factors shaping individuals' investment to engage with microinsurance products. Microinsurance, a pivotal financial instrument catering to the risk management needs of low-income individuals, holds significance in Kerala's socio-economic landscape. Moreover, the study also highlights the potential contributions of microinsurance business in the state of Kerala to the growth and development of the Microinsurance sector of the Indian economy. Microinsurance policies sold by LIC in Kerala during the 2019-20 financial year contributed less than 1% to the national Microinsurance business in India.

Microinsurance is defined as “the protection of low-income people against specific perils in exchange for regular premium payments proportionate to the likelihood and cost of the risk involved”. The definition is the same as one might use for regular insurance except that the target group is low-income people. Low-income people live in unfavourable environments and are vulnerable to many perils like sickness, accident, death and loss of property. They are more vulnerable to these risks than the rest of the population. The emerging opportunity of Microinsurance not only promotes business perspective but also social development and protection for poor people. The rural and social sector obligations and Microinsurance regulations from IRDA are important steps in the direction of ensuring financial inclusion and social protection for the poor. The first Microinsurance Regulations came in 2005 which was amended from time to time. The Insurance Regulatory and Development Authority of India (IRDAI) notified the Microinsurance Regulations in July 2015 with a mission to drive the growth and development of the microinsurance market in India. This regulatory framework aimed to make insurance accessible and affordable for low-income individuals and underserved communities. However, market penetration of Microinsurance is seen to be very low in India as well as Kerala. There is a huge rural market but the protection gap is equally huge.

The research methodology relies on ‘Research Onion’, proposed by Saunders et al. (2007), which is a conceptual framework that illustrates the various stages and layers involved in conducting research. By using the Research Onion as a guide, the researcher can systematically navigate through each layer, making informed decisions at each stage of the research process, ensuring a comprehensive and well-structured research design. Employing a mixed-method research approach, the study amalgamates quantitative surveys and qualitative interviews to comprehensively

explore the investment determinants in microinsurance. Quantitative data collection involved administering structured interview schedules to a diverse sample of policyholders residing across various regions of Kerala. This quantitative phase aimed to obtain statistical insights into the primary factors influencing policyholders' choices regarding microinsurance investment. The qualitative segment encompassed in-depth interviews with selected participants from life insurance Companies, facilitating a deeper understanding of the nuanced perspectives and motivations surrounding microinsurance investment.

Analysis of the data revealed pivotal determinants influencing microinsurance investment in Kerala. The study identified key factors such as financial capability, perceived value and benefits of microinsurance, perceived risk, attitude towards risk, levels of awareness and understanding, informal strategies adopted to mitigate risk, and demographic characteristics influencing policyholders' Microinsurance investment. Furthermore, the study unveiled significant changes in socio-economic status financial capability, Perceived value, and perceived benefits when they are insured. Attitude towards risk had a positive and significant impact on Microinsurance investment decisions whereas Perceived risk was found to have a significant negative impact on Microinsurance investment decisions. Similarly, informal strategies adopted by policyholders have a negative relation to Microinsurance policyholders. Among the determinants financial capability was a major factor influencing policyholders' investment. More than fifteen years of data were collected from the IRDA report, which provided an accurate picture of Kerala's and India's life microinsurance markets. In the past few years, there hasn't been any significant growth in new business. Kerala's microinsurance market share within LIC of India has remained below 1% in recent years. The microinsurance sector's thirteen-year compound annual growth rate in the state of Kerala showed a negative growth rate of 9.15%. Over time, Kerala's share of India's microinsurance market has decreased.

These findings aim to inform the design of targeted strategies, tailored products, and effective communication initiatives that resonate with the preferences and needs of individuals in Kerala, thereby fostering increased participation and engagement with microinsurance. In essence, this study contributes to the existing body of knowledge by shedding light on the specific determinants that influence microinsurance investment among individuals in Kerala. The findings hold relevance for devising more inclusive and effective microinsurance policies and practices, ultimately contributing to the promotion of financial resilience and risk management among the economically vulnerable population in the region.

Keywords: Microinsurance, social sector obligation, risk management, Microinsurance investment

സംഗ്രഹം

കേരളത്തിലെ പോളിസി ഉടമകളുടെ വീക്ഷണകോണിൽ നിന്ന്, മൈക്രോ ഇൻഷുറൻസ് ഉല്പന്നങ്ങളിൽ വ്യക്തികളുടെ നിക്ഷേപത്തെ സ്വാധീനിക്കുന്ന നിർണ്ണായക ഘടകങ്ങളെ കുറിച്ച് ഈ പഠനം അന്വേഷിക്കുന്നു. താഴെ വരുമാനക്കാരായ വ്യക്തികളുടെ റിസ്ക് മാനേജ്മെന്റ് ആവശ്യങ്ങൾ നിറവേറ്റുന്ന ഒരു സുപ്രധാന സാമ്പത്തിക ഉൽപ്പന്നമായ മൈക്രോ ഇൻഷുറൻസ്, കേരളത്തിന്റെ സാമൂഹിക-സാമ്പത്തിക ഭൂപ്രകൃതിയിൽ പ്രാധാന്യമർഹിക്കുന്നു. കൂടാതെ, ഇന്ത്യൻ സമ്പദ്വ്യവസ്ഥിതിയിൽ മൈക്രോ ഇൻഷുറൻസ് മേഖലയുടെ വളർച്ചയിൽ കേരള സംസ്ഥാനത്തിലെ മൈക്രോ ഇൻഷുറൻസ് വ്യാപാരത്തിന്റെ പങ്കും പഠനം എടുത്തുകാണിക്കുന്നു. 2019-20 സാമ്പത്തിക വർഷത്തിൽ കേരളത്തിൽ എൽഐസി വിറ്റ മൈക്രോ ഇൻഷുറൻസ് പോളിസികൾ ദേശീയ മൈക്രോ ഇൻഷുറൻസ് വ്യാപാരത്തിലേക്ക് സംഭാവന ചെയ്തത് ഒരു ശതമാനത്തിൽ താഴെ മാത്രമാണ്.

“അപകടസാധ്യതയ്ക്കും ചെലവിനും ആനുപാതികമായി പതിവായിട്ടുള്ള പ്രീമിയം പേയ്മെന്റുകൾക്ക് പകരമായി നിർദ്ദിഷ്ട അപകടങ്ങളിൽ നിന്ന് താഴെ വരുമാനമുള്ള ആളുകൾക്കു നൽകിവരുന്ന സംരക്ഷണം” എന്നാണ് മൈക്രോഇൻഷുറൻസിനെ നിർവചിച്ചിരിക്കുന്നത്. ഇത്തരം പോളിസികൾ ലക്ഷ്യം വെക്കുന്നത് താഴെ വരുമാനമുള്ള ആളുകളെയാണ് എന്നതൊഴിച്ചാൽ സാധാരണ ഇൻഷുറൻസിനായി ഒരാൾ ഉപയോഗിച്ചേക്കാവുന്ന നിർവചനം തന്നെയാണ്. താഴെ വരുമാനക്കാരായ ആളുകൾ ബാക്കിയുള്ള ജനവിഭാഗങ്ങളെ അപേക്ഷിച്ച് പ്രതികൂലമായ ചുറ്റുപാടുകളിലൂടെയാണ് ജീവിച്ച് വരുന്നത്, അവർ അസുഖം, അപകടം, മരണം, സ്വത്ത് നഷ്ടം തുടങ്ങിയ നിരവധി അപകടങ്ങൾക്ക് ബാക്കിയുള്ള ജനവിഭാഗങ്ങളെ അപേക്ഷിച്ച് കൂടുതൽ ഇരയാകുന്നു. മൈക്രോ ഇൻഷുറൻസിന്റെ ഉയർന്നുവരുന്ന അവസരം കച്ചവട കാഴ്ചപ്പാട് മാത്രമല്ല, സാമൂഹിക വികസനവും പാവപ്പെട്ട ആളുകൾക്ക് സംരക്ഷണവും നൽകുന്നു. ഐ ആർ ഡി എയുടെ ഗ്രാമീണ, സാമൂഹിക മേഖലാ ബാധ്യതകളും മൈക്രോ ഇൻഷുറൻസ് നിയന്ത്രണങ്ങളും താഴെ തട്ടിലുൾപ്പെടുന്നവർക്ക് സാമ്പത്തിക ഉൾപ്പെടുത്തലും സാമൂഹിക സംരക്ഷണവും ഉറപ്പാക്കുന്ന സുപ്രധാന ഘടകങ്ങളാണ്. ഇന്ത്യയിലെ ആദ്യത്തെ മൈക്രോ ഇൻഷുറൻസ് ചട്ടങ്ങൾ 2005 ൽ നിലവിൽ വരികയും, അത് കാലക്രമേണ ഭേദഗതി വരുത്തുകയും ചെയ്തുവരുന്നു. അവസാനമായി ഇൻഷുറൻസ് റെഗുലേറ്ററി ആൻഡ് ഡെവലപ്മെന്റ് അതോറിറ്റി ഓഫ് ഇന്ത്യ (ഐആർഡിഎഐ) 2015 ജൂലൈയിലാണ് മൈക്രോ ഇൻഷുറൻസ് ചട്ടങ്ങളിൽ മാറ്റം വരുത്തിയത്. ഈ നിയന്ത്രണ ചട്ടങ്ങൾ, കുറഞ്ഞ വരുമാനമുള്ള വ്യക്തികളെയും സമൂഹത്തിലെ താഴെ തട്ടിലുള്ളവരെയും ഇൻഷുറൻസിൽ ഉൾപ്പെടുത്താനും അവർക്ക് താങ്ങാവുന്നതിലേക്കാണ് ലക്ഷ്യമിടുന്നത്. എന്നിരുന്നാലും, ഇന്ത്യയിലും കേരളത്തിലും മൈക്രോ ഇൻഷുറൻസ് വിപണിയുടെ വളർച്ച വളരെ കുറഞ്ഞ തോതിൽ മാത്രമാണ്. ഒരു വലിയ ഗ്രാമീണ വിപണിയുണ്ടെങ്കിൽപോലും, എന്നാൽ ഇൻഷുറൻസ് ഉപയോക്താക്കൾ വളരെ കുറവാണ്.

സോണ്ടെഴ്സും മറ്റുള്ളവരും 2007 ൽ നിർദ്ദേശിച്ച 'റിസർച്ച് ഓണിയൻ'നെയാണ് ഗവേഷണ രീതി ആശ്രയിക്കുന്നത്, ഗവേഷണം നടത്തുന്നതിൽ ഉൾപ്പെട്ടിരിക്കുന്ന വിവിധ ഘട്ടങ്ങൾ ചിത്രീകരിക്കുന്ന ഒരു ആശയപരമായ ചട്ടക്കൂടാണിത്. റിസർച്ച് ഓണിയൻ ഒരു മാർഗ്ഗരീതിയായി ഉപയോഗിക്കുന്നതിലൂടെ, ഗവേഷകന് ഓരോ ഘട്ടങ്ങളിലും വ്യവസ്ഥാപിതമായി തീരുമാനങ്ങൾ എടുക്കാനും സമഗ്രവും നന്നായി ചിട്ടപ്പെടുത്തിയതുമായ ഗവേഷണ രൂപകൽപ്പന ഉറപ്പാക്കാനും കഴിയും. ഒരു സമ്മിശ്ര-രീതി ഗവേഷണ സമീപനം ഉപയോഗിച്ചുകൊണ്ട്, മൈക്രോ

ഇൻഷുറൻസിലെ നിക്ഷേപ നിർണ്ണായകരെ സമഗ്രമായി പഠ്യവേക്ഷണം ചെയ്യുന്നതിനായി ക്വാണ്ടിറ്റേറ്റീവ് സർവ്വേകളും ഗുണപരമായ അഭിമുഖങ്ങളും ഈ പഠനം സംയോജിപ്പിക്കുന്നു. കേരളത്തിലെ വിവിധ പ്രദേശങ്ങളിൽ താമസിക്കുന്ന 325 പോളിസി ഉടമകളിൽനിന്നുമുള്ള ഘടനാപരമായ അഭിമുഖത്തിലൂടെയാണ് വിവര ശേഖരണം നടത്തിയിരിക്കുന്നത്. ലൈഫ് ഇൻഷുറൻസ് കമ്പനികളിൽ നിന്ന് തിരഞ്ഞെടുത്ത പങ്കാളികളുമായുള്ള ആഴത്തിലുള്ള അഭിമുഖങ്ങളും പഠനത്തിന് സഹായകമായി, ഇത് മൈക്രോ ഇൻഷുറൻസ് നിക്ഷേപത്തെ ചുറ്റിപ്പറ്റിയുള്ള സൂക്ഷ്മമായ വീക്ഷണങ്ങളെയും പ്രചോദനങ്ങളെയും കുറിച്ച് ആഴത്തിൽ മനസ്സിലാക്കാൻ സഹായിക്കുന്നു.

അഭിമുഖത്തിലൂടെ ശേഖരിച്ച വിവരങ്ങളുടെ വിശകലനം കേരളത്തിലെ മൈക്രോ ഇൻഷുറൻസ് നിക്ഷേപത്തെ സ്വാധീനിക്കുന്ന സുപ്രധാന നിർണ്ണായക ഘടകങ്ങൾ കണ്ടെത്തുന്നതിനും സഹായകമായി. സാമ്പത്തിക ശേഷി, മനസ്സിലാക്കിയ മൂല്യം, മൈക്രോ ഇൻഷുറൻസിന്റെ നേട്ടങ്ങൾ, അപകടസാധ്യതയോടുള്ള മനോഭാവം, അവബോധത്തിന്റെയും ധാരണയുടെയും നിലവാരം, അപകടസാധ്യത ലഘൂകരിക്കാൻ സ്വീകരിച്ച അനുപചാരിക തന്ത്രങ്ങൾ, പോളിസി ഉടമകളുടെ മൈക്രോ ഇൻഷുറൻസ് നിക്ഷേപത്തെ സ്വാധീനിക്കുന്ന ജനസംഖ്യാപരമായ സവിശേഷതകൾ തുടങ്ങിയ പ്രധാന ഘടകങ്ങൾ പഠനം തിരിച്ചറിഞ്ഞു. കൂടാതെ, പഠനം സാമൂഹിക-സാമ്പത്തിക നിലയിലുള്ള സാമ്പത്തിക ശേഷി, മനസ്സിലാക്കിയ മൂല്യം, ഇൻഷുറർ ചെയ്യപ്പെടുമ്പോൾ ലഭിക്കുന്ന ആനുകൂല്യങ്ങൾ എന്നിവയിൽ കാര്യമായ മാറ്റങ്ങൾ വെളിപ്പെടുത്തി. അപകടസാധ്യതയോടുള്ള മനോഭാവം മൈക്രോ ഇൻഷുറൻസ് നിക്ഷേപ തീരുമാനങ്ങളിൽ പ്രാധാന്യമർഹിക്കുന്നു. പോളിസി ഉടമകളുടെ നിക്ഷേപത്തെ സ്വാധീനിക്കുന്ന ഒരു പ്രധാന ഘടകം സാമ്പത്തിക ശേഷിയാണ്.

കേരളത്തിന്റെയും ഇന്ത്യയുടെയും ലൈഫ് മൈക്രോ ഇൻഷുറൻസ് വിപണിയുടെ വളർച്ചയിൽ വന്ന മാറ്റങ്ങൾ ഐആർഡിഎ റിപ്പോർട്ടിൽ നിന്നും ശേഖരിച്ച വിവരങ്ങൾ വിശകലനം ചെയ്തതിലൂടെ പഠനത്തിന് സഹായകമായി. കഴിഞ്ഞ കുറച്ച് വർഷങ്ങളായി, കാര്യമായ വളർച്ചയൊന്നും നേടിയെടുക്കാൻ സാധ്യമായിട്ടില്ല എന്നുള്ളതും കണക്കുകൾ വെളിപ്പെടുത്തുന്നു. എൽഐസി ഓഫ് ഇന്ത്യയുടെ കേരളത്തിന്റെ മൈക്രോ ഇൻഷുറൻസ് വിപണി വിഹിതം സമീപ വർഷങ്ങളിൽ .97% മാത്രമാണ്. കേരളത്തിലെ മൈക്രോ ഇൻഷുറൻസ് മേഖലയുടെ പതിമൂന്ന് വർഷത്തെ സംയുക്ത വാർഷിക വളർച്ചാ നിരക്ക് 9.15% നെഗറ്റീവ് വളർച്ചയാണ് കാണിക്കുന്നത്. കാലക്രമേണ, ഇന്ത്യയുടെ മൈക്രോ ഇൻഷുറൻസ് വിപണിയിൽ കേരളത്തിന്റെ വിഹിതം കുറഞ്ഞു വരുന്നതായും കാണുന്നു.

കേരളത്തിലെ വ്യക്തികളുടെ മുൻഗണനകളോടും ആവശ്യങ്ങളോടും പ്രതിധ്വനിക്കുന്ന ഉദ്ദേശ്യ തന്ത്രങ്ങൾ, അനുയോജ്യമായ ഉൽപ്പന്നങ്ങൾ, ഫലപ്രദമായ ആശയവിനിമയ സംരംഭങ്ങൾ എന്നിവയുടെ രൂപകൽപ്പന ചെയ്യുന്നതിനും അതുവഴി മൈക്രോ ഇൻഷുറൻസുമായുള്ള പങ്കാളിത്തവും നിക്ഷേപവും വർദ്ധിപ്പിക്കാനും ഈ കണ്ടെത്തലുകൾ ലക്ഷ്യമിടുന്നു. ചുരുക്കത്തിൽ, കേരളത്തിലെ വ്യക്തികൾക്കിടയിലുള്ള മൈക്രോ ഇൻഷുറൻസ് നിക്ഷേപത്തെ സ്വാധീനിക്കുന്ന നിർണ്ണായക ഘടകങ്ങളുടെ പ്രാധാന്യം ഈ പഠനം നിലവിലുള്ള വിജ്ഞാനശേഖരത്തിലേക്ക് സംഭാവന ചെയ്യുന്നു. ഈ കണ്ടെത്തലുകൾ കൂടുതൽ ഉൾക്കൊള്ളുന്നതും ഫലപ്രദവുമായ മൈക്രോ ഇൻഷുറൻസ് പോളിസികളും സമ്പ്രദായങ്ങളും രൂപപ്പെടുത്തുന്നതിന് പ്രസക്തിയുള്ളതാണ്, സാമ്പത്തികമായി ദുർബലരായ ജനങ്ങൾക്കിടയിൽ സാമ്പത്തിക പ്രതിരോധശേഷിയും റിസ്ക് മാനേജ്മെന്റും പ്രോത്സാഹിപ്പിക്കുന്നതിനും പഠന കണ്ടെത്തലുകൾ സഹായകമാകുന്നു.

സൂചകപദങ്ങൾ: മൈക്രോ ഇൻഷുറൻസ്, സോഷ്യൽ സെക്ടർ ബാധ്യത, റിസ്ക് മാനേജ്മെന്റ്, മൈക്രോ ഇൻഷുറൻസ് നിക്ഷേപം

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List of Abbreviations

AABY	-	Aam Admi Bima Yojana
AVE	-	Average Variance Extracted
BOP	-	Bottom of the Economic Pyramid
BPL	-	Below Poverty Line
CAGR	-	Compounded Annual Growth Rate
CBHI	-	Community Based Health Insurance
CBO	-	Community Based Organisation
CFA	-	Confirmatory Factor Analysis
CR	-	Composite Reliability
EFA	-	Exploratory Factor Analysis
FOC	-	First Order Construct
GIC	-	General Insurance Corporation
GSV	-	Guaranteed Surrender Value
HOC	-	Higher Order Construct
HTMT	-	Heterotrait-Monotrait
ILO	-	International Labour Organisation
IRDA	-	Insurance Regulatory Development Authority
LIC	-	Life Insurance Corporation of India
LOC	-	Lower Order Construct
MCP	-	Multiple Country Publication
MFI	-	Micro Finance Institution
MIA	-	Microinsurance Agent
NABARD	-	National Bank for Agriculture and Rural Development
NGO	-	Non-Government Organisation
OECD	-	Organisation for Economic Co-Operation and

Development

PLS	-	Partial Least Squares
RBI	-	Reserve Bank of India
SCP	-	Single Country Publication
SEM	-	Structural Equation Modeling
SHG	-	Self Help Group
SOC	-	Second Order Construct
SPSS	-	Statistical Package for the Social Sciences
SRMR	-	Standardized Root Mean Square Residual
TPA	-	Third Party Administrator
UNDP	-	United Nations Development Program

Chapter 1

INTRODUCTION

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“Nobody has a right to comfort, unless everybody has access to the essentials of life.”

— **Abhijit Naskar**

1.1 Introduction

A well-functioning and inclusive financial system is fundamental for sustainable economic growth; insurance has a significant role in it. Inclusive insurance practices contribute to economic stability by preventing financial setbacks caused by unforeseen events. It helps communities and economies recover faster from unexpected losses, reducing the long-term negative impact on livelihoods and economic progress. A stable economic environment allows for sustained growth and development opportunities for all. To achieve this goal, effective implementation of financial inclusion is required. The development of financial inclusion in India can be traced in two significant studies: Hundred Small Steps, led by Raghuram G. Rajan, and the Committee on Financial Inclusion, chaired by C. Rangarajan. Financial inclusion, in the words of Raghuram G. Rajan, "the most important financial services for the poor are vulnerability-reducing instruments- Savings, remittances, insurance, and pension demands are among them." Rangarajan (2008), on the other hand, states that "the process of ensuring access to financial services and timely and adequate credit where needed by vulnerable groups such as weaker sections and low-income groups at an affordable cost." In their analysis of financial inclusion, both studies emphasize how crucial it is to develop human capital, build infrastructure, and reform laws (Dasgupta, 2009).

Inclusive growth plans frequently incorporate the development of social safety nets to safeguard vulnerable communities from economic shocks and uncertainty. These

safety nets, such as unemployment benefits and specialized welfare programmes, contribute to improved well-being by providing a safety net during difficult times. Inclusive growth is a holistic approach that attempts to ensure that the advantages of economic progress are widely shared, resulting in improved well-being for all members of society. It also contributes to a higher quality of life and more overall satisfaction among individuals by resolving income inequality, giving access to essential services, offering employment possibilities, and promoting social cohesion. Inclusive growth and financial inclusion are no longer policy options; they are now policy imperatives that will determine the social and economic order's long-term financial sustainability and stability in the future.

In general, marginalized sectors of the population are financially excluded in contemporary society. Most of the time, their earnings are not monetized, and they are denied financial inclusion. Furthermore, there is a lack of understanding about regaining access to insurance services; on the other hand, insurance authorities are not fully informed of the needs and capacities of the people in these areas. Universal financial service access will enable consumers to save money and benefit from a variety of financial services such as insurance. As a result, they will have more control over their money, will be able to make better investment and spending decisions, and will be able to improve their standard of living.

Microinsurance is a concept that has received substantial attention in India for addressing the insurance needs of marginalized groups. It entails providing affordable and accessible insurance solutions that are tailored to the specific risks and vulnerabilities experienced by these communities. In India, marginalized groups are encouraged to participate in the financial system through the use of microinsurance. Financial inclusion is important for reducing poverty and strengthening the resilience of vulnerable populations, according to a World Bank study (World Bank, 2019). These communities can avoid an endless cycle of debt and poverty by managing risks including crop failure, medical emergencies, and natural disasters with the help of microinsurance (Micro Save, 2016).

Marginalized groups, especially those engaged in agriculture, are particularly vulnerable to the risks posed by changing weather and market conditions, etc. Microinsurance programmes aimed at these areas protect farmers from crop failure and help them maintain their way of life. According to research by Banerjee and Duflo (2019), microinsurance has a favourable effect on the income stability of Indian rural farmers. Urban groups who are marginalized, such as daily labourers and street vendors, have their needs met by microinsurance. These people frequently lack social safety nets. Such informal sector workers have access to life and disability insurance through microinsurance programmes like the Aam Aadmi Bima Yojana (AABY) (Gov. of India, 2016). Women in marginalized communities often face additional challenges due to traditional gender roles and limited access to resources. Microinsurance can empower women by providing coverage for maternity expenses, offering economic security, and enhancing their decision-making power (ILO, 2015).

The vulnerability of above-mentioned category is very high to various risks related to their lives and livelihood activities. Therefore, making insurance services available to them becomes a key strategy to ensure that sustainable social protection is offered to those people. Insurance is a fast-emerging strategy and social security measure even for the low-income group engaged in a large variety of activities for income generation and who are exposed to various kinds of risk. Because of poor economic conditions, the risk attached to the lives of the poor comprises of injury, illness, accident, death and loss of income. One of the World Bank study groups has observed that about a quarter of the hospitalized Indians belong to the BPL category and they are compelled to sell their assets and belongings for meeting the hospital bills. Therefore, the provision of suitable insurance products to such sections is an inevitable social security measure. Creating sufficient banking and insurance infrastructure to be offered to the rural and urban poor can be regarded as one of the appropriate elements of a financial inclusion plan. It is observed by Gunaranjan (2007) that the thrust area for bringing financial inclusion among the disadvantaged and the poor is microinsurance. For the low-income segments, the IRDA has developed a special type of insurance policy which are termed as microinsurance

policies. This specific category of insurance helps to promote insurance coverage among the people of lower strata. The provision of Micro Insurance Regulation 2005, facilitates financial inclusion in the area of insurance through the distribution of insurance services at an affordable cost. This regulation applies the principle of risk pooling to design the product appropriate to the low-income class in general and the life insurance sector.

1.2 Microinsurance - The Concept

Microinsurance is a first step toward providing the poor with social and economic security, particularly business and livelihood security. Microinsurance refers to the protection of assets and lives against insurable risks of the target population, which includes micro-entrepreneurs, small farmers and the landless, women, and low-income people, through formal, semiformal, and informal institutions. These groups are required to pay specific amounts as regular premiums, proportionate to their livelihood and the cost of risk against which they insure their lives, the lives of their family members, and their property. Microinsurance is typically provided to people who are not covered by mainstream commercial and social insurance schemes because they do not have access to the products offered in the general line. Insurance companies also disregard them because they lack a consistent and predictable source of income.

Microinsurance operates on the same principles as the regular insurance business. However, there are a few things that set it apart from traditional insurance. It's a low value product (with a modest premium and benefit package) that necessitates different design and distribution strategies, like having a premium based on community risk rating (as opposed to individual risk rating), having an intermediary agency that actively represents the target community, and bundling microcredit and micro-savings. The intermediary agency can be an NGO or an MFI. In this way, microinsurance combines the best aspects of informal insurance (by using local resources and information to help design appropriate schemes delivered in an economical manner) with the advantages of formal insurance (prepaid, scientifically organized scheme). Microinsurance is a type of property, life, or health insurance

that has a low contribution cost and provides restricted protection. It is intended to assist the less fortunate segments of society in collectively protecting themselves from hazards.

1.3 Development of Microinsurance in India

Historically, a few microinsurance schemes were launched in India, either by non-governmental organizations (NGOs) in response to a perceived need in the communities in which these organizations were active, or by the government. The government, on its own and through nationalized industries, implemented several schemes to alleviate the financial losses suffered by low-income rural residents. In the 1970s and 1980s, the government also launched several schemes to increase the earning power of low-income groups in rural areas, focusing on loans made accessible to them to acquire milch cattle, engage in horticulture, and other economic pursuits. Both schemes were administered on a reimbursable basis by the nationalized General Insurance Corporation (GIC) for the Government of India. The GIC, as an instrument of social change, which was the primary goal of nationalization, introduced a new personal accident scheme known as Janata Personal Accident Insurance in 1975, making it available at a cost of Rs.12 for a sum insured of Rs.10,000 against death and permanent disability. This scheme proved to be very popular, and it was widely used as a credit-life insurance cover by a large number of low-income individuals and cooperative banks.

Over the past ten years, many community-based organizations in India have concentrated on creating community-based health insurance (CBHI) programs. Micro Health Insurance Schemes is another name for the majority of these CBHI programs. The growth of microfinance activity and the law requiring all formal insurance companies to expand their operations to the nation's rural and clearly defined social sectors are the two main reasons why microinsurance schemes are currently gaining popularity (IRDA 2000). According to the Insurance Regulatory and Development Authority (Microinsurance) Regulations, 2005, an insurer's obligations to the rural and social sectors will apply to any microinsurance product that is issued in compliance with the regulations. The social obligations relate to the

number of people in specific identified segments of society who must be covered by both life and non-life insurers. The obligations related to rural areas are expressed as a percentage of the total gross premium collected, and they are based on a minimum percentage of all policies written by life insurance companies as well as general insurance companies. A few aspects of these responsibilities deserve special attention. First, insurance subsidies are not always necessary to meet social and rural obligations. Secondly, the new insurers have to fulfil these responsibilities from the first year of operation. Thirdly, insurers who do not want to serve the low-income and rural populations do not have an exit option. Lastly, failure to comply with these requirements may result in a penalty from the regulatory body.

Insurance companies are under intense pressure to offer microinsurance as a result of these regulations. To meet these demands, all insurance providers have created products for the underprivileged and those with low incomes. Similar approaches are being taken by public and private insurance companies to establish partnerships with different civil society organizations. A large number of private insurance companies have begun creating composite microinsurance products that combine general and life insurance coverage to include their the new products following the recently established IRDA Microinsurance Regulations.

1.4 Significance of the Study

Insurance as a pre-paid risk managing instrument was never considered as an option for the Bottom of the Economic Pyramid (BOP). The poor were considered too poor to be able to afford insurance premiums. Often they are considered uninsurable, given the wide variety of risks they face. However, recent developments in India, as elsewhere have shown that not only can the poor make small periodic contributions but also that the risks they face and they were mostly independent or idiosyncratic. Coping with risks such as health problems, crop failure, loss of livestock, death of a family member, loss of assets, and income and employment is much harder on the part of poor and low-income groups than others. Many poor households are involved in activities of smaller scale but carry a higher degree of risk and uncertainty and are hence prone to financial and income risks. Microinsurance is believed to work as a

powerful risk management tool for low-income and vulnerable groups by preventing them from falling into the poverty trap. However not much is known about outreach and efficacy of microinsurance across regions and groups. In India, though government plays a proactive role in providing insurance coverage to the poor through subsidized insurance schemes and other programmes. The size and potential of the microinsurance market are enormous due to a sizeable portion of the poor and low-income population who live without any formal insurance. However, it is also found that many people's image of insurance is based on incomplete information or even on institutions. What may think about microinsurance may be the result of different factors, such as perception, attitude, or familiarity and may in turn influence people's decision for or against Microinsurance investment. Hence, this study has been carried out.

1.5 Statement of the Problem

Microinsurance is low-cost insurance for people with limited income. Inclusion of underprivileged people into insurance coverage might be significantly aided by microinsurance. For the social and economic development of our country, insurance protection for all and inclusive social development are essential. Insurance is a measure of a nation's social as well as economic development indicator. Insurance is especially important for low-income and marginalized people in society since they are especially vulnerable to the effects of illness, accidents, death, or misfortune and do not have adequate means to make use of when unexpected risks arise. Low-income people live in unfavourable environments and they are more vulnerable to these risks than the rest of the population. A nation like India must make sure that everyone has access to insurance to provide them with the capability to defend themselves in emergency situations. In India, 66 percentages of people have daily incomes ranging from USD 1.9 to USD 5.5. According to a survey on microinsurance in 2014 by the Insurance Institute of India (III) in partnership with GIZ, out of a population of 1.25 billion, 40% of rural and 45% of urban households earn between Rs 5000 and Rs 12000/pm. Which indicate the potential market for Microinsurance in India. To attain sustainable economic development, the weaker

section of the society must get the benefits of inclusive policies. Microinsurance is a necessary step in this direction as the bottom of the economic pyramid is most vulnerable to several risks.

Microinsurance has become recognised as a viable risk management strategy for providing marginalised and vulnerable groups with financial security against a various risk. In the context of Kerala, a region characterized by its unique socio-economic dynamics and susceptibility to diverse uncertainties. In order to increasing utilization of microinsurance products by lower segments, requires developmental focus shift to more inclusive measures. People who lie at the bottom of the economic pyramid are unable to utilize these financial services. At the same time, some of them utilise these services to a limited extent. In response to this problem this study proposes certain questions as to whether the target segment is aware about Microinsurance products, what extent of awareness exhibited by target people about various aspects of insurance, there may be several factors that influence an individual to take microinsurance policy, what are the determinants creating demand for microinsurance. Hence it is imperative to conduct an investigation to understand how these market realities are influencing microinsurance investment. There was a need to carry out a microinsurance study in light of the significant under-penetration of Microinsurance from the policyholders' perspective. This study aims to address this gap by examining the complex interplay between financial capability, perceived benefits, perceived value, perceived risk, risk attitude, and the utilization of informal strategies in shaping microinsurance investment behaviours in Kerala

1.6 Research Questions

Despite the potential advantages of microinsurance, there exists a lack of comprehensive understanding regarding the determinants of microinsurance investment in the Kerala context. This study aims to explore the following central research inquiries:

- What is the current state of microinsurance penetration in India and Kerala? How has microinsurance evolved?

- Whether microinsurance beneficiaries capable of managing their financial resources for their future security?
- How does the financial capability of individuals in Kerala influence them to engage in microinsurance investment?
- Are there any other measures used to protect against risk and shocks they face?
- Whether microinsurance is made affordable accessible and appropriate for people whose income is low, unpredictable and uncertain?
- How closely does the product meet the real need of the target customers?
- Is microinsurance perceived as an efficient tool for managing risk?

1.7 Objectives of the Study

The following study objectives have been established based on the research questions mentioned above.

1. To evaluate the growth and progress of microinsurance in India and Kerala.
2. To analyze the dimensions that measures the level of financial capability among policyholders.
3. To measure the perceived value of microinsurance among policyholders.
4. To examine various risk management strategies adopted by policyholders other than insurance and its effect on microinsurance investment.
5. To assess the effectiveness of microinsurance products available in the current market.
6. To measure the effect of financial capability and perceived value, perceived benefits, perceived risk and attitude towards risk on microinsurance investment.

1.8 Research Hypotheses

The following hypotheses have been developed and tested in light of the stated objectives.

1. There exists variation in financial capability across demographic profiles of microinsurance policyholders.
2. Financial capability positively influences microinsurance investment.
3. Informal strategies adopted by microinsurance policyholders are different.
4. There exists variation in perceived value, perceived benefits and perceived risk across demographic profiles of microinsurance policyholders.
5. Perceived value has a positive impact on microinsurance investment.
6. Perceived benefits positively influence investment in microinsurance.
7. Perceived risk negatively affects investment in microinsurance.
8. Insurance awareness moderates the impact of financial capability on microinsurance investment.
9. There exist improvements in their socio-economic condition after taking microinsurance

1.9 Scope of the Study

The current study's geographical scope is limited to the state of Kerala. The study covers all five divisions of LIC of India in Kerala (Trivandrum, Emakulam, Kottayam, Thrissur, and Kozhikode). Furthermore, this study focuses solely on the individual life microinsurance plans LIC of India. The present study is limited to the analysis from the point of view of the policyholders in Kerala.

1.10 Conceptual Framework

A conceptual framework is developed for the study and is used as a research framework. This is based on the review of the related constructs and their interrelationship. Figure 1.1 depicts the conceptual model of the study. A brief description of the construct used in the framework is as follows.

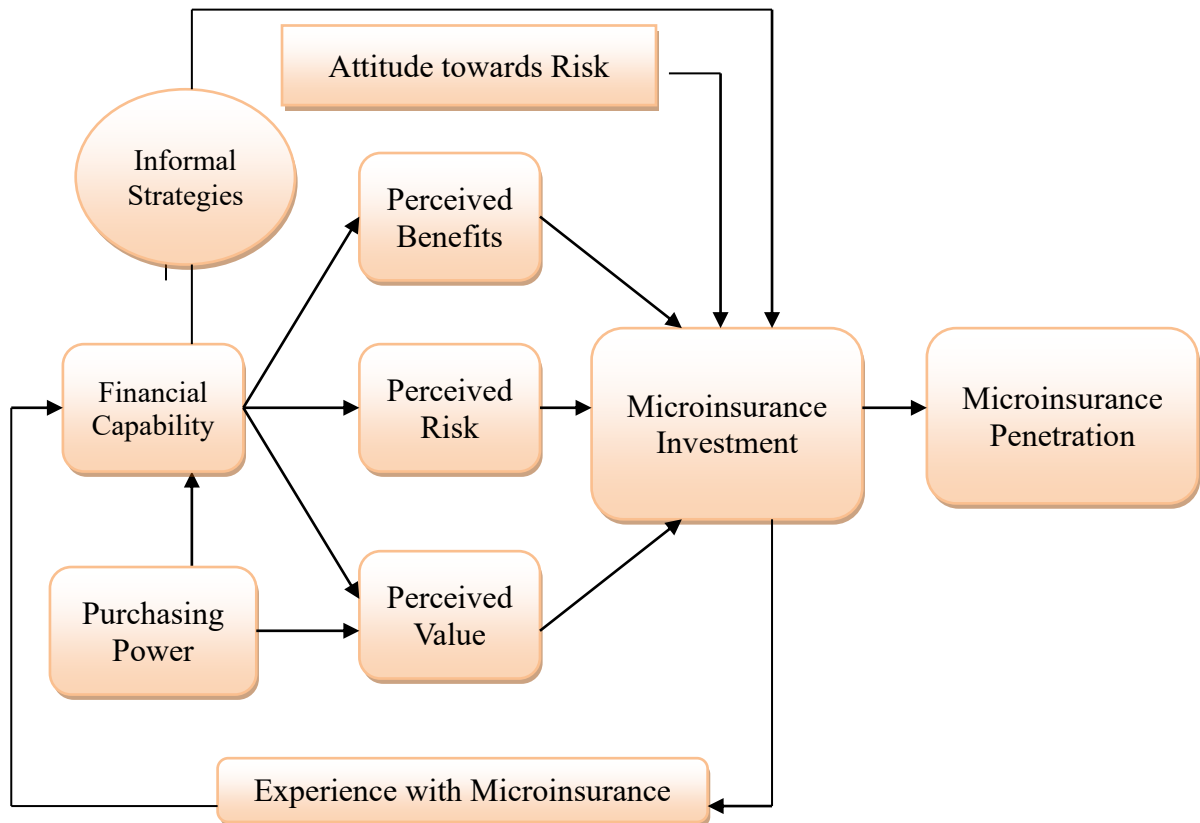
1.10.1 Financial Capability

Financial capability encompasses the knowledge, attitudes, skills, and behaviours of consumers concerning managing their resources and understanding, selecting, and making use of financial services that fit their needs. In this study financial capability is measured with three sub-dimensions namely financial knowledge, financial attitude, and financial behaviour.

1.10.1a Financial Knowledge is the understanding of a financial concept that is important to a person, such as budgeting and saving plans. When it comes to investment options, increased financial knowledge may change people's perceptions of risk.

1.10.1b Financial Attitude is an individual's mental state when handling financial matters can be defined as their financial attitudes (Marsh, B. A, 2006). A financial attitude is the application of financial concepts to the process of making and evaluating financial decisions. (Rajna, A., Ezat, W. S., Al Junid, S., & Moshiri, H, 2011)

1.10.1c Financial Behaviour is a collection of actions carried out in the context of financial activities (Parrotta, J. L., & Johnson, P. J, 1998). The way a person saves, invests, and manages his or her expenditure and credit are common indicators of financial behaviour Oquaye, M., Owusu, G. M. Y., & Bokpin, G. A., 2022).

Figure 1.1*Conceptual Model*

Source: Developed by the researcher

1.10.2 Perceived Benefits

Perceived benefits are beliefs about the positive outcomes associated with a behaviour in response to a real or perceived threat (Chandon et al., 2000). From the literature, researcher identified the perceived benefits relating to Microinsurance investment and it classified them as perceived monetary benefits and Perceived Non-Monetary benefits.

1.10.2a Perceived Monetary Benefits: The financial advantages and protections that individuals or households expect to receive from participating in microinsurance programs are referred to as perceived monetary benefits of microinsurance.

1.10.2b Perceived Non-Monetary Benefits: Non-financial advantages, gains, or positive outcomes that individuals or entities anticipate or experience as a result of a

specific action, decision, or circumstance are referred to as perceived non-monetary benefits. These advantages are unrelated to monetary or financial compensation. Non-monetary benefits can vary widely depending on the context, but they frequently contribute to an individual's overall well-being, satisfaction, and quality of life.

1.10.3 Perceived value

Consumer's "overall assessment of the utility of a product based on perceptions of what is received and what is given". in this regard (Zeithaml 1988) described value in four different ways: (1) value as low price, (2) value as whatever the consumer wants in a product, (3) value as the quality get from the price the customer pays, and (4) value as what is get for what is given. In this study perceived value is measured with three sub-dimensions based on the financial inclusion principle of Affordability, Appropriateness, Accessibility which are explained as;

1.10.3a Microinsurance Affordability: The degree to which microinsurance products or coverage options are financially feasible for individuals or households with limited financial resources is referred to as microinsurance affordability. Microinsurance is intended to provide insurance coverage to low-income or underserved populations, and affordability is a critical factor in ensuring that these people can take advantage of insurance services.

1.10.3b Microinsurance Appropriateness: The degree to which microinsurance products and services are well-suited to the specific needs, preferences, and circumstances of the target audience, which typically consists of low-income or underserved populations, is referred to as microinsurance appropriateness. It is critical to ensure that microinsurance offerings are appropriate for meeting the unique needs and challenges of these individuals.

1.10.3c Microinsurance Accessibility: The ease with which low-income or underserved populations can obtain and use microinsurance products and services is referred to as microinsurance accessibility. Microinsurance is intended to provide insurance coverage to individuals and families who do not have access to traditional

insurance options. It is critical to ensure accessibility in order to provide insurance protection to those who require it the most.

1.10.4 Perceived Risk

The subjective evaluation or assessment of the potential negative consequences or uncertainties associated with a specific decision, action, or situation is referred to as perceived risk. It is a mental and emotional assessment of the likelihood and severity of harm, loss, or unfavourable outcomes associated with Microinsurance investment

1.10.5 Attitude towards Risk

It includes one's beliefs, feelings, and behavioural reactions in the face of uncertainty and the possibility of negative outcomes. An individual's risk attitude can be classified along a spectrum ranging from risk-averse to risk-seeking, and it influences their choices and actions significantly.

1.10.6 Experience with Microinsurance

Microinsurance acts as a catalyst for positive socioeconomic change by addressing the specific needs and challenges faced by those living below the poverty line, resulting in a more resilient and empowered population.

1.10.7 Informal Strategies

Informal strategies for risk mitigation encompass a wide array of practices and mechanisms employed by individuals, communities, to manage and mitigate various risks without relying on formal financial institutions or traditional insurance. These strategies are prevalent, especially among marginalized or low-income populations, and often serve as crucial means of coping with uncertainties and adverse events.

1.11 Research Methodology

The methodology in this study relies on a theoretical concept of the "Research Onion" developed by Saunders et al. in 2016. The research onion describes the important layers or phases that must be accomplished to construct an effective technique in a very systematic manner (Raithatha, 2017). The research methodology

begins with the research's philosophy, basic concept, the selection of techniques, methods, and strategies, and the time horizon defined for the study. These processes take the study rationale to the research design, which contains the key methodologies and procedures for data collection and analysis. Saunders et al. (2017) designed the research onion, which depicts the stages that must be incorporated when developing a research strategy. Each layer of the onion, when viewed from the outside, represents more exhaustive steps of the research process (Saunders et al., 2017). It outlines methods for research and an effective process to follow. It can be used in several situations and is adaptable to almost any type of study methodology (Bryman, 2012). The methodology used for this study is illustrated in Figure 1.2 as a research onion.

1.11.1 Research Philosophy

A research philosophy is a collection of ideas about the nature of the world being examined (Bryman, 2012). Understanding the research philosophy utilized can assist to clarifying the assumptions behind the research process and how this matches the methods being employed. The assumptions of a research philosophy provide a rationale for the research methodology (Flick, 2011). In brief, research philosophy is concerned with the essence of truth or knowledge. Positivism, Critical Realism, Interpretivism, and Pragmatism are the four research philosophies that are commonly employed. The assumptions behind these classifications are ontological, epistemological, and axiological.

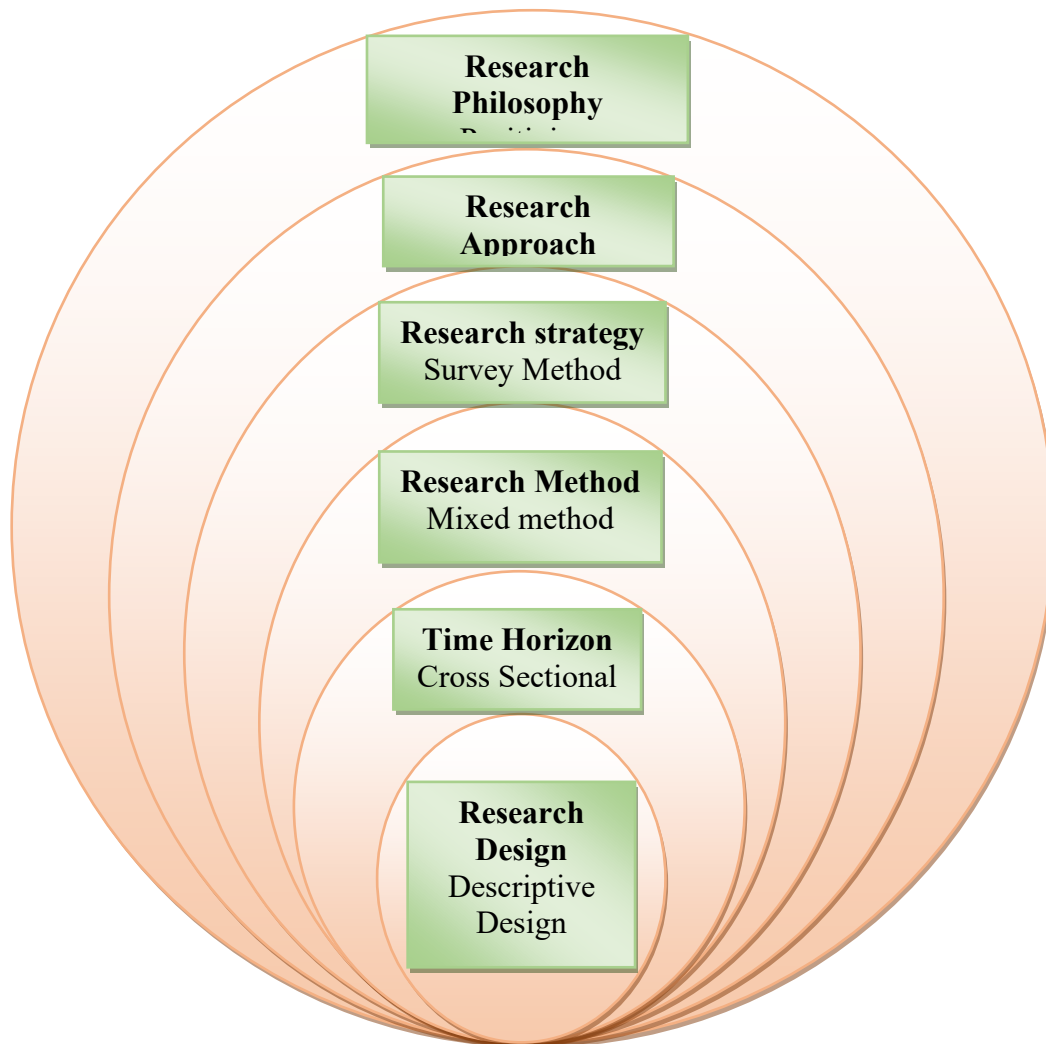
1.11.1a Ontology: According to Thomas and Hady (2011), ontology is the presumption about how an individual views the business world; as a result, the researcher's options are limited to either objective or subjective, or both. Two primary ontological frameworks might guide the research process: constructionism and positivism (Monette et al., 2005). The researcher adopted an objectivism technique in producing new information in this study.

1.11.1b Epistemology: The process of discovering reality and the associated theories is referred to as epistemology. This clarifies what true knowledge and acceptable values are as well as how we communicate knowledge to others.

Consequently, it could be qualitative, quantitative, or a combination of the two (Clegg, 2011). The researcher established quantitative standards for evaluating the body of knowledge in the area.

Figure 1.2

Research Onion Proposed for the Study



Source: Saunders et al. 2016

1.11.1c Axiology: It emphasizes the inclusion of ethics and values in research methodologies. This includes inquiries about the researcher's approach to managing the values of research participants (Thoman & Hady, 2011). Because the researcher in this study assumes that values are free, positivism is the chosen research philosophy. According to positivism, reality exists apart from the subjects of study.

This effectively indicates that each subject's interpretation of the phenomenon under study is consistent (Newman, 1998). Researchers may favour one philosophy over another, but neither is intrinsically superior to the other (Podsakoff et al., 2012). The research methodology is merely justified by the philosophy. The researcher employed a positivism research philosophy in this study

1.11.2 Research Approach

Boyd (2002) defines a research approach as an effective way of managing a research circumstance or a research challenge. In general, there are three different approaches to knowledge generation:

1. Deductive Approach: The deductive approach establishes a hypothesis based on an existing theory and then formulates the research approach to test it (Silverman, 2013). Deduction begins with the broad and progresses to the specific. According to Plano Clark and Creswell (2007), Deductive analysts employ the 'top down' strategy, which involves moving from a previously developed existing theory to hypotheses developed for a specific setting to contribute to or contradict the theory. This approach is best suited to circumstances where the research endeavour is concerned with determining if the observed occurrences are consistent with past research (Wileset.at.2011).

2. Inductive Approach: This method is defined as a shift from the specific to the universal (Bryman & Bell, 2011). Trochim and Arora (2006) define induction as the transition from the specific to the general. There is no framework that informs data collecting in this approach, and the study emphasis can thus be developed after the data has been collected (Flick, 2011). Inductive analysts use the 'bottom-up' technique, summarising the arguments of the participants in order to identify bigger patterns and create a theory that connects the themes (Creswell and Plano Clark, 2007). Although this may be viewed as the stage at which new theories emerge, it is also true that when data is analyzed, it may fit into an existing theory (Bryman & Bell, 2011).

3. Abductive Approach In practice, many qualitative researches employ an abductive method to theory formation, in which inductive and deductive assumptions are tested iteratively throughout the inquiry. This is a type of logical

inference in which the observer begins with an observation or group of observations and then finds the simplest and most likely explanations for the data.

1.11.3 Research Strategy

It describes how the researcher intends to carry out the research. The strategy can incorporate a variety of approaches, such as experimental research, action research, case study research, interviews, surveys, or systematic literature reviews (Saunders et al., 2007). The survey approach was employed by the scholar in this study to solve the research problem and interpret the research objectives.

1.11.4 Methodological Choice

The research onion suggests mono techniques, multi methods, and mixed methodologies (Saunders et al., 2007). There are various methodological options available in general, namely Mono quantitative, Mono qualitative, Multi quantities, Multi qualitative and mixed method. The researcher utilised a mixed method in this investigation.

1.11.5 Time Horizon

The time horizon specifies how often and within what deadlines data gathering must be accomplished (Saunders et al. 2007). The research onion specifies two types of time perspectives: cross-sectional and longitudinal time horizons (Bryman, 2012). A cross-sectional time horizon has already been set and requires data to be collected at a single point in time. This is utilised when the investigation is concerned with the examination of a specific phenomenon at a certain moment. A longitudinal time horizon for data collection refers to the collecting of data periodically over a lengthy period of time and is utilised when it is crucial for the research must examine changes over time (Goddard&Melville,2004). The cross-sectional time horizon is the foundation of this research.

1.11.6 Research Design

It serves as a foundation or a guide for conducting research. In other terms, a research design is a list of a study's core components. It resembles a "model" description in several ways. Depending on the study's needs and the researcher's preferences, a study design may incorporate different elements (David Luck & Ronald Rubin, 2001).

The researcher employed a descriptive research design for this investigation. According to David Luck and Ronald Rubin (2001), a descriptive study design is one that explains the phenomena without proving a connection between the elements. This design demonstrates that there is some relationship between the variables by providing an appropriate description of the variables directly related to the decision being made.

1.11.7 Sources of Data

The research relies on both primary and secondary data. The primary data were gathered from LIC microinsurance policyholders from different parts of Kerala. Secondary sources of data included LIC Divisional Office, Kerala reports, Annual reports and handbooks of the Insurance Regulatory Development Authority of India, Annual Reports of LIC, website, and numerous other journals.

1.11.8 Sampling Design

The validity and accuracy of the final judgment are critical, and they are heavily dependent on the extent to which the data was obtained in the first place. Because data quality has a significant impact on the conditions, this procedure requires special attention, and every effort should be made to ensure accuracy while collecting data. Choosing the appropriate sample size was one of the most difficult aspects of this study.

The determination of sample size is concerned with how much information we require to make an informed decision on specific research. More data means a more precise decision and less error in parameter estimation.

1.11.8.1 Target Population

The current study was carried out in the state of Kerala. People living below the poverty line who have purchased any of the LIC's microinsurance plans available in the state of Kerala are considered the population for the study.

1.11.8.2 Sampling Unit

The sampling unit for the study constitutes microinsurance policyholders didn't make any default in the payment of premium. Lapsed policyholders were excluded from the study.

1.11.8.3 Sampling Technique

As the population was unknown and scattered over the state, conducting a census survey was challenging. Similarly, the researcher did not have access to a sample frame; therefore purposive sampling was used to choose sample respondents from five divisional areas of LIC in the state of Kerala.

1.11.8.4 Sample Size Determination

The minimum sample size for the study was determined by applying following formula

$$\begin{aligned} \text{Sample Size } (n) &= \frac{(z \text{ score})^2 * \text{Std Dev} * (1 - \text{Std Dev})}{(\text{Margin of Error})^2} \\ &= \frac{(1.96)^2 * 1.179 * (1 - 1.179)^2}{(0.05)^2} \\ &= 325 \end{aligned}$$

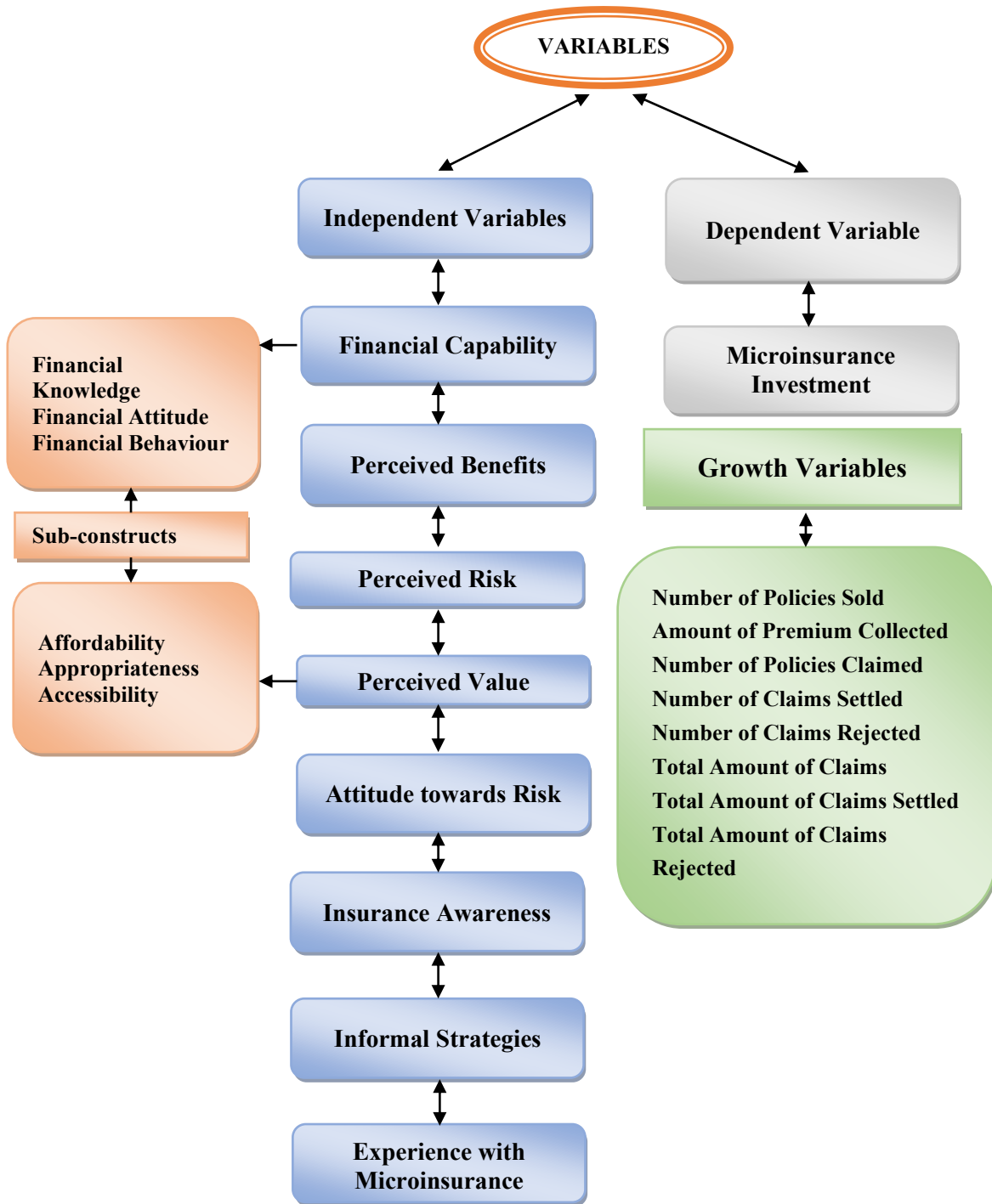
To attain determined sample size for the study, there are 65 policyholders were selected from each division.

1.12 Variables Used in the Study

Identification of variables is crucial for designing a robust research framework. It involves a systematic process to define, measure, and establish relationships among the elements being studied, contributing to the credibility and effectiveness of the research outcomes.

Figure 1.3

Variables used for the study



Identifying variables is a fundamental step in research design, helping researchers understand, measure, and analyze relationships between different elements within a study. Variables are attributes, characteristics, or phenomena that can be measured, observed, or manipulated. They form the building blocks of research and are categorized into independent, dependent, moderating, mediating, extraneous, and control variables. Identified variables are presented in the Figure 1.3

1.13 Framework of Analysis

The framework of analysis includes various statistical techniques used for data analysis in tune with the objectives of the study which helps to arrive at meaningful conclusions. The collected data were validated and established reliability by employing various statistical tests. After checking the normality assumptions, the data do not follow normal distribution and appropriate statistical tools were used for analyzing the data to empirically test the hypotheses developed from the literature review in tune with the objectives of the study. The collected data was coded using SPSS package and various appropriate statistical tools were used for analysis based on objective such as Descriptive statistics, Percentage Analysis, Compounded Annual Growth Rate, Garret ranking, Friedman Test, Mann-Whitney U test, Kruskal-Wallis H test, Wilcoxon signed Rank test, Wilcoxon Matched Pair test, Confirmatory Factor Analysis, and Structural Equation Modeling. Hence the researcher applied different statistical tools for analysis by using the statistical package of SPSS 22, Jamovi and Smart PLS4 which are more suited to make inferences with regard to the subject matter of the study. The tools used for the study are explained as follows:

1.13.1 Descriptive Statistics

In order to evaluate variation among policyholders concerning their socio-demographic variables descriptive statistics is used. It helps the researcher to present the different dimensions statistical difference in a summarized way and also helps to make correct inferences about the population.

1.13.2 Percentage Analysis

The present study used the percentage analysis describe demographic variables like gender age, monthly income, educational qualification, occupation, marital status,

place of residence, type of family, number of dependents, and membership in any social group. level of financial capability, perceived value, perceived risk, perceived benefits, and insurance service awareness also presented with the help of percentage analysis

1.13.3 Compounded Annual Growth Rate

A compound annual growth rate (CAGR) is a way to measure how an investment or business has grown over a specific period. The present study uses the compounded annual growth rate to show the increase/decrease in the number of policies sold in Individual category, the amount of premium collected under the Individual category, the number of policies claimed under the individual category, the number of claims settled under the individual category, the number of claims rejected under the individual category, total amount of claims under the individual category, total amount of claims settled under the individual category, total amount of claims rejected under the individual category.

$$CAGR = (\text{End Value} / \text{Start Value})^{(1/t)} - 1$$

1.13.4 Garret Ranking

Garret Ranking is used to rank the preference indicated by the respondents on the different informal strategies used by policyholders other than microinsurance. Here this tool is applied to identify the strategies adopted to reduce the financial burden when any emergencies happened in their life. On the basis of the Mean Score obtained after being weighted with Garret Value, rankings are given to each informal strategy identified.

1.13.5 Friedman Test

The Friedman test compares the mean ranks between the related groups and indicates how the groups differed. In this study researcher applied the Friedman test to know the whether the policyholder's selection of informal strategies is similar or not.

1.13.6 Mann- Whitney U Test

A popular non-parametric test to compare outcomes between two independent groups is the Mann-Whitney U test. When comparing two independent samples

when the outcome is not normally distributed, a nonparametric test is appropriate. In order to understand if there is any significant difference of socio-demographic variables along with study constructs the Mann-Whitney U test was performed.

1.13.7 Kruskal Wallis Test

The Kruskal-Wallis Test is a way of matching the mean rankings of more than two groups to determine whether or not the samples have the same group source as an origin. It is an important technique for comparing three or more groups based on a dependent variable at the categorical level.

1.13.8 Chi-Square Test

The chi-square test is a statistical test that is used to detect whether or not there is a significant relationship between two category variables. It is a non-parametric test, which means it makes no assumptions about the data's underlying distribution. It compares the observed frequencies of the categories in a contingency table to the expected frequencies that would occur if the variables were independent. The test computes a chi-square statistic that quantifies the difference between observed and anticipated frequencies.

1.13.9 Exploratory Factor Analysis

Exploratory factor analysis (EFA) is commonly used to determine the factor structure of a measure and to assess its internal reliability. Exploratory factor analysis of principle component analysis with varimax rotation performed to classify the perceived benefits of Microinsurance. Identified variables of perceived benefits classified as perceived monetary benefits and perceived non monetary benefits.

1.13.10 Confirmatory Factor Analysis

Confirmatory Factor Analysis was utilized to confirm concept validity and interrelationships between variables. In these cases, CFA can be used to determine whether the original structure of the measure performs well in the new population. SMART PLS4 was used to create an inner model for the study at first. The current study employs CFA to determine whether or not the indicators of each construct were sufficient to measure the construct using suitable model validity criteria.

Following Criteria for the Reflective Model were checked to ensure the construct validity of the model

Table 1.1

Construct Validity Criteria

Validity indicators	Criteria
1 Indicator reliability	Factor loading > 0.5 Cronbach alpha >0.7
2 Convergent validity	Average Variance Extracted (AVE) >0.5
3 Internal consistency	Composite reliability (CR) >0.7
4 Discriminant validity	Fornell-Larcker criterion and Cross loadings

Source: The criteria of validity indicators are suggested by different scholars- Hulland (1999), Bagozzi and Yi (1988), Cronbach and Meehl (1955) and Hair et al (2010)

1.13.11 Structural Equation Modeling

Structural Equation Modeling (SEM) is a set of statistical techniques used to assess and analyze relationships between observable and latent variables. It explores linear relationships between variables while accounting for measurement error (Beran and Violato, 2010). SEM is used to evaluate the theorised relationship between variables or constructs so that the researcher may identify how well the empirical evidence supports the theoretical models.

1.14 Instrument for Data Collection

An interview schedule is used to acquire the data for the study. An interview schedule helpful in gathering details about individuals' thoughts and feelings. It provides a good response rate as well. The interview schedule is divided into two sections: a segment with demographic data and a section with questions on different construct measures. A five-point Likert scale was used to measure each variable; one (1) is for "strongly disagree" and five (5) is for "strongly agree".

1.14.1 Pilot Study

A pilot study with 90 participants was carried out to ensure the feasibility of the study and assess the suitability of the questions that are included in the data collecting instrument. This helps to ensure that the interview schedule's construct

will sufficiently collect the data required for the study. Certain questions in the schedule have been slightly altered in response to feedback from the pilot study.

1.14.2 Reliability Test

An accurate and consistent result is what a measuring device is said to be reliable for. More precisely, the lower the error, the more reliable and accurate the data is. It quantifies the relative lack of errors in a measuring device. Cronbach's alpha was utilized by the researcher to test the internal consistency of the scale in to gauge its reliability. Internal consistency is one technique for testing scale reliability by evaluating the commonality of a set of items that measure a specific construct. The reliability of the scale is shown by a Cronbach's alpha of greater than 0.7. Evidence of internal consistency among the scale's items is seen in the fact that the Cronbach's alpha for each construct is greater than 0.7. As a result, every construct is substantial and appropriate. The scale constructs and their alpha values are given in Table 1.2.

Table 1.2

Reliability Statistics of Study Variables

Sl. No	Construct	Number of Items	Cronbach's Alpha
1	Insurance Awareness	12	.821
2	Financial knowledge	8	.804
3	Financial Attitude	8	.730
4	Financial Behaviour	6	.856
5	Microinsurance Affordability	6	.782
6	Microinsurance Appropriateness	7	.810
7	Microinsurance Accessibility	5	.865
8	Perceived Benefits	11	.827
9	Perceived Risk	6	.889
10	Attitude Towards Risk	5	.741
11	Experience With Microinsurance	12	.834
12	Microinsurance Investment	6	.733

Source: Pilot Study

1.14.3 Validity Test

"Is one measuring what one intends to measure?" is how Frankfort-Nachmias & Nachmias (1996) defined validity. Validity describes how a construct and its indicators relate to one other. As the most important criterion, validity shows how well an instrument measures what it is intended to assess. A measure's validity refers to how well it captures the intended subject matter and is considered the most important condition. Logical and statistical approaches are used to determine an instrument's validity. The two forms of validity that are examined in the study are content validity and construct validity.

1.14.3a Content validity

Content validity cannot be expressed numerically. Expert opinions can be obtained to ascertain the degree to which the measurement device satisfies the requirements. In order to assess the goals, ideas, and interview schedule, the researcher discussed with several subject matter experts, academicians, and insurance professionals.

1.14.3b Construct validity

"Construct validity is defined as the degree to which a measure confirms predicted correlations with other theoretical propositions" (Kothari, 2004). By performing Confirmatory Factor Analysis, two forms of construct validity (convergent validity and discriminant validity) evaluated to standardising the measuring instrument. The current study meets the convergent validity criteria, as the average variance extracted and composite reliability of all components in the study are greater than 0.5 and 0.7, respectively. The square root of the extracted average variance of all components in the study is greater than the inter-construct correlation. As a result, the discriminant validity of all the constructs was also ensured.

1.15 Limitations of the Study

Limitations are common for all studies based on survey method. Since the study is based on empirical evidence gathered through a structured interview schedule to

obtain meaningful conclusions on Microinsurance investment, it is bound to have certain limitations, which are listed below;

1. Life microinsurance schemes are accessible under both individual and group categories. The current analysis only takes into account products that come under the individual category.
2. The respondents of the study are limited to the public insurance policyholders; other private insurance policyholders are excluded.
3. Non probability method was used for selecting samples therefore all the limitations of the sampling method were of concern.
4. The majority of the information required for the study is qualitative and collected by using appropriate scales in the interview schedule, so all the limitations of scaling techniques are there.

Despite the above limitations, an earnest attempt has been made to arrive at fairly objectives and representative conclusions.

1.16 Chapter Structure of Thesis

The thesis is organized and presented in eight chapters, with brief descriptions of each chapter discussed here;

Chapter 1 – Introduction

The first chapter provides a general idea about the research work done. This chapter provides a background of the study, a statement of the research problem, the significance and objectives of the study, the scope and limitations, chapter scheme. It also includes the methodology followed like research design, sources of data, the sampling technique adopted, sample design, tools used for data collection and analysis, nature of the study and hypotheses set for the study.

Chapter 2 – Review of Literature

This chapter presents a detailed review of the available literature pertaining to the study area. Information from doctoral theses, M.Phil dissertations, articles from well

known journals, magazines and web resources etc. are presented in four heads and finally the chapter explains the research gap.

Chapter 3 – Theoretical Framework

The third chapter gives a detailed picture of the microinsurance industry in India. Features, models, the concept of financial capability, perceived value, perceived benefits, perceived risk and attitude towards risk.

Chapter 4 – Growth of Microinsurance in the Indian Scenario

This chapter provides an outline of the present status of microinsurance, business volume under microinsurance in India and Kerala, performance evaluation of LIC of India in the microinsurance segment etc. are detailed in this chapter.

Chapter 5– Financial Capability, Insurance Awareness and Informal Strategies: An Assessment

This chapter comprises of analysis of primary data and interpretation associated with each construct mentioned in the chapter head. The chapter is presented in three sections; the first presented financial capability analysis and its inferences based on the statistical test, second part deals with insurance awareness analysis and the final section describes informal strategies used by policyholders and their impact on Microinsurance investment.

Chapter 6 – Effectiveness of Microinsurance

Under this chapter major three constructs analysis namely, Perceived value, perceived benefits, perceived risk and attitude towards risk were analyzed with the help of appropriated statistical tests and their results were systematically presented to achieve the study objectives

Chapter 7 – Summary, Findings, and Conclusion

This chapter starts with a brief summary of the work, after a summary of the major findings derived from the analysis is presented and the chapter ends with the conclusions made from the study.

Chapter 8 – Suggestions, Implications, and Scope for Further Research.

This chapter provides suggestions based on the study findings and measures for the enhancement of Microinsurance investment. The implications of the study and its future scope are also depicted in this chapter.

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Chapter 2

REVIEW OF LITERATURE

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2.1 Introduction

The literature review chapter serves as the cornerstone of scholarly research, offering a comprehensive examination and synthesis of existing knowledge, theories, and findings pertinent to the research topic. It presents a critical analysis of published works, providing a theoretical framework and contextualizing the current study within the broader academic landscape. This chapter not only showcases the depth of understanding and familiarity with existing literature but also highlights the gaps, inconsistencies, or unresolved issues that the present research aims to address. By delving into established scholarship, the literature review lays the groundwork for the research methodology, guiding the direction of inquiry and shaping the hypotheses or research questions. In essence, this chapter serves as a foundational framework that not only grounds the study in established knowledge but also propels it forward by identifying areas for further investigation and contribution to the field.

This chapter explains various previous research studies in a summarized form relating to the present study. The researcher attempted to collect information from prior research and relevant studies conducted in the area of financial capability and Microinsurance so that the important variables for the study could be identified and analyzed. It also helps to know the previous research work carried out in the particular area and acts as guidance for the new researchers to identify the research gap, design the present study scientifically and systematically and understand the implications of various studies so that the present study can be channelled towards concrete and specific direction to get good results of the study. The review of the literature has been presented in a summarised and precise manner. The collected literature, related to the study has been given under specific heads

- Financial Capability Studies
- Review Related to Microinsurance

2.2 Financial Capability Studies

Financial capability is one of the major independent variables selected for the study, so it is essential to conceptualize and identify the indicators that can accurately measure the construct. For this, an extensive literature search in the area of financial capability is conducted. In this section, an attempt has been made to present a brief view of the available studies in the concerned area.

Zakaria (2013) look at ways to measure financial capability with an emphasis on four major domains: money management, staying informed, product selection, and planning. The study concluded with financial capability studies in ten nations, which show how financial capability is measured in different countries. According to his findings, young persons under 45 years old, women who are married or living with a partner, those on low income, and those with low levels of education, reading, and numeracy have the lowest financial capability. Older men and women who live with an employed spouse, on the other hand, have the highest financial capability.

According to Netemeyer et al., (2018), perceived financial well-being has two dimensions: 1) current money management stress, which includes feelings of being stressed/worried about one's current financial situation and being unable to manage current earnings to meet financial obligations and live the life one wants to live; and 2) expected future financial security, which includes perceptions of having a financially secure future and meeting future financial goals. The present dimension measures how consumers feel about their financial lives right now, while the future dimension measures how they feel about their financial lives' trajectory and likely future conditions.

Cera et al., (2021) focused on the mediating effect of financial behaviour in the collective influence of financial literacy and inclusion on individuals' financial potential. Individuals' financial capability can be increased by enhancing their financial knowledge, boosting their participation in financial services, and encouraging them to use them. In addition, the indirect influence of financial knowledge and attitude on financial capability is found to be significant,

emphasizing the significance of financial behaviour. This allows them to create policies and services that provide residents with the knowledge and skills they need to make the most of their financial resources.

Xiao et al., (2014) three sets of characteristics, perceived financial capability, financial literacy, and financial behaviour, were used to assess consumer financial capability. The findings suggest that to promote consumer financial well-being, consumer financial education programs should emphasize action-taking and encourage consumers to avoid risky financial behaviour, and engage in desirable financial activity, thereby building financial self-efficacy.

Friedline & West (2016) opined that financial capability combines financial education with financial inclusion through a savings account, allowing people to apply what they've learned. They examined links between financial capability and financial behaviours among US Millennials. Financially proficient Millennials were 17.6 percent more likely to afford unexpected expenses, 22.4 percent more likely to save for emergencies, 21 percent less likely to use alternative financial services, and 30 percent less likely to hold burdensome debt than their financially excluded counterparts. They also found that interventions that only focus on financial education or inclusion may not be enough to help Millennials create good financial habits; instead, interventions should focus on developing financial capability.

Williams & Oumlil (2015) provide a model of college students' financial capabilities to avoid them from becoming financially disadvantaged, the model is to provide a comprehensive, all-encompassing framework to assist universities and other organizations in conceptualizing, planning, organizing, implementing, and evaluating financial education-related systems and processes aimed at improving students' long-term financial decisions and behaviours.

Taylor (2011) used data from a general household survey to address the topic of measuring financial capability with a particular focus on making ends meet and money management and then applied panel data models to uncover its primary determinants. The study found that young unemployed single adults living in

households with additional non-working adults have the lowest financial capability. Older men and women who work full-time and have a working spouse, on the other hand, have the largest financial capabilities.

Marron (2014) discussed how financial capability has become a known, measured, and assessable characteristic of individuals and populations. Authorities' concerns about financial capability shifted from a broad, generalized issue to a specific governing project. This occurred against the backdrop of substantial financialization, which resulted in changes not just in the scope of markets but also in people's expectations of how they should interact with financial services in their daily lives. Financial capability is inspired by a conviction in the failure of real customers to live up to their construction as rational actors, in a parody of Rousseau's statement that "man is born free, and everywhere he is in chains,"

Nam et al., (2019) investigated financial capability among low-income elder Asian immigrants; they create an image of economic uncertainty in general. The majority of respondents lack financial understanding or financial management abilities, resulting in significant financial losses. There is evidence that respondents' financial knowledge and management abilities improve after they open a bank account, implying that financial access may play a role in enhancing financial capability. The findings show how important financial capability-building initiatives are for low-income older Asian immigrants. The study concluded that Social workers should be financially literate and have a thorough awareness of the population's financial needs, views, values, behaviours, and resources.

Zottel, Siegfried et al., (2016) opined that people are now expected to take on greater responsibility for managing a wide range of hazards throughout their lives. People who make solid financial decisions and interact effectively with financial service providers are more likely to attain their financial goals, hedge against financial and economic risks, improve their household's welfare, and contribute to economic growth. To that end, policymakers are increasingly employing surveys as diagnostic tools to identify areas of financial capability that require improvement as

well as vulnerable groups of the population that may be targeted with specific interventions.

Cera et al., (2021) explored the collective influence of financial literacy and inclusion on individuals' financial capability, with a focus on the function of financial behaviour as a mediator. Financial competence can be strengthened by expanding individuals' financial knowledge and behaviour, as well as encouraging their participation in financial services. Furthermore, the indirect effect of financial knowledge and attitude on financial competence is discovered to be significant, emphasizing the significance of financial behaviour. This allows them to create policies and programs focused on providing individuals with the knowledge and skills they need to make the ultimate use of their financial resources.

Tokar & Asaad (2015) examined the impact of financial literacy, which includes both actual financial knowledge and perceived financial confidence, on financial decisions using national survey data from the United States. The findings show that financial confidence is a key component of financial literacy at all knowledge levels. Overconfident people, on the other hand, or those with high confidence (or self-assessed) knowledge but low actual knowledge, are more likely to engage in risky (expensive) financial behaviours. The findings indicate that financial literacy campaigns should focus not only on factual knowledge but also on assisting individuals in developing a healthy booster of confidence.

Atkinson & Angel Moliner Tena (2007) revealed that safeguards are required to explicitly protect persons who do not have the essential skills to read and understand the information they receive or the contract they enter into when purchasing a financial instrument. This cannot be accomplished solely through education; people will not always be able to wait until they have acquired the necessary skills before making financial investments. A more immediate remedy would be to impress upon all financial service providers, the need to be proactive in supporting clients rather than waiting for individuals to request assistance. It should not be assumed that all customers will have access to someone who can read and explain financial literature,

or that they will actively seek assistance. Customers should not be expected to be educated about the things they wish to purchase.

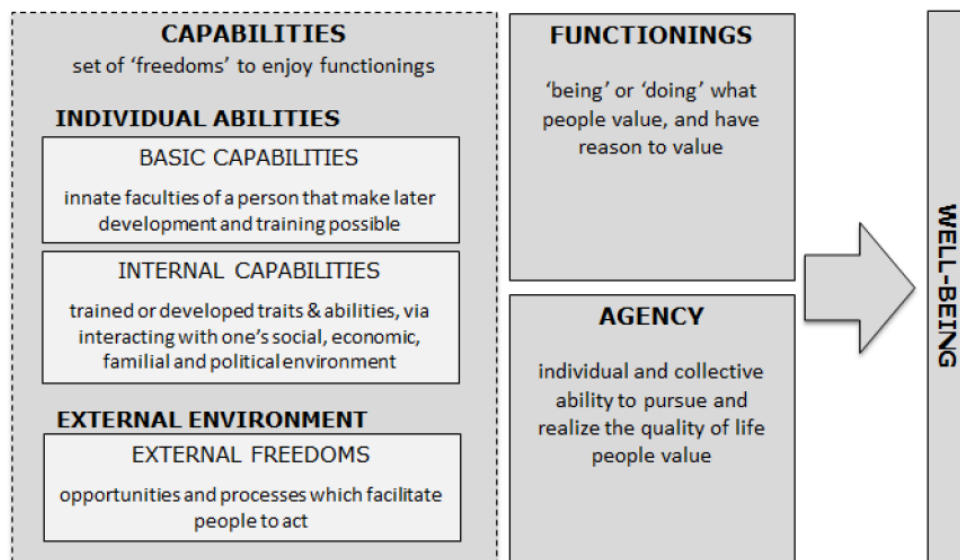
Atkinson et al., (2007) illustrated some of the concerns that have given rise to growing interest in increasing levels of financial capability. Their study findings indicate that there is a need for independent pre-purchase guidance, particularly for people who do not have the funds to invest in a long-term relationship with a reliable financial adviser. This would almost definitely have to be supplied free of charge to persons with low to intermediate incomes. This technique recognized that the behaviour and abilities underpinning financially feasible acts varied according to personal and economic conditions. According to the findings of the cluster study, efforts should potentially target those with low to middle incomes. However, given their lower levels of participation in financial services and relative incapacity to prepare for the future, education may not be the best solution to their problems.

Beat Weber et al., (2007) seeks to measure Austrian households' financial capability in terms of money management, financial planning, making financial choices, and staying informed. One of the study's key results is that future initiatives to improve financial literacy should pay specific attention to the discrepancies between financial attitudes and actual financial behaviour. Personal attitudes toward financial concerns (e.g., risk orientation, propensity to invest in complex financial products, and financial self-confidence) are frequently associated with level of education, income, or age. Respondents with higher incomes and education levels are more confident in their financial knowledge and skills. Payment and saving behaviour in Austrian households, as well as how well they keep track of their finances, are not generally related to education. Disparities in income or age, on the other hand, are frequently associated with differences in behaviour. The relationship between age and behaviour indicates the importance of experience in financial behaviour.

Johnson & Sherraden (2007) discusses theoretical and pedagogical approaches to enhancing financial aptitude among economically disadvantaged youth in the United States. They recommend that financial education includes access to financial institutions, maybe with savings incentives, to acquire financial capability. This is

not to say that financial education or access to bank accounts is ineffective on their own. Researchers feel that a mix of financial education, institutional access, and chances for savings accumulation could be made more effective.

They opined that placing the problematic subject of financial exclusion within the human development and capacity paradigm demonstrates that increased participation in economic life through improved financial skills should optimize well-being, and life chances, and enable people to have happy financial lives. A society that seeks greater inclusion should focus on increasing people's internal "capabilities" as well as enabling their ability to act by giving external opportunities through political, social, economic, and governance "freedoms." In short, financial well-being can be achieved when individuals develop their own financial understanding, knowledge, attitudes, and abilities, as well as obtain access to external liberties such as health, education, work, and proper financial policies, tools, and services.



Leskinen (2005) explored the concept of consumer financial capability as well as other related concepts. Furthermore, presents a broader interpretative framework based on the microeconomics approach and examines empirical findings in this field based on the life cycle approach. They argue that consumer financial capability is

inherently relative and changing. It is relative to the consumer's place in the life cycle, as well as their education, income, and living situations. Financial capability is interconnected with other financial concepts like risk, return, diversification, etc.

Valerie Egdell (2010) found that financially proficient consumers can manage their finances daily; plan, and efficiently select financial products and comprehend these products; know where and how to obtain financial assistance; and have the motivation to properly manage finances and achieve change. The significant result of this research assessment is that a sizable portion of the population lacks parts of this financial skill, they are the most disadvantaged and vulnerable people in society (such as those living in disadvantaged communities and young adults) who are mostly involved in risky environments.

Financial knowledge has been statistically associated with financial practices such as cash-flow management, credit management, saving, and making investments. It should be noted that various types of financial knowledge are statistically significant for specific financial activities. Except for the cash-flow management practices (Hilgert & Hogarth, 2003).

Collins & Nafziger (2019) investigated the impacts of a financial counselling offer made to low-income individuals exiting welfare assistance in a workforce development program. People with incomes at or below the poverty line may require more intensive financial assistance than counselling can provide. This study also demonstrates the difficulty of engaging participants in financial competence services, as well as the limitations of interventions such as counselling for those with extremely low incomes.

Godinho (2014) studied the historical, cultural, and family background of money as it flows through Indigenous households in remote, regional, and urban Australia ('Indigenous money'), and discusses how this shapes Indigenous perspectives on financial capabilities and well-being. Indigenous people outnumber the three million adult Australians who are financially excluded or have the lowest financial

capabilities. They are also the only community group that is linked to financial exclusion regardless of where they live.

Huang et al., (2015) financial capability was described as the sum of financial literacy, financial access, and financial functioning. The inability to meet fundamental needs was described as economic hardship. The findings of their study revealed that the majority of the sample had trouble achieving their fundamental necessities. The majority of respondents gave erroneous answers to fundamental financial knowledge questions, while only a minority used cautious financial management skills. Financial access and financial functioning were found to be inversely connected with the probability of suffering economic hardship, however, financial literacy was not found to be significantly associated. These findings advocate for proactive public policies and programs that address economic issues among low-income Asian immigrants by increasing their financial capability.

Fan et al., (2021) the study looked at the links between young adults' personality qualities, financial responsibility, perceived financial capabilities, and subjective well-being. The findings validated the conceptual framework that included connections between personality traits and subjective well-being, as well as between perceived financial capability, financial responsibility, and subjective well-being. There were strong indirect relationships between specific personality qualities and subjective well-being, which were somewhat mediated by financial responsibility and perceived financial capability. Financial issues are crucial in understanding young adults' subjective well-being and its correlations with personality features.

Sabri et al., (2017) explored the impact of socio-demographic variables on four dimensions of financial capability, namely planning, managing money, selecting products, and staying informed. A self-administered questionnaire was provided to a sample of 2000 Malaysians, and data analysis found that gender had a substantial effect on the domains of planning ahead of time and staying informed. Income, on the other hand, did not affect financial capacity. As a result, it is suggested that more emphasis be placed on study and professional development to increase one's financial capability. Furthermore, both the government and non-governmental

organizations should work together to build an inclusive strategy for increasing financial capabilities and improving the living standards of especially financially disadvantaged households.

2.3 Financial Capability Bibliometric Analysis

In this study, the researchers attempted to understand research trends in the area of financial capability by performing a bibliometric mapping analysis. Bibliometric mapping is gaining acceptance in a variety of disciplines (Aria & Cuccurullo, 2017; Arici et al., 2019). Perhaps the suitability of bibliometrics for science mapping has contributed to their growing acceptance among academics (Aria & Cuccurullo, 2017). This section describes the entire procedure for conducting bibliometric mapping analysis in this study, including data collection, screening, extraction, and synthesis.

On July 1, 2022, a comprehensive search using the search keyword "financial capability" was conducted in the Scopus database. The publication period lasted from 2007 to 2022. To avoid bias caused by daily database updates, the search was conducted on a single day. After refining the inclusion and exclusion criteria shown in Table 2.1, a total of 624 data were collected. These data were exported to be analyzed. Scopus database allows for a maximum of 2000 data exports at one time. Furthermore, Scopus allows scholars to export data to a variety of file formats, including Plain Text, BibTeX, Excel, and RIS formats. Data from this study were exported in both CSV and plain Text formats. Plain Text is used to import data into bibliotiny for bibliometrix tools (Aria & Cuccurullo, 2017), whereas CSV files are used to import data into VOS Viewer software for network mapping.

2.3.1 Bibliometric analysis and software package

The bibliometric R-package software was used in this study, which is open-source software that provides a set of tools for conducting quantitative research in bibliometrics. Aria and Cuccurullo created the R-package, which is written in the R programming language (Aria & Cuccurullo, 2017). It contains the primary algorithms for statistical and science mapping analysis. Recent versions of the

bibliometric R-package (i.e., 2.0 and higher) include a web interface application Biblioshiny designed to help users without coding skills conduct bibliometric analysis. The Biblioshiny interface supports data import from the Scopus database in BibTex, CSV, or Plain Text format.

VOS Viewer Software was also used in this study. Van Eck and Waltman created VOS Viewer, a Java application for analyzing and visualizing citation networks in scientific collections. It focuses on the graphical representation of bibliometric maps and is particularly useful for displaying large bibliometric maps in an easy-to-understand format (Van Eck & Waltman, 2010).

Table 2.1

Inclusion and Exclusion Criteria for Retrieving the Dataset

	Code	Criteria
Inclusion criteria(IC)	IC1	Articles containing one of the keywords in either title, abstract, or keywords.
	IC2	Documents written in the English language
	IC3	Articles in journals, conferences, and book chapters
Exclusion criteria(EC)	EC1	Articles with publication stage “in press.”
	EC2	Articles source is a trade journal
	EC3	Year of publication before 2006
	EC4	Subject area other than social science, economics econometrics and finance, business management and accounting, psychology, arts and humanities and decision science

Source: Compiled by the researcher

2.3.2 Data synthesis

Table 2.2 presents the summary information of the dataset and Figure 2.1 shows the percentage of different documents in the area of financial capability. There were 624 total financial capability-related articles from the Scopus database used for this study, distributed in 361 source types (articles, Books, Book chapters, Conference Papers, editorials, notes and reviews) and over 7 different document types. The total

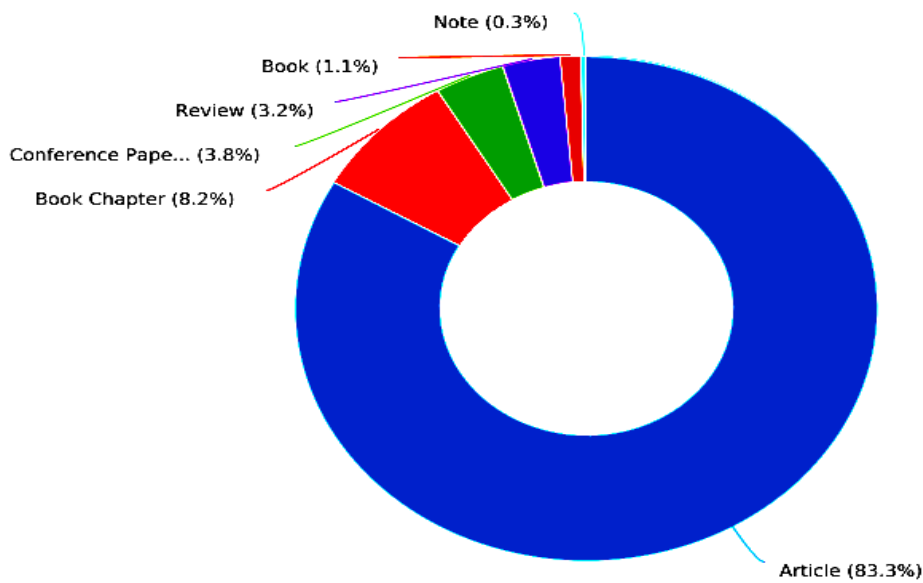
document retrieved includes 522 articles comprising 83.3% of total data, followed by book chapters (51, 8.20%), conference papers (27, 3.8%), reviews (27, 3.2%), and books (7, 1.1%). The note document types were less than 1%.

Figure 2.1

Document Types in Data Set

Documents by type

Scopus



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Source: Scopus Database

As used in this study, author's keywords (DE) refer to a specific list of keywords that authors of publications have listed (usually less than ten) to describe what their study dwelt upon as used in the full text. In contrast, keyword plus (ID) refers to extended keywords and phrases generated by the Scopus system, which consist of keywords from the references cited by authors of a publication (Tripathi et al., 2018). In addition, authors per document refers to the mean number of authors per document, while co-author per document is the mean number of authors' appearances per document; both authors per document and co-author per document measure authors' collaboration.

Table 2.2*Summary of Information*

Description	Results
Time Span	2006:2022
Sources (Journals, Books, etc)	361
Documents	624
Average years from publication	4.67
Average citations per documents	11.68
Average citations per year per doc	1.82
References	29066
DOCUMENT TYPES	
Article	520
Book	7
Book chapter	51
Conference paper	24
Note	2
Review	20
DOCUMENT CONTENTS	
Keywords Plus (ID)	1268
Author's Keywords (DE)	1654
AUTHORS	
Authors	1344
Author Appearances	1705
Authors of single-authored documents	121
Authors of multi-authored documents	1223
AUTHORS COLLABORATION	
Single-authored documents	136
Documents per Author	0.464
Authors per Document	2.15
Co-Authors per Documents	2.73
Collaboration Index	2.51

Source: Biblioshiny Output

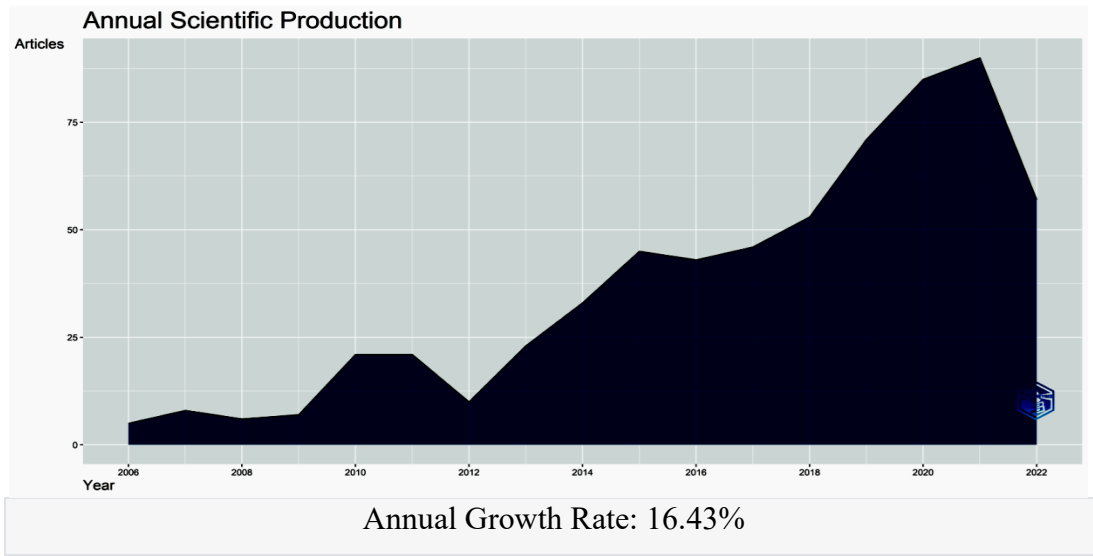
2.3.3 Annual Scientific Growth of Financial Capability

In this section, Table 2.3 and Figure 2.2 provide the annual scientific production of publications in the notion of financial capability. According to bibliometrics R package analysis, the field of financial capability has a 16.43 percent annual growth rate of scientific production between 2006 and mid-2022. In the year 2010, 21 articles were reported, indicating the start of the field's significant development in publishing. In the realm of scientific productivity, there was a fall in 2012. This trend accelerated in 2015 when 46 publications were produced. In 2021, 90 articles were published; it was the year with the most publications ever reported, according

to the Scopus database. This is because the field of financial capability is still emerging, and the scientific contribution is predicted to grow yearly as demonstrated by the analysis results.

Figure 2.2

Annual scientific growth of financial capability: A geometric progression ratio with a constant scientific production rate over a period.



Source: Biblioshiny Output

Table 2.3

Annual Scientific Production of Publications over Years

Year	Number of articles
2006	5
2007	8
2008	6
2009	7
2010	21
2011	21
2012	10
2013	23
2014	33
2015	45
2016	43
2017	46
2018	53
2019	71
2020	85
2021	96
2022	57

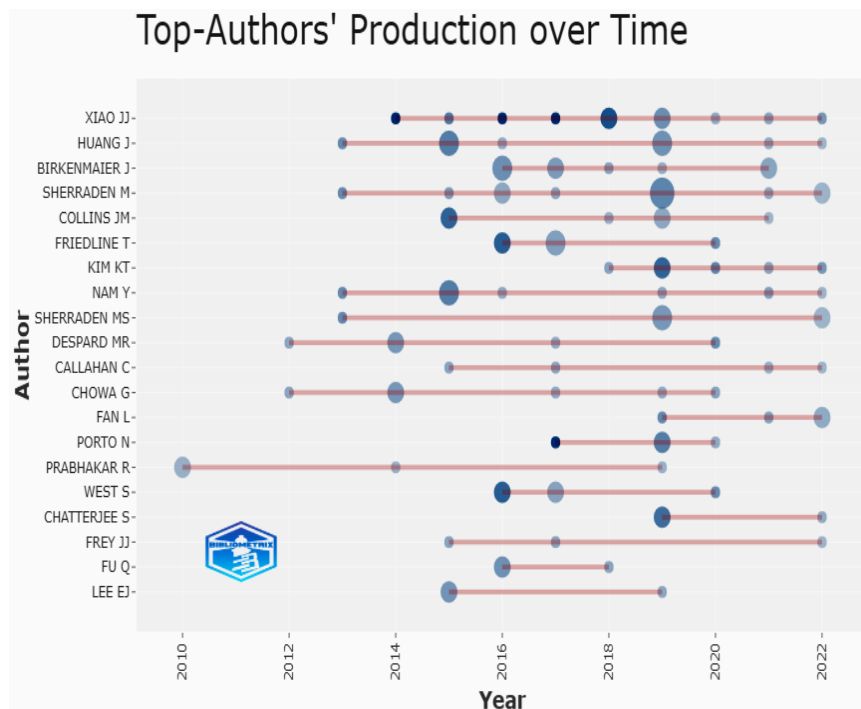
Source: Biblioshiny Output

2.3.4 Influential Authors in the Field of Financial Capability

Figure 2.3 shows the author's productivity, the line represents an author's timeline; the bubble size is proportional to the number of documents produced by an author per year; the colour intensity of the bubble is proportional to the total number of citations per year; the first bubble on the line indicates when the author began to publish in the field; the bigger the bubble, the higher the number of articles published by an author per year; bubbles with deeper colour intensity indicates higher citation counts

Figure 2.3

Top 20 Authors Productivity over the Years



Source: Biblioshiny Output

2.3.5 Citation Analysis

Citation analysis is a method used in bibliometrics to evaluate the impact and interconnectedness of scholarly works. It involves examining the citations within academic literature to understand how often a particular work has been referenced by other publications and how works are interconnected through their references.

Table 2.4*Average Citation Per Year*

Year	Average TC per Articles	Average TC per Year
2006	18.20	1.14
2007	51.25	3.42
2008	14.00	1.00
2009	13.57	1.04
2010	12.71	1.06
2011	54.95	4.99
2012	21.30	2.13
2013	23.00	2.56
2014	19.42	2.43
2015	21.44	3.06
2016	13.02	2.17
2017	10.24	2.05
2018	10.34	2.58
2019	7.49	2.49
2020	4.78	2.39
2021	3.22	3.22

Source: Biblioshiny Output

Table 2.4 reveals the average number of citations received by financial capability publications per year. The number of citations is the main factor to reflect the quality of a paper (Tahamtan et al., 2016). This figure shows the publication's annual influence on the field. The results indicate that only 5 publications obtained an average of 1.14 citations per year and an average of 18.20 citations per article in 2006. Remarkably, the average number of citations per year increased to 4.99 in 2011, the highest number ever recorded. However, this figure fell drastically to 2.13 in 2012 and 2.05 in 2017. The cause for the drop in citations in both years was not obvious to the authors; however, they can be considered anomalies. Furthermore, as shown in Table 2.3, the yearly scientific production in both years did not increase as much as in prior years, which may have contributed to the drop in the annual citation for that year. Due to the year's low number of scientific publications (6 articles), 2008 has the lowest citation rate of one.

2.3.6 Author's Collaboration and its Citation

Table 2.5 displays the number of articles, percentages, and citation indices produced by the top 20 most productive countries. Eight of the twenty countries were from

Asia, seven from Europe, two from North America, two from Oceania, and one from Africa. The United States (165 articles) ranked first among all countries, followed by the United Kingdom (47), China (29), Australia (19), and India (14). The hybrid index (h-index) is a value used to assess scientific outcomes (Abrizah et al., 2013). In terms of article production, total citation, and h index, the United States ranked first. The United States produced 165 articles (26.12% of the documents in the database); 154 of these articles were published by authors from the same country (SCP), and the remaining 11 articles were created through international collaboration (MCP). India, Malaysia, New Zealand, Nigeria, and Poland are the only top twenty countries with a single-country publication; the remaining 15 countries have international collaborations in their publications. (Glänzel et al., 2006) stated that the h-index considers both the quantity and quality of papers. Countries' rankings in terms of citation and h-index have shifted slightly. The United States took the top spot in both categories, with the United Kingdom placed second.

Table 2.5

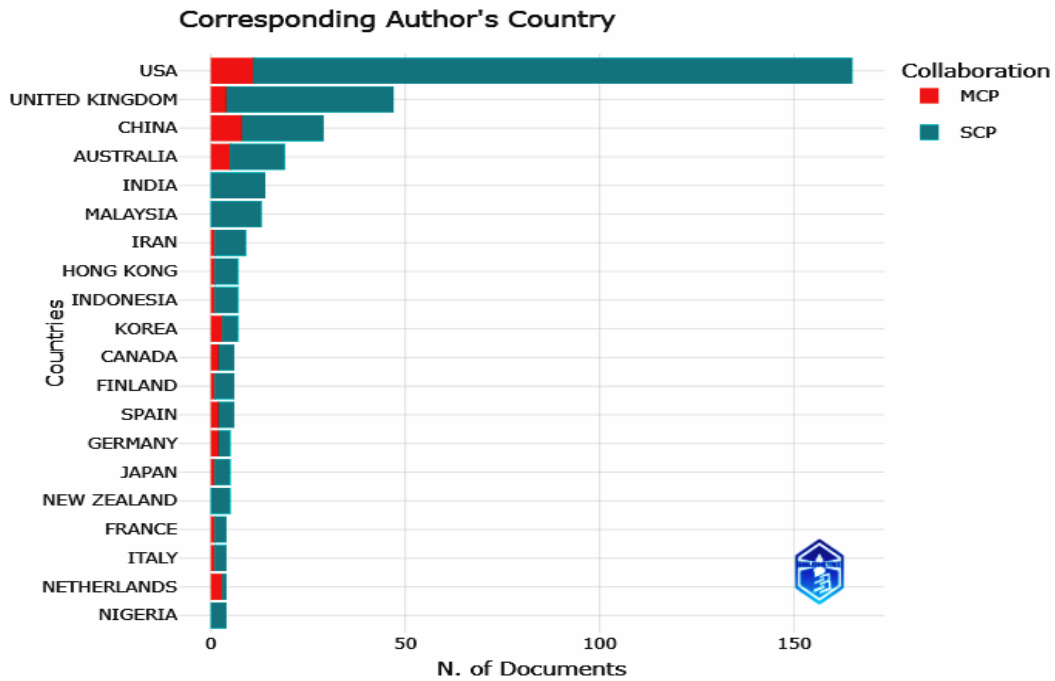
Number of Articles and Citation Indices by Countries (Top 20 Countries)

Country	Articles	% of 624	SCP	MCP	TC	H Index
USA	165	26.44	154	11	2739	30
United Kingdom	47	7.53	43	4	803	17
China	29	4.65	21	8	420	10
Australia	19	3.04	14	5	146	8
India	14	2.24	14	0	265	7
Malaysia	13	2.08	13	0	85	5
Iran	9	1.44	8	1	17	3
Hong Kong	7	1.12	6	1	72	5
Indonesia	7	1.12	6	1	16	4
Korea	7	1.12	4	3	29	4
Canada	6	0.96	4	2	36	4
Finland	6	0.96	5	1	93	3
Spain	6	0.96	4	2	258	4
Germany	5	0.80	3	2	138	5
Japan	5	0.80	4	1	40	4
New Zealand	5	0.80	5	0	22	2
France	4	0.64	3	1	28	3
Italy	4	0.64	3	1	48	3
Netherlands	4	0.64	1	3	21	4
Nigeria	4	0.64	4	0	19	3

Source: Article Percentage computed by Researcher & other indices from Scopus

Figure 2.4

Authors' Collaboration (SCP and MCP)



Source: Biblioshiny Output

Scopus can be used to analyze international collaboration by counting the number of articles published by authors from the same country as well as articles published by authors from different countries. Figure 2.4 depicts single-country and multiple-country production in terms of financial capability. In other words, there are two kinds of articles: single-country publications (SCP), in which all of the authors are from the same country, and such publications represent intra-country collaboration; and multiple-country publications (MCP), in which the authors are from different countries, and such publications represent inter-country collaboration, i.e. international collaboration. Articles created through international collaboration (MCP) received more citations per article than articles created without international collaboration (SCP). This demonstrates the importance of international collaboration in increasing the number of citations. However, the countries with the lowest percentages of international collaboration, such as China and India, had the fewest citations per article. The top country in terms of article production, total citation, and h index was the United States. The United States produced 163 articles (26.12 percent of the documents in the database); 152 of these articles were published by authors from the same country (SCP), with the remaining 11 articles produced

through international collaboration (MCP). Looking at the Table 2.5, we can see that among the top twenty countries, India, Malaysia, New Zealand, Nigeria, and Poland have only a single country publication, while the remaining 15 countries have international collaborations in their publications.

2.3.7 The Keywords Analysis of Research Hotspots

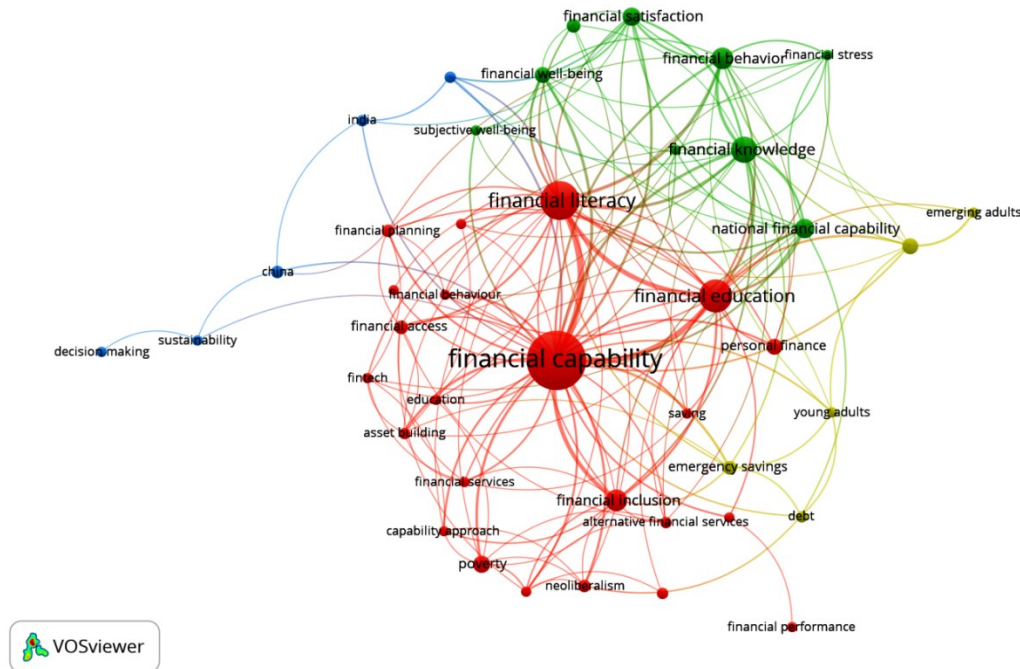
Analysis of financial capability research based on the frequency of the key words used in the title and abstracts of the articles can achieve a conceptual image of the content of these studies and reflect research hotspots. Table 2.6 shows the Top ten most occurring keywords, links, and the total link strength. A total of 1654 co-occurrence keywords were extracted from 141 articles. The minimum occurrence of each keyword was set to five times, and 42 co-occurrence keywords were finally presented. The top five keywords ranked by the number of occurrences were as follows: financial capability (n = 167), financial literacy (n = 74), financial education (n = 54), financial knowledge (n=33), and financial behaviour (n=22).

Table 2.6

Top Ten Most Occurring Keywords, Links, and Total Link Strength.

Keyword	Occurrence	Total Link Strength
Financial Capability	167	200
Financial Literacy	74	127
Financial Education	54	102
Financial Knowledge	33	62
Financial Behaviour	22	45
Financial Inclusion	23	38
Financial Satisfaction	16	33
Financial Wellbeing	13	27
Financial Socialisation	13	20
Emergency Savings	9	17
Financial Planning	8	14
Financial Stress	6	14
Financial Access	10	13
Financial Advice	7	13
Financial Exclusion	6	13

Source: VOS Viewer Output

Figure 2.5*Keyword Co-occurrence Map*

Source: Retrieved from VOS Viewer

For each of the identified keywords, VOS Viewer calculated a relevance score and selected the 42 (60%) most relevant keywords that were mapped into four clusters. Figure 2.5 shows the keyword co-occurrence network map. The link strength between two nodes refers to the frequency of co-occurrence. It can be used as a quantitative index to depict the relationship between two nodes (Pinto et al., 2014). The distance between two nodes reflects their associative strength. A shorter distance generally reveals a more substantial relationship. The line between the two keywords represents that they have appeared together. Nodes with a similar color belong to the same cluster (Wiendartun et al., 2022). Cluster 1 (red) is the largest cluster related to financial capability, literacy, education, planning, inclusion, and behavioural impact. Cluster 2 (green) shows financial knowledge, satisfaction, stress, and well-being. Cluster 3 (blue) depicts the keyword occurrence like decision making, financial advice, and sustainability. The yellow cluster is the smallest,

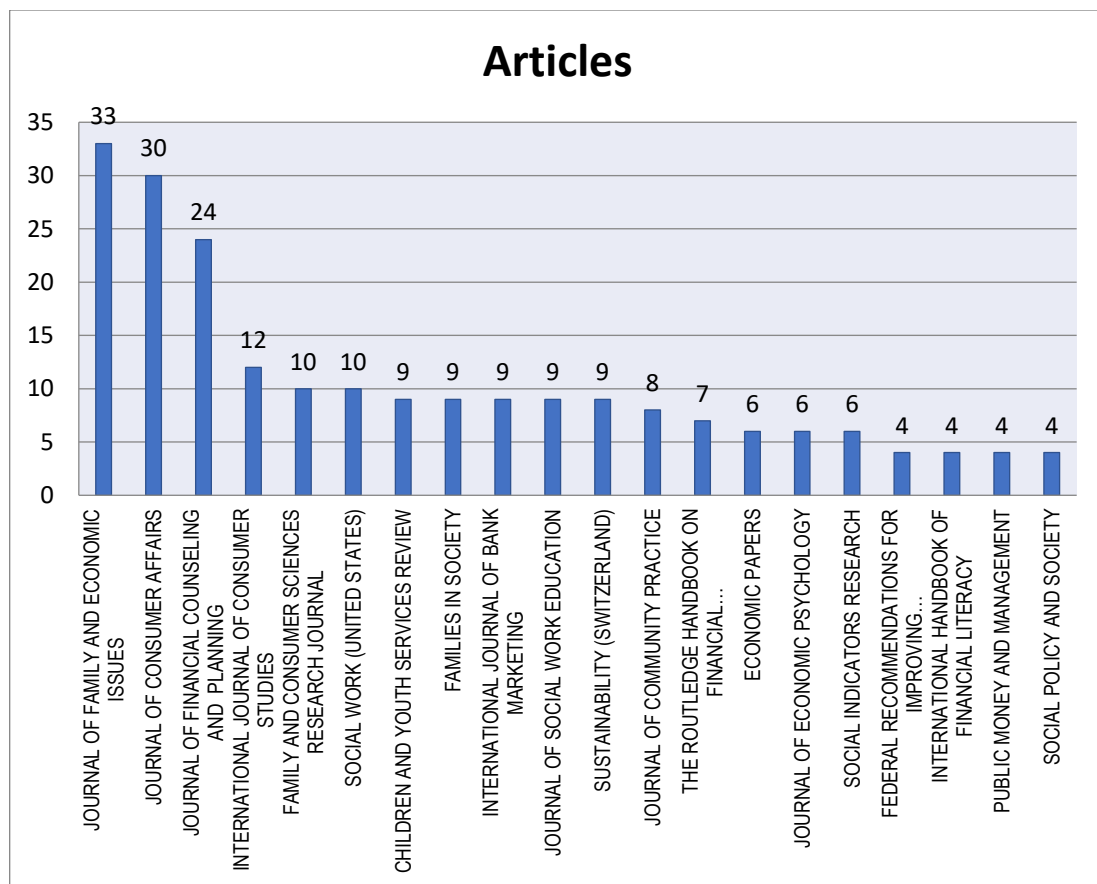
showing the least occurring keywords among the articles, which include emergency savings, financial socialization, and debt.

2.3.8 Most Relevant Sources

Figure 2.6, the result of the top 20 most relevant sources focused on publishing articles on financial capability is presented. This result is based on the data from Scopus retrieved on July 1st, 2022. Journal articles in the Journal of Family and Economic Issues (33 articles) remain the topmost relevant source. Other relevant sources include the Journal of Consumer Affairs (30 articles) journal of Financial Counselling and Planning (24 articles) International Journal of Consumer Studies (12 articles).

Figure 2.6

Top Twenty Most Relevant Sources



Source: Compiled by the researcher

Table 2.7*Top Twenty Most Cited References Based on Number of Local and Global Citations*

Authors and Year of publication	Document title	Source	Local citations	Global citations
Jing jian xiao, Cheng chen & Fuzhong chen, 2014	Consumer financial capability and Financial satisfaction	Social indicators research	30	136
Adele atkinson, Stephens mckay, Sharon collard, Elaine kenson, 2007	Levels of financial capability in the uk	Public money & management	20	81
Jing jian xiao And barbara o'neill, 2016	Consumer financial education and financial capability	International journal of consumer studies	20	102
Mark taylor , 2011,	Measuring financial capability and its determinants using survey data	Social indicators research	18	64
Jing jian xiao, cheng chen and lei sun	Age differences in consumer financial capability	International journal of consumer studies	17	49
Vernon loke, Laura choi, and margaret libby, 2015	Increasing youth financial capability: an evaluation of the my path Savings initiative	The journal of consumer affairs	13	39
Cliff a. Robb, Patryk babiarz, Ann woodyard, Martin c. Seay, 2015,	Bounded rationality and use of Alternative financial services	The journal of consumer affairs	11	43
Jing jian xiao, nilton porto, 2017,	Financial education and financial Satisfaction: financial literacy, behaviour, And capability as mediators	International journal of bank marketing	11	88

Authors and Year of publication	Document title	Source	Local citations	Global citations
Annamaria lusardi Andolivia s. Mitchell, 2011,	Financial literacy and retirement Planning in the United States	Journal of pension economics & finance	9	242
Jin huang, Yunju nam, Margaret s. Sherraden 2013,	Financial knowledge and child Development account policy: A test of financial capability	The journal of consumer affairs	9	42
Jin huang, Yunju nam, Michael sherraden, Margaret clancy 2015,	Financial capability and asset Accumulation for children's education: Evidence from an experiment of child Development accounts	The journal of consumer affairs	8	19
Terri friedline stacia west 2016,	Financial education is not enough: Millennials may need financial Capability to demonstrate healthier Financial behaviours	Journal of family and economic issue	8	41
Mark p.taylor Stephen p.j Enkins Amandasackera20 11,	Financial capability and Psychological health	Journal of economic psychology	7	56
Mathieu r. Despard, Gina a. N. Chowa, 2014,	Testing a measurement model Of financial capability among Youth in Ghana	The journal of consumer affairs	6	18

Authors and Year of publication	Document title	Source	Local citations	Global citations
Michael batty,j. michael collins, Elizabeth odders- white, 2015,	Experimental evidence on the effects of financial education on Elementary school students' Knowledge, behaviour, and attitudes	The journal of consumer affairs	6	53
Jamie wagner ,william b. Walstad, 2019,	The effects of financial education on short-term and long-term financial behaviours	The journal of consumer affairs	6	27
Mathieu r. Despard , gina a. N. Chowa & lauren j. Hart , 2012,	Personal financial problems: Opportunities for social Work interventions?	Journal of social service research	5	16
Jodi jacobson frey, deborah svoboda, Rebecca l. Sander, Philip j. Osteen, christine callahan & Audrey elkinson, 2015,	Evaluation of a continuing Education training on Client financial capability	journal of social work education	5	13
Margaret miller, Julia reichelstein, Christian salas and bilal zia, 2015,	Can you help someone become Financially capable? a meta-analysis of the literature	The world bank research observer	5	65
Jodi jacobson frey, Karen hopkins, Philip osteen, Christine callahan, sally hageman & jungyai ko, 2017,	Training social workers and Human service professionals to address the complex financial Needs of clients	Journal of social work education	5	9

Source: Elaborated by researcher using data extracted from Scopus.

An extensive review of scientific publications in the field of financial capability over time using bibliometric analysis is made here. With the help of bibliometric researcher investigated the themes of the publications; recognized prolific scholars and their contributions; explored social networks and collaborations across countries and regions over time, and presented the thematic analysis of the field of financial capability by showing its current status regarding the sub themes, and prospects. A total of 624 documents were retrieved from the Scopus database for this purpose. With the research results of literature growth, the analysis confirmed that related research and Publications have increased during these years. Scientific production during the study period shows a compound annual growth rate of 16.43. The “Journal of Family and Economic Issues” the major source published 33 articles in the area of financial capability. Similarly, our result delineates that the United States has the highest number of scientific productions in the field of financial capability over the years, which suggests that the United States remained the most relevant country in the field. In the aspect of prolific scholars making an immense contribution to the field of financial capability, Jing Jian Xiao, is from the list with a global citation of 136. Besides, scholars such as Jing Jian Xiao, Cheng Chen, and Fuzhong Chen have established a wide range of collaboration networks.

2.4 Review related to Microinsurance

A comprehensive literature review will synthesize findings from various sources, providing an overview of the current state of microinsurance, gaps in knowledge, and potential avenues for the current study. The reviews are presented in two sub heads microinsurance and awareness level studies and microinsurance demand studies.

2.4.1 Microinsurance and Awareness Level Studies

This section provides an in-depth exploration of microinsurance awareness level studies. It serves as a foundation for understanding the complexities and significance of awareness in shaping the success and accessibility of microinsurance.

Alzain & Saleh Alshebami (2022) investigated the role of microinsurance awareness in predicting microfinance entrepreneurs' intentions to purchase microinsurance in Yemen. It is based on a survey of 201 microfinance entrepreneurs who received loans from Yemen's National Microfinance Foundation (NMF) for a variety of purposes. The study specifically demonstrated the ability of microinsurance awareness to predict the desire of approximately 17 percent of microfinance entrepreneurs to purchase microinsurance services. To maximize benefits, the study recommends focusing more on increasing microinsurance awareness among microfinance entrepreneurs.

Rajendran (2012) According to the study, the level of participation in microinsurance is very low, and the main reason is a lack of awareness. The majority of life-related products are popular among rural women, and they view investments in life insurance products as future-saving instruments. Even though microinsurance is considered a component of the microfinance program, microinsurance participation among microfinance participants is low.

Ajemunigbohun et al., (2015) the study found that while awareness of microinsurance products has been genuinely encouraged among insurance companies, accessibility has yet to have a significant impact on the lives of many insuring populations. As a result, the study recommends that adequate awareness, education, and enlightenment programs be implemented, particularly for low-income earners. Furthermore, the government should promote "financial literacy" through educational programs in the media; greater emphasis should be placed on lowering operating costs and increasing efficiencies among microinsurance service providers; investment and continuous improvement in technology are critical for effective relationship management between customers and insurance firms.

Manik & Mannan (2017) the awareness of life insurance among Dhaka City's Hawkers is the main focus of this study. The prospects of microinsurance are examined while taking into account its characteristics, as Hawkers are unaware of it. It was also discovered that Hawkers are eager to apply for microinsurance due to its unique features. They conclude that there is a positive correlation between

knowledge-related issues such as awareness of life insurance among Dhaka City's Hawkers and knowledge of life insurance policies, financial security, and benefits, as well as knowledge of various companies' insurance products.

Ajit Kanitkar (2005) indicated that higher awareness levels among potential SHG members and clients were necessary for the provision of effective life microinsurance services. He suggests the importance of educating field employees in banks, microfinance organizations, non-governmental organizations, and insurance firms about the unique needs of rural communities. The author emphasized that there was an urgent need for a thorough communication plan to promote the idea of rural microinsurance. A suitable database of insured and uninsured SHG members should be kept up to date by the service provider on each member's individual needs for microinsurance.

Amrutha Varshini, V. (2016) stated that there are numerous benefits associated with microinsurance, and many of them are satisfied with them; however, there is still a need to increase the benefits in addition to those already provided to them. It is extremely beneficial to the poor, but there is a lack of awareness about the concept of Microinsurance, there is a need to provide adequate information on microinsurance schemes and their associated benefits.

Renuka, A. (2021) the concept of microinsurance is having a significant impact on people with low incomes. Choosing life-micro insurance gives them peace of mind in the face of adversity. Life struggles have put them in a financial bind. The level of awareness and the general public's attitude toward microinsurance indicates well the future of the insurance sector. The study discovered that financial protection, which is heavily influenced by policyholders, aids in saving money and creates wealth.

Barik, B. (2016) the critical success factors for MI in India have been identified as awareness and availability. From the insurer to the client, and from the government to the regulator, everyone has put their best tools and techniques, as well as strict laws and regulations, into developing this among the target people. However, microinsurance has not occupied a distinct place in the minds of rural people. Rural

poor people believe they can manage their risks and that insurance is a waste of money. However, only a small number of people have purchased it.

Arora, P. (2009) according to the findings of his research, low-income people are unaware of the existence of life microinsurance products. They also assumed that insurance was a status symbol and that only the wealthy could afford it. They did not want to spend a large portion of their income on insurance companies to protect themselves against an indefinite and uncertain future risk. The study suggests that institutions will need to take the initiative not only to remove these misconceptions, but also to provide more appealing, useful, and affordable alternatives.

The Centre for Microfinance (2010) the rural and urban populations' awareness of various social security schemes varied. It was discovered that 46.72 percent of rural households were aware of any of the social security schemes, and 21.44 percent of them used any of them. In contrast, only 4 percent of urban households were aware of any social security scheme, with only 2 percent taking advantage of any scheme. It also stated that there was a lack of effort on the part of insurers and microfinance institution staff to explain the life microinsurance products in a way that the target groups could understand.

Deliya et al., (2012) the awareness of microinsurance products was investigated in the Patan district of Gujarat, India. According to the findings of the study, the majority of people are unaware of microinsurance products and the majority have microinsurance policies with public sector companies (LIC). Furthermore, the study discovered that the majority of respondents learned about insurance by watching television and that the majority paid their premiums semi-annually. The study recommended that insurers use existing government organizations, banks, MFIs, NGOs, and SHGs to expand the reach of microinsurance to the poor, and that microcredit be linked with microfinance to make good business.

Ajemunigbohun et al., (2015) the study looked into the awareness and accessibility of microinsurance products among selected insurance companies in Lagos, Nigeria. The researcher used the interview survey method, which entails questioning and

discussing issues with insurance practitioners about microinsurance practices. According to the study, the vast population of Nigeria that MI represents as a viable market remains untapped by the country's insurance service providers. It was also discovered that an aggressive awareness drive towards MI products has been genuinely encouraged among insurance companies in Nigeria, and the accessibility of MI products created by insurance companies in Nigeria has not significantly reflected in the lives of many insuring populace.

Ramalakshmi & Ramalingam (2014) analyzed microinsurance awareness in terms of source of information, period of awareness, influencer for microinsurance policy, payment mode, grace period, and utilization. According to the study, both the urban and rural populations are aware of microinsurance. Agents were crucial in raising awareness. Customers who purchase microinsurance policies are heavily influenced by their agents. The period of awareness appears to be better, and there is no significant relationship between socio-economic factors and the period of awareness about Life Insurance Corporation of India's microinsurance products. It was also discovered that the majority of respondents insured their lives through the microinsurance product 'Jeevan Madhur', which is the most popular among them. A monthly mode premium is generally preferred.

2.4.2 Microinsurance Demand Studies

Giesbert, Steiner, & Bendig (2011) enquired why people purchase life microinsurance and other financial services. Based on the study, the use of insurance and other formal financial services is mutually reinforcing. Households that are risk-averse or believe they are more vulnerable to risk than others are less likely to purchase insurance. They concluded that insurance is viewed as a high-risk investment, and that there is evidence of adverse selection and a life-cycle effect on insurance uptake.

Microinsurance is strongly correlated with indicators of bequest motives, such as the number of dependents or children, according to research done by Arun, Bendig, and Arun (2012). This was discovered by comparing life microinsurance participation

patterns to insurance demand and supply side parameters. The results demonstrate that the microinsurance sector must play a major role in financial education to help people understand why they require microinsurance, and there is a strong need for the sector to be more sensitive to the needs of the underprivileged.

Jiyas, K. (2018) in his research revealed a clear picture of the life microinsurance business in Kerala. The amount of new business generated in the last few years has been insignificant. Certain issues confront the major stakeholders, such as microinsurance agents and policyholders. Because the agents are dissatisfied with the benefits they receive from MI policies, little effort is made to popularize and sell the policies. Beneficiaries, on the other hand, are dissatisfied with the policy benefits but satisfied with the product features. When compared to other channels, Life of India generates less than 1 percent of the business.

Giesbert & Steiner (2015) examined how and when consumers of a micro life insurance product judge value. They demonstrate that value is influenced by costs and financial gains as well as the product's emotional appeal, social benefits, and service quality. Perceptions of high or low value can be explained by how expectations relate to actual experiences with the insurance and the unique circumstances of each client. Peers greatly impact each other's perceptions of values.

Market research by McCord & Roth (2007) indicates that low-income individuals consistently express a desire for risk management tools to help them deal with the financial difficulties brought on by a breadwinner's demise. High return on investment, client-focused products can help ensure the family's long-term financial stability and foster steady development of human capital for future generations.

Eling, Pradhan, & Schmit (2014) found that the main factors influencing the demand for microinsurance were price, wealth, risk aversion, non-performance risk, trust and peer effects, religion, financial literacy, informal risk sharing, quality of service, risk exposure, age, and gender. The data for each of these 12 criteria's effects on demand in the regular insurance and microinsurance markets were also analyzed in this

study. Trust should play a role in the unexpected (negative) impact of risk aversion on microinsurance demand relative to typical markets.

Manjunath (2012) investigated the process by which microinsurance turns into a macro business. There are numerous opportunities for insurers and risk carriers to enter the well-regulated Indian microinsurance market. Ninety percent of Indians cannot access the insurance market. Now, when selling a microinsurance product to people who have never heard of it, insurers need to change their perspective. Insurers must first educate and increase awareness among the impoverished about insurance principles, risk management, and pricing before introducing microinsurance products into the market.

Cohen et al., (2005) examining the current strategies used by the impoverished to manage a range of risks and gender and wealth disparities, also takes into account Microinsurance uptake. Cost, timeliness, accessibility, coverage, and timeliness are all important variables in assessing market potential. Three major risks that impoverished individuals in East Africa face are listed in the report illness, fire and theft-related property loss, and the death of a breadwinner.

Iancu & Scurtescu., (2006) investigated the needs of low-income households for microinsurance, as well as the prospects and challenges for microinsurance provision. Microinsurance is a financial protection mechanism that assists low-income households in dealing with financial constraints caused by unexpected shocks and strains. In Romania, low-income households are not very proactive in risk management, with only 13 percent claiming to save regularly. They rely heavily on revolving credit from family and friends, as well as institutional financial institutions (banks and credit unions). Current risk-management measures for over-indebtedness are potentially dangerous. Even now, 14 percent of the population is in debt above their means.

Millinga, A. (2002) the study investigated the demand for microinsurance among Tanzania's disadvantaged urban and rural households. They began by addressing the poor's vulnerability - the most common crises and dangers faced by poor

households, as well as the effectiveness of existing coping methods used by rural and urban poor in response to hazards. Then discover and comprehend what formal and informal resources are currently available to assist the poor in dealing with threats. Thirdly, the level of satisfaction with the formal and informal services currently available was investigated. Individuals are very creative when looking for individual or collective risk-aversion strategies. The study, however, shows that risk aversion does not always translate into a desire for insurance coverage, particularly formal insurance services and programs. It is critical to note that poor households have recognized and taken adequate precautions against many of these risks.

Simba (2002) attempted to assess the potential demand for microinsurance among disadvantaged Kenyan households in both rural and urban areas. It achieved this by identifying the most common crises/risks/vulnerabilities that rural and urban households face, as well as the mechanisms that these households use to manage them, and assessing the efficacy of these measures. Low-income Kenyans, according to the researcher, have a variety of coping strategies for risks such as health, theft and burglary, fire, death, motor vehicle accidents, demolition, floods, life cycle hazards, and unfavourable economic conditions. Because Kenya lacks official protection measures for the low-income economic sector, low-income populations must rely on informal coping mechanisms. The following are the most popular strategies:

- The sale or mortgage of assets including business equipment and machinery
- Borrowing money from friends and relatives
- Borrowing money from MFIs
- Organising *Harambee*
- Withdrawing savings from ROSCAs, ASCAs, and other welfare organizations
- Diverting MFI loan funds
- Diversification of sources of income, for example, operating two to four businesses
- Purchase of assets that are easily convertible to cash during times of crisis
- Seeking credit from suppliers

- Soliciting contributions from fellow credit group members
- Lobbying elected representatives for policy changes
- Use of business capital to pay for recurrent expenditures like school fees
- Saving for emergencies.

Uddin, M. A. (2017) investigated the impact of insurance literacy and demographics on the likelihood of possessing a micro-insurance policy. It was determined through a quiz administered to the targeted population. Insurance literacy, income, employment, and education all increased the likelihood of owning an insurance policy, according to a binary logistic regression analysis. Insurance literacy was average among both insured and uninsured people. It is also justified by the need to develop a model that identifies the segments of society that are unlikely to own microinsurance, contributing to the low take-up of insurance.

Seiro Ito and Hisaki Kono (2007) used household data to investigate take-up decisions, focusing on prospect theory, hyperbolic preference, and adverse selection. They discovered that when faced with the risk of loss, people behave in a risk-loving manner, which is consistent with prospect theory. Because insurance covers losses, it is assumed that these individuals are less likely to purchase insurance. They also discovered that hyperbolic discounters are more likely to buy insurance, which can be explained by the high demand for commitment among sophisticated hyperbolic discounters, and that households with a higher ratio of sick members are more likely to buy insurance. They also discovered that households with a sick head of household are less likely to purchase insurance.

Basaza et al., (2008) carried out a case study comparison of two community microinsurance schemes. They pointed out several non-exclusive explanations for the low uptake of these insurances, relating to both demand and supply issues. They discovered that the design and operation of the insurance scheme, insurance principles, community involvement, and a lack of trust in the scheme's management could all be potential explanations for low demand.

Chankova et.al, (2008) policyholders' perspectives on some critical issues relating to life microinsurance have been identified. The study's key findings revealed that the use of life microinsurance was low and ineffective. It was often accepted among low-income microcredit clients of microfinance institutions. The actors influencing insurance demand were discovered to be diverse at the group and regional levels and were not adequately considered when designing the insurance product. The low demand for insurance was largely due to low product customization, as well as conflicting perspectives of insurance clients, microfinance institutions, and insurers. They revealed some trends in insurance demand, such as high performance for comprehensive health insurance and money-back or endowment-type insurance products.

Liu Yan (2011) created a probit model to examine the primary influencing factors and gender differences in rural Microinsurance purchase desire. The study found that when social and cultural variables are constant, the likelihood of males purchasing rural Microinsurance is 44.68% lower than that of females. Furthermore, the influences of factors such as age, level of education, cognitive level of the insurance, risk situation in the previous three years, and so on all demonstrated significant gender differences in insurance purchase.

Oscar Joseph et al., (2011) identified the factors that influence the demand for microinsurance services among Ghana's informal sector workers, who are particularly vulnerable to economic risks. The study employs a quantitative approach based on primary data. For the empirical investigation, the probit regression model was used. The study found that premium flexibility, income level, and nodal agency are important determinants of microinsurance demand. Insurance knowledge, expectation (trust), and marital status were also discovered to have a positive and significant impact on microinsurance demand. Surprisingly, the empirical analysis reveals that formal education is not a significant determinant of micro-insurance demand; rather, one's level of insurance knowledge has a positive and significant impact. The study's main implication was that insurers must consider

the nature of informal workers' cash flow when designing premiums. The government's poverty-reduction program must include microinsurance.

Abdallah Naniyo Saqware (2012) examined three distinct but interconnected areas in Tanzania's microinsurance sector, strengths and weaknesses of current risk-coping strategies in the informal sector, and household characteristics that influence demand for microinsurance: first, the major risk exposures of households were examined, second, risk-coping strategies in place were examined, and third, a probit regression analysis was performed to establish the relationship between household characteristics and demand for microinsurance in the informal sector.

Based on the findings, employment, marital status, use of financial services, education, risk exposure, and insurance knowledge are all important determinants of microinsurance demand. Insurance knowledge and insurer trust were found to have a positive and significant impact on microinsurance demand. The empirical analysis, contrary to expectations, reveals that income is a significant determinant with a negative impact on microinsurance demand. It also suggests that the competitive advantage between formal insurance services and available informal techniques influences the demand for microinsurance in the informal sector. Because of their close physical proximity and frequent, repeated interactions, informal techniques have significant informational advantages. Another highlight is the various approaches that insurers should take when designing microinsurance products, there is evidence that pre-existing informal sharing networks influence microinsurance demand. The low demand for microinsurance can be explained by the availability of informal arrangements.

Fabian Huber (2012) investigated the socioeconomic factors influencing microinsurance demand in Indonesia. The study was motivated by the fact that, even though microinsurance is thought to help with poverty alleviation and economic development in emerging economies, take-up rates still fall behind projections. As a result, the study aims to provide insight into the customer characteristics that lead to actual microinsurance take-up, allowing for more effective product design and distribution to capitalize on microinsurance opportunities. The findings show that

education and household wealth have a positive influence on insurance uptake. Furthermore, economic capacity measurements deemed more appropriate for low-income households are introduced, and they confirm an evident strong positive influence of households' relative economic capacity. Furthermore, respondents' financial literacy and product understanding, as well as client trust attitude and brand recognition, are found to have a positive influence. When dependents' economic self-sufficiency is considered, a significant negative life-cycle effect is revealed.

Ahmed (2013) examined the current state of affairs of rural life insurance in India and attempted to explore the issues and challenges that led to poor penetration of rural life insurance markets. A field survey of rural customers in the Aligarh and Agra regions was conducted to examine their perceptions and attitudes toward purchasing life insurance products. The study also summarized the marketing strategies used by Indian life insurance players to market their products in rural areas and offered suggestions for capturing the potential in these areas. Finally, a brief discussion of microinsurance and its challenges was conducted.

According to Brown and Churchill (2000), when designing a microinsurance product, several factors should be considered when determining whether the risks the product is meant to cover can be insured. These factors include (i) a high number of comparable units exposed to risk; (ii) limited policyholder control over the insured event; (iii) the existence of insurable interest; (iv) losses that can be measured and identified; (v) losses shouldn't be catastrophic; (vi) chance of loss is calculable; and (vii) premiums that are reasonably priced.

Leftley & Mapfumo (2006) emphasized that creating a successful product requires concentrating on the demand side and going through an iterative process of looking at the operational and regulatory environment in addition to risk carrier options. The authors also emphasized the need for insurers to constantly balance policy coverage, inclusion, premiums, and financial sustainability.

Morduch (2006) concentrated on creating insurance plans for low-income individuals. There were several interesting innovations discussed, including weather insurance, health insurance partnerships, and credit life insurance. Each was established to provide services to underserved populations, and viable institutional solutions were beginning to emerge. The question of what makes institutions functional should be replaced, he suggested, with the question of how to improve designs so that they best serve low-income populations. In doing so, he made the point that existing methods need to be reviewed to better serve clients' needs and prevent unintentional harm.

NABARD (2008) found that the penetration level for health microinsurance was significantly lower than that of life microinsurance. The report identified the critical illness and hospitalization categories as the two primary product segments. Additionally, the report noted that some state governments had created, albeit in very early phases, health microinsurance programs. The health microinsurance models, according to the report, have the benefit of having members who can handle a variety of tasks, including marketing, enrolment, premium collection, claims processing, monitoring, and awareness-raising. The report recommended that a mutual entity that obtains re-insurance for such risks handle the high covariant risks, like epidemics.

Despite the great need, Sahu (2008) identified the following particular causes for the low demand for life microinsurance. Why were they so? The expansion of the rural insurance market was hampered by (i) the rural financial markets, which were marked by a lack of appropriate services, insufficient information, and capacity gaps; (ii) product design, which led to a mismatch between client's needs and the standard products on offer; and (iii) a lack of sufficient and appropriate insurance data. The willingness to pay based on macro aggregates may not provide meaningful insights if there is no appropriate insurance database to calculate premiums, costs, and benefits. Rural insurance services have not grown as quickly as they could have due to the high cost of entering these markets and inadequate utilization of existing distribution channels. (v) The industry's growth is hindered by difficult and

inappropriate procedures; (vi) disagreements between insurers and insured parties will result in less product customization and less demand for what is currently offered.

Ito and Kono (2010) discovered that despite practitioners' enthusiasm and the perceived need for life microinsurance, take-up rates had been low. They discovered some evidence that people's beliefs were risk-loving when they were confronted with losses. Additionally, they discussed some requirements for life microinsurance, including the following: (i) a high number of comparable units exposed to risk; (ii) restricted policyholder control over the insured event; (iii) the existence of insurable interest; (iv) losses could be measured and identified; (v) losses shouldn't be catastrophic; (vi) calculation of chance of loss; and (vii) reasonably priced premiums.

According to Siegal et al., (2010), a key factor in determining the success of microinsurance programs is their design. The study made the observation that design had an impact on the capacity to eliminate transaction costs and overcome information asymmetries. These elements largely dictated how financially viable these programs would be. Up until now, microinsurer's have mostly offered small-scale death benefits and minimal health insurance coverage as their only risk and service offerings. The study also made clear that risk assessment and service coverage are only two aspects of a program's overall design.

Cohen and Sebstad (2011) identified important components of product design. The strategies encompassed the following: (i) divide the various risk components of health, life, and loan insurance; (ii) offer customized products that can cater to varying requirements; (iii) schedule premium payments to correspond with income streams; (iv) evaluate the assortment of official and informal insurance choices to enhance comprehension of effective demand; (v) disentangle micro-credit and microinsurance; and (vi) concentrate on safeguarding mechanisms for property damage instead of ex-post insurance. Take note of the benefits and drawbacks of social duty and reciprocity in unofficial group-based systems.

Chache Willys Obuba (2014) investigated whether the pricing strategies used by insurance underwriters had an impact on the expansion of microinsurance in Kenya. The goal of the study was to determine how product pricing influences Kenyan insurance underwriters' efforts to expand microinsurance. The multiple linear regression analysis of secondary data served as the foundation for the experimental research design that the investigator used. Seven insurance companies that underwrite microinsurance provided the data. The gross premium served as a proxy for the expansion of microinsurance, while the incurred expense ratio, incurred claims ratio, and net income ratios served as independent variables that represented the cost of the products. The results showed a correlation between the gross premium and the ratios of incurred expenses, incurred claims, and net income. The study found that the independent variable could account for 87.9% of the variation in gross premium, indicating that the regression model fits the data. According to the study, a rise in the ratios will point to an increase in the gross premium.

According to McCord (2001), the insurance provider took on all responsibilities under the full-service model, including product development, marketing, sales, premium collection, and claims processing. The author stressed the importance of determining the best ways to distribute microinsurance to various risk groups. He emphasized that additional information was needed about the best ways to deliver different risk categories, how to market and sell effectively, the fundamentals of agent incentive contracts, and the significance of customer retention for an insurance company's ability to operate as a trustworthy business, offer sufficient incentives, and pay agents more for renewals than for new business.

McCord (2006) examined several drawbacks for clients, agents, and insurers for the partner-agent model to benefit the underprivileged. The author emphasized that: (i) the needs of the client should drive the development and distribution of the insurance product; (ii) the regulatory framework should protect the rights of customers by facilitating straightforward procedures; and (iii) microfinance institutions should involve clients in the development of their products and solicit feedback so they can use that information in negotiations with the insurer.

The community-based model was studied by Fisher and Qureshi (2006). They asserted that under the community-based model, policyholders, or members of the community, owned and managed the insurance entirely. It had a non-profit status and was distinguished by its emphasis on social cohesion and participatory methods. Mutual or community-based insurance can be found in several configurations, such as (i) insurance companies operating independently as mutual (or cooperative) insurers; (ii) insurance companies connected to a network of financial cooperatives, such as savings and credit cooperatives; and (iii) networks of mutual insurance associations.

Churchill (2006) covered the different aspects of microinsurance design, marketing, premium collecting, and governance. The author also covered the different institutional frameworks that can be used for delivery, including microfinance organizations, insurance companies owned by networks of savings and credit cooperatives, and community-based approaches. The book included incisive tactics for striking the ideal balance between coverage, costs, and price in addition to examining the roles of important stakeholders.

Verma (2016) criticized the direct marketing model, claiming that it was ineffective due to the model's extremely limited outreach in providing microinsurance to the underprivileged. According to the study, this was an expensive distribution strategy because the insurance company handles all client identification, policy sales, premium collection, claim receipts, and other related tasks.

It was logical to seize an established mechanism that was functioning in these segments to cut costs and assist the insurer in capitalizing on the trust that the entity had already established, as reported by NABARD (2007), given that India's large rural population was marked by difficulties and complexities. A partner-agent model, in which the insurer underwrites the risk and an established intermediary handles distribution, would be a wise choice for delivery, the study noted. The model addressed the insurers' concern regarding the low returns of life microinsurance while maintaining an attractive enough cost for the impoverished to join and stay in the program, as the reason given for this.

According to Chari (2008) in the study "Insurance—A relook at the distribution strategy," the insurance industry is concentrating its marketing efforts primarily on the urban middle class and affluent segment. Insurance companies are required by the Insurance Regulation and Development Authority (IRDA) to extend their business coverage to the rural and social sectors. The success of the insurance business is largely dependent on how cost-effective and conversion-efficient various distribution strategies are.

Lakshmikutty et al., (2008) examined insurance distribution channels from the standpoint of the socio-cultural ethos of the market and how these channels fit into it in their study "Insurance Distribution in India: A Perspective, Marketing of Insurance Services in India." The primary challenge in the insurance industry today is gaining clients' trust in the company and the legitimacy of intermediaries.

The microinsurance market globally, the business structures of over 600 microfinance institutions (MFIs) operating in 83 countries between 1998 and 2007, and organizational, market, and socio-cultural factors influencing the provision of insurance and other financial services by microfinance institutions in developing economies were all examined by Kwon (2010). After that, an empirical analysis is conducted to determine how organizational, market and socio-cultural factors affect MFIs' ability to provide lending, savings, and insurance services in underdeveloped nations. In nations with a large Muslim population, MFIs appear to concentrate on lending services. In the microinsurance market, he also did not find any evidence linking the availability of saving services to the presence of insurance and vice versa.

According to Brown (2000), microfinance organizations were probably inadequate in providing microinsurance. He advised microfinance institutions to collaborate with reputable insurance companies rather than creating their line of microinsurance products. He proposed that those collaborations would allow clients to obtain microinsurance products without the microfinance institutions having to assume the risk of the insurance.

Srinivasan & Arunachalam (2002) concentrated on microfinance institutions' microinsurance plans. The study concluded with lessons learned about insurance from a variety of insurance companies. These companies were able to create flexible procedures if they were persuaded of the legitimacy of the operating organizations. For example, strong interpersonal relationships lead to good customer care from the MFI's perspective, and competition in the insurance market results in the best product at competitive rates giving the MFI more negotiating power and reducing risk.

According to GTZ (2004), microfinance can offer a useful connection between the provision of microinsurance and other services from a conceptual standpoint. The report stated that microfinance institutions possessed significant advantages. They had a well-established institutional framework, were trusted by the public, and were near the target group. Their expertise in group methodologies and social mobilization can lower the transaction costs associated with insurance provision. Due to cross-selling concerns and the fact that insurance lowers the borrower's and lenders' financial risk, they had a stake in providing microinsurance. The report also suggested using microfinance institutions to carry out demand research and awareness-raising initiatives. The report concluded by noting that certain microinsurance products had a significant savings component.

A case study explaining the role of microfinance institutions in developing the life microinsurance market in India was documented by Roth et al. in 2005. The paper covered the key takeaways from top Indian microfinance organizations on how to grow the market for life microinsurance. The document covered the financial services that microfinance institutions generally provide the rationale behind MFIs' entry into life microinsurance, and potential client delivery methods. The document also covered the MFIs selected for the study about several important parameters, including their history, the clientele's general profile, the risk management products and policies they have adopted, the life microinsurance products they have to offer, and the different partnership models and partners they have used.

According to Ahuja & Khasnobis (2005), microfinance institutions significantly contribute to the improvement of impoverished households' quality of life. An overview of Microinsurance's potential in India was given in the paper, along with recommendations for future expansion tactics. Aside from this, it made more sense to combine microinsurance and microfinance since it reduced the cost of lending. The paper offered an analysis of the Insurance Regulatory and Development Authority's (IRDA) concept note on microinsurance. The note explained IRDA's intentions to advance its intermediate model by adding new provisions.

Garand (2005) concentrated on the development of Vimo SEWA, an insurance program offered as a voluntary integrated insurance product by SEWA, India. It stressed that when developing new products, the members' financial capacity must always be taken into account. Additionally, because of the membership's dispersed nature, it may be challenging to achieve a high renewal rate. The study concluded that creditor insurance was still the most straightforward kind of microinsurance to use. It did, however, highlight that it was ineffective in providing health and life insurance, which are necessities for the low-income community.

All India Disaster Mitigation Institute (2006) stated that microfinance services were also starting to offer microinsurance as a means of providing low-income households or businesses with financial protection against certain losses, such as funeral and burial costs, medical costs, loss of small-scale assets, property damage, or loss of livestock and crops. The study also noted that the rise of microinsurance posed a challenge to the widely-held notion that the impoverished were "non-insurable" and was a significant development in the field of microfinance.

Shakera Siddiky (2007) examined the characteristics of numerous current microinsurance plans that support the role that microfinance plays in reducing poverty and the microinsurance service delivery mechanisms that are used by a small number of Microfinance Institutes in Bangladesh. Based on primary data gathered from interviews with seven MFIs offering microinsurance products to both members and non-members, the analysis was conducted. The results indicate that all microinsurance products are required and serve as a supplement to the MFIs'

savings or loan products. The MFIs follow the provider model of microinsurance service delivery, which entails that they design the insurance products, collect premiums, and evaluate claims, handle payments, and so forth.

Trust was said to be a significant barrier to the adoption of insurance (Dercon & Kirchberger, 2008). It was made easier to distinguish between these two microfinance initiatives by contrasting microcredit and life microinsurance. According to the study, money is first offered in microcredit, and lenders then need to figure out how to make sure that borrowers repay the loan. Essentially, they needed to figure out how to feel confident that borrowers would repay the loan. In the insurance business, customers have to part with their money upfront and then have faith in the insurer to pay out when issues occur. While insurers must have the clients' trust, lenders must have the borrowers' trust.

Some significant concerns regarding the viewpoints of micro life insurance policyholders were brought to light by (Ratnaraju, 2016). A study found that micro credits approved by microfinance institutions are the reason why micro-life insurance is used. They are making a big difference in the lives of low-income households. It makes more sense to combine micro-life insurance with microfinance since it lowers lending costs. The analysis reveals that the market for micro-life insurance is showing a positive upward trend. The study demonstrates the public's increasing awareness of micro-life insurance policies and their growing popularity. As an all-encompassing instrument to lessen vulnerability, inequality, and poverty, microinsurance can be extremely important.

Bardhan & Udry (2002) pointed out that it was not unexpected that about 2 percent of the poor, or about 5.2 million people, had access to insurance in a country where barely 10 percent of the population had formal insurance coverage. This demonstrated the enormous untapped potential in the underserved population segments. According to the 2001 Census, India had 638596 villages and about 780 million people living in rural areas overall. According to the authors, life microinsurance was seen as a social security tool to address the larger development needs of the vulnerable sections by lowering their risk exposure, or as a new market

opportunity for insurers to develop business models to serve the larger underserved market. The primary goal of achieving equilibrium in the industry was to strike a balance between the fundamentally conflicting goals of meeting the target population's needs for coverage, maximizing insurer costs, and maximizing client prices to achieve the dual goals of accessibility and affordability.

According to Prasad (2007), India has a huge potential for life microinsurance because over 90 percent of those who are excluded fall into the "insurable" range, and several million of those excluded are in this range. The author did, however, note that the majority of people's attitudes and affordability were based on factors such as product design and pricing, a dearth of coherent and trustworthy data on the population and assets that could be insured, inappropriate and inadequate technical knowledge, high distribution and service costs, and a lack of consumer awareness.

Benedikt Link et al., (2007) looked into the causes of low-income households in the Tamil Nadu state of South-East India's low microinsurance policy uptake. The study examined the issues that have impeded the growth of the microinsurance industry. It was discovered that the insurance companies' current product offerings help low-income clients reduce their risk, proving that the offered products were adequate for the client's needs. The target market, however, is not well-informed about basic insurance concepts, financial literacy, or the availability of microinsurance.

The present state of microinsurance provision in Ghana and Srilanka, two nations with radically dissimilar socio-cultural contexts was described by Arun, (2008). The study concludes that private micro-insurance initiatives are crucial tools for assisting people in reducing their vulnerability because it is unlikely that either country will expand its social security systems to include the entire population shortly.

Arvind & Renukumar, (2008) investigated the requirements and existing coping strategies for microinsurance in low-income households. A review of the microinsurance products available in central Tamil Nadu was also conducted, along with an analysis of the management and implementation difficulties MFIs encounter when providing microinsurance. Approximately ninety households were surveyed in

each of the three central districts of Tamil Nadu to assess client demand. Clients of two MFIs, ASA and SHEPHERD, were included in the survey. It was noted that households had regular insurance policies through the insurance agency network and had access to them, whether they were MFI clients or not. Their comprehension of the need for insurance and their affiliations with MFIs are clear. The study also indicates the need for increased public education regarding microinsurance and the requirement for increased bargaining power.

Mosley (2009) made an effort to determine appropriate insurance against risks affecting the poorest in his study titled "Assessing the success of microinsurance programs in meeting the insurance needs of the poor." It provides empirical data on the effects of various forms of microinsurance and suggests the concept of "quasi-insurance," or the provision of insurance functions via a non-insurance route, in situations where institutional or regulatory restrictions make it impossible to offer insurance properly. The study contends that rather than being primarily driven by effective demand, particularly from the poorest, microinsurance has up to now been largely supply-driven. As a result, insurance products that would help the poorest people are still in the early stages of development. Thus, it is appropriate to promote institutional innovations as well as new insurance offerings.

According to Chandhok (2009), the majority of people are aware of the significance of micro health insurance, and there is a sizable untapped market for it. Microinsurance will therefore play a significant role in reducing poverty. The population living below the poverty line will lead a peaceful and secure life if the various microinsurance models are implemented effectively by insurers, microfinance institutions, SHGs, NGOs, health institutions, donors, and cooperatives.

Hermanto (2010), stated the relationship between "family Income, Saving and Potential Demand for Microinsurance policy in Indonesia", the study indicates that the improvement of low-income individuals' prosperity in Indonesia's informal sectors has been hampered by the discrepancy between Microinsurance supply and demand mechanisms. There is a pressing need to identify the optimal scheme, both

technically and professionally, from the insurance companies' perspective on the supply side. However, there is a need to increase urban people's willingness and ability to purchase insurance products to protect them from risk.

Shweta Mathur (2010) provided an overview of the growth of microinsurance in India as well as the difficulties encountered by the businesses that provide these products. They believed that institutional and policy innovations are encouraging insurance among low-income individuals, who make up a sizable portion of the population and are primarily uninsured. Even though Microinsurance's current coverage is restricted, an early trend in this area indicates that both public and private insurance companies that operate for profit can cover a sizable portion of the impoverished.

2.5 Research Gap

The current body of literature lacks comprehensive research focusing specifically on the policyholders' perspective regarding the determinants influencing their investment decisions in microinsurance within the context of Kerala, India. While there have been studies examining the general perceptions of microinsurance benefits in Kerala, there remains an absence of detailed investigation into the specific factors that drive policyholders' decisions to invest or participate in microinsurance schemes within the region.

Existing studies often concentrate on the macro-level impact of microinsurance or evaluate perspectives from a broader societal standpoint. However, there is a dearth of research that delves deeply into the nuanced motivations, preferences, and perceptions of individual policyholders in Kerala regarding their decision-making process related to investing in microinsurance. There is insufficient exploration into the determinants that shape policyholders' decisions to enrol, sustain, or discontinue microinsurance policies in Kerala. Factors such as socio-demographic characteristics, perceived value of insurance coverage, and trust in insurers, awareness levels, accessibility, affordability, and cultural influences are potential determinants that warrant in-depth investigation.

A comprehensive study focusing on policyholders' perspectives and their investment determinants in Kerala can offer valuable insights for policymakers, insurers, and stakeholders in the microinsurance industry. Such insights could aid in the development of more targeted policies, product design improvements, and effective communication strategies that resonate with the needs and preferences of policyholders in the region. In summary, the research gap lies in the absence of a detailed investigation into the determinants influencing policyholders' investment decisions in microinsurance from the specific context of Kerala. Bridging this gap would provide essential insights into policyholder behaviour, enabling the design of more effective microinsurance products and strategies tailored to the needs and preferences of individuals in Kerala, ultimately promoting greater financial inclusion and resilience within the region.

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Chapter 3

THEORETICAL FRAMEWORK

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3.1 Introduction

This chapter serves as a foundational framework that navigates the multifaceted landscape of microinsurance. This theoretical segment aims to comprehensively explore and analyze the various theoretical underpinnings, frameworks, and concepts essential for understanding the determinants that influence policyholders' decisions regarding microinsurance investments. In essence, the theoretical chapter serves as a comprehensive groundwork for the empirical study, aiming to provide a robust theoretical foundation and framework to evaluate the determinants influencing policyholders' decisions regarding microinsurance investments. It sets the stage for a detailed empirical exploration, aiming to bridge the research gap and offer practical insights beneficial for both academia and industry stakeholders in the microinsurance domain.

3.2 Microinsurance- The Concept

'Microinsurance is just as effective as microcredit' this statement was made by the World Bank. The ability of insurance policies to stop people from being poor in the first place is even better. Microinsurance serves the purpose of containing these downturns, which are significant barriers to escaping poverty, like any other efficient risk-management tool. When faced with a shock, poor individuals typically look for a range of resources, such as formal and informal credit, savings, and additional job or income-generating possibilities to cover their needs. A good place to start when considering how much insurance the poor need is by comprehending these risk management techniques.

Individuals, families, and businesses can all benefit from financial security provided by insurance. Insurance makes it possible to save and provides a secure and

rewarding investment. This promotes thrift, lessens anxiety, and boosts individual initiative. Insurance is beneficial in easing the state's financial strain. Insurance companies can build up funds to invest in both the public and private sectors, creating a source of funding for new companies, new homeowners, and farmers and their equipment. In the same light, the goal is to achieve a balance between social protection and market viewpoints (insurers' need to avoid losing money). As a result, microinsurance programmes for the poor must strike a compromise between the following conflicting goals (Cohen and Sebstad, 2006).

1. Providing coverage to meet the needs of the target population.
2. Minimizing operating costs for the insurers.
3. Minimizing the price including transaction cost for policyholders to enhance affordability and accessibility.

In addition to coping with the effects of risks, the impoverished also require resources to deal with life cycle events like marriages, births, deaths, education, and old age. Educated rich and middle-class individuals have access to a variety of financial services, including insurance. However, the poor typically do not have access to any type of financial services, including banking services. As a result, the poor require access to large sums of money on occasion in order to meet these needs comprehensively without compromising their current or future livelihood. Unfortunately, the poor have few options for financial management due to limited access to banks and insurance companies (Rutherford, 1999). For the extremely poor who cannot afford even subsidized insurance, social security may be an option. Microcredit and microinsurance, on the other hand, may be viable options for the rest of the poor.

On November 14, 2007, more than 300 microinsurance experts and practitioners from fifty countries will gather in Mumbai, India, for the third annual microinsurance conference to discuss trends and recent developments in cost-effective insurance for the poor. P. Chidambaram, former Finance Minister of India, inaugurated the conference by stating: "While growth is the best antidote to poverty,

governments must now turn their attention to those at the bottom of the income pyramid." Wealth does not filter down to society's poor. In India, approximately 250 million people, or more than half of the Indian population, do not have access to banking or insurance products. "It is just as important to address these concerns as it is to focus on growth," (Chidambaram, 2007).

Microinsurance is a phenomenon that is mostly found in developing nations. The low insurance penetration rate and the fact that only a small portion of the population is covered by government social protection programs contribute to this. To bridge the gap left by the three distinct entry points, microinsurance has arisen. Firstly, a lot of low-income people create their own mutual benefit organizations, burial societies, and the like to manage risks. The challenge for regulators has arisen because some of these unregulated insurance schemes have become relatively large. Second, individuals left out of social and commercial insurance programs have been urged by some development organizations, such as the ILO, to establish risk-pooling mechanisms. Ultimately, a lot of these donor-driven initiatives aim to connect them to government funding to enable a transfer of wealth from the wealthy to the underprivileged. Third, with support from MFIs, some insurers view the large population of low-income individuals in developing nations as a potential new market.

Prahalad provides the best explanation of this "New market" viewpoint. According to Prahalad (2004), product and service providers including multinational corporations invent new business models and target low-income consumers, there exists a market opportunity for the over four billion people who rely on less than \$2 per day. The inability of societies to transfer risks makes development extremely difficult. If the organization does not turn a profit from the insurance business, however, it will not last. Large numbers and a large base are taken into consideration in microinsurance, rather than a significant profit on each client. India has enormous potential, as only two percent of the target population is insured.

3.3 Development of Microinsurance in India

The Insurance Regulatory and Development Authority of India (IRDA) set targets for insurance companies in the social and rural sectors in 2002. Consequently, all insurers that entered the market after the IRDA Act of 1999 went into effect had to gradually fulfil their obligations to the social and rural sectors. Obligations are outlined in insurance company guidelines. The definition of the rural sector was initially quite rigid, defining it as a community of less than 5,000 people where more than 25% of the male workforce worked in agriculture. However, the IRDA later weakened its definition of a rural area in response to requests from insurers.

The unorganized, self-employed workers, the vulnerable population, and people with disabilities are all included in the social sector. The IRDA implemented a floor percentage for life insurers' policies in the rural sector to boost insurance sales in this particular target market segment. However, to encourage a greater number of people to be covered, IRDA has set a floor percentage for premiums for non-life insurers. The Act guarantees that the minimum percentage required for life and non-life insurers will rise for coverage in the social and rural sectors over five years. It was mandatory for insurers that were in operation on the day the IRDA Act went into effect to make sure that their volume of business was equal to or greater than what they had documented in the previous fiscal year.

Under the new regulation of November 2005, IRDA has for the first time emphasized on microinsurance. It has defined both general and life microinsurance products. General Insurance refers to “any health insurance contract protecting assets such as a hut, livestock, tools and instruments: or an accident contract, either for an individual or a group”. Life insurance refers to a “term insurance contract, with or without return of premium; endowment insurance contract; or health insurance contract; with or without accident rider, either an individual or group basis”. For each of these policies, the age at entry, the minimum and maximum amount of coverage, and the duration of coverage have been specified. To be eligible to be classified as microinsurance products, companies must create their products in accordance with these guidelines and receive IRDA approval. To

achieve pro-poor policy goals, insurers have been compelled to offer certain insurance products to the rural and social sectors. In reality, though, social sector products tend to more closely satisfy the fundamental requirements of microinsurance.

3.4 Definitions and Characteristics of Microinsurance

Microinsurance describes plans and products for insurance that are specially made to meet the needs of people with low incomes or limited access to traditional insurance services. Affordable, easily accessible, and appropriate for those in underprivileged or economically disadvantaged communities are the attributes that define these offerings. A few well accepted definitions are given below.

“The protection of low-income people against specific perils in return for regular premium payments proportionate to the likelihood and cost of the risks involved” (*Preliminary Donor Guidelines, Microinsurance Network, 2003*)

“A risk-transfer device characterized by low premiums and low coverage limits, designed for low-income people not served by typical social insurance schemes” (*Microinsurance Academy, India, 2007*)

“Insurance that is accessed by the low-income population, provided by a variety of different entities, but run in accordance with generally accepted insurance practices. Importantly, this means that the risk insured under a microinsurance policy is managed based on insurance principles and funded by premiums” (*International Association of Insurance Supervisors, 2007*).

“A mechanism to protect poor people against risk (accident, illness, death, natural disasters, etc.) in exchange for insurance premium payments tailored to their needs, income, and level of risk” (*ILO's Microinsurance Innovation Facility, 2008*)

Worldwide accepted Microinsurance Definitions given by different countries regulatory bodies were presented in Table 3.1

Table 3.1*Microinsurance Definition Around the Globe*

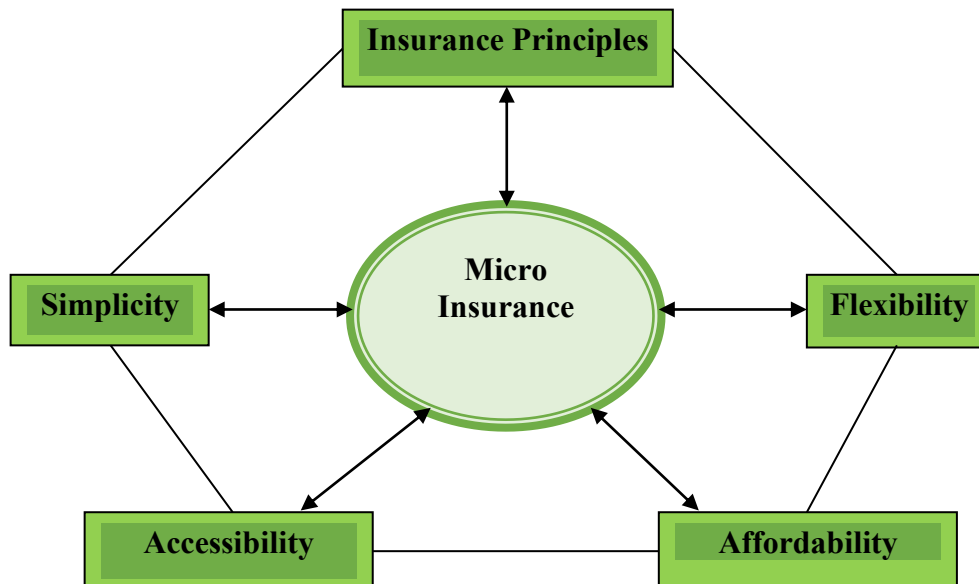
Country	Nature	Definition
Brazil	Qualitative	Microinsurance is “the insurance protection provided by licensed entities within the country against specific risks which aims fundamentally to preserve the socio-economic and personal and family situation of the low-income population.”
Philippines	Quantitative	“microinsurance is an activity providing specific insurance, insurance-like and other similar products and services that meet the needs of the low-income sector for risk protection and relief against distress, misfortune and other contingent events with the following features: the amount of premiums, contributions, fees or charges, computed daily, does not exceed five (5) percent of the current daily minimum wage rate for non-agricultural workers in Metro Manila (USD 0.50), and the maximum sum of guaranteed benefits is not more than 500 times the daily minimum wage rate for non-agricultural workers in Metro Manila(USD 5,000).”
Peru	Quantitative	Microinsurance is insurance that does not cover more than USD 3,300 or does not have a monthly premium greater than USD 3.30. (2007)
	Qualitative	Microinsurance must respond to the protection needs of a specific insurance group [such as the low-income population], and the intermediary working with the microinsurance organization must register its policy model at SBS (Superintendencia de Banca, Seguros 2009)
Ghana	Qualitative	“Microinsurance is insurance that is accessible by the low-income population. It is provided by regulated insurers. Its main aim is to protect the social economic living conditions of the low-income population against specific risks (life, asset protection, accident, health) through the payment of premiums related to the risks involved in line with the law and globally accepted insurance principles (IAIS Core Principles).”

Taiwan		<p>“Microinsurance means insurance products that offer basic coverage against specific risks as provided by insurance enterprises for the economically disadvantaged. “Economically disadvantaged” means a person must meet any of the following criteria:</p> <ul style="list-style-type: none">- a spouseless person with a gross annual income less than NT\$250,000- a member of a household with a combined gross annual income of less than NT\$500,000- a person with the status of an indigenous person- a person who is a member of a legally established civil organization or institution for fishermen, or a domestic fishing professional, or a foreign fishing professional.”
India	Quantitative	<p>(i) "General microinsurance product means health insurance contract, any contract covering the belongings, such as, hut, livestock or tools or instruments or any personal accident contract, either on individual or group basis, as per terms stated in Schedule-I appended to these regulations".</p> <p>(ii) "Life Microinsurance product means any term insurance contract with or without return of premium, any endowment insurance contract or health insurance contract, with or without an accident benefit rider, either on individual or group basis, as per terms stated in Schedule-II appended to these regulations as those within defined (low) minimum and maximum caps.”</p>

Though the concept of microinsurance is gaining in popularity across the globe, Figure 3.1 shows the characteristics of microinsurance

Figure 3.1

Characteristics of Microinsurance



Source: Swiss Re Economic Research and Consulting

1. **Insurance principles:** In accordance with insurance principles, policyholders (or donors and government development agencies on their behalf) pay premiums in exchange for the insurer's guarantee of indemnity in the event of a covered loss.
2. **Accessibility:** Microinsurance is intended for those in the population with variable and low incomes who would not otherwise be able to purchase traditional insurance. Expanding the insurance market to include more remote areas of society, guarantees that risk protection is accessible to a larger portion of the population.
3. **Affordability:** Products are made affordable for the intended market by maintaining low levels of coverage and premiums. The provision of premium subsidies by governmental bodies or developmental agencies contributes to the affordability of products.
4. **Flexibility:** Microinsurance products must be customized in order to effectively meet community requirements, as the low-income segment of society is not a

homogeneous cluster. Premium collections, for example, can be adjusted to the policyholders' variable income stream.

5. ***Simplicity***: In terms of product design, underwriting requirements, premium collection, policy wording, and claim handling, microinsurance ought to be organized simply. This helps to make the products accessible and understandable because real data is frequently inadequate.

3.5 Microinsurance Environment Structure

Microinsurance development entails more than the creation of new products and institutions to offer them. Microinsurance necessitates the involvement of numerous institutions at various levels. This is depicted in Figure 2, which depicts how institutions are active at the Micro-Level, Meso-Level and Macro-Levels. Effective interventions must occur at all levels (Roth.J, McCord.M.J, Liber.D, 2007).

3.5.1 Macro-Level

Governments and donors are the main stakeholders at the macro level. The government must provide an appropriate legal environment in which microinsurer's can function. Insurance regulators play an important role in the industry by protecting consumers' interests and establishing a legal and policy framework for microinsurance. Donors use financial and technical assistance to influence the government to establish the necessary atmosphere and to facilitate government actions. The primary goals of both parties are to safeguard microinsurance policyholders and to grow the sector. Governments must also develop supervisory procedures to guarantee that the various parties operating microinsurance schemes in the country are following the law. By creating an ombudsman or other method for recording complaints from dissatisfied microinsurance policyholders and aiding them in getting an equitable resolution, the government may also play a role in providing consumer protection.

Figure 3.2

Stakeholders involved in Microinsurance Environment Structure



Source: J.Roth, Michel J. Mc Cord, D.Liber (2007)

3.5.2 Meso-Level

Micro-level microinsurance activities are facilitated by meso-level microinsurance activities in a microinsurance value chain. They offer the vital assistance needed for the efficient operation of microinsurance programmes. Actuaries, claims adjudicators, IT service providers, software developers, information system providers, trainers, and other facilitators are among them. They frequently act as the connection between participants at the micro- and macro-levels, thus driving the other two levels. Technology platforms, which include social mechanisms like group-based premium collecting or electronic media like personal digital assistants and mobile phones, enable the processing of services along the supply chain.

3.5.3 Micro-Level

The policyholders are the focal point and the centre of attention at the micro level. Individuals, groups, or members of organised groups may be the policyholders. The underwriting procedure is streamlined and the cost of microinsurance is significantly decreased when offered on a "group basis".

The institution that carries the risk advertises or distributes the products, and manages the policy can be the provider. These tasks are occasionally carried out by distinct organisations. A MFI, NGO, CBO, or cooperative may distribute the product and take the premium while the insurer may carry the risk. The service may be administered by a specialized provider known as a Third-Party Administrator (TPA). Administrators provide professional back-office assistance and/or claims processing throughout the supply chain. These tasks may also be carried out by the risk carrier or the delivery route.

Separating duties frequently results in lower expenses, which lowers the premium as a whole. Low-income households can now afford microinsurance as a result of this. The microinsurance sector is continually developing new connections between diverse micro-level companies. Major proponents of microinsurance have started a number of initiatives to promote the creation of new microinsurance concepts, encourage support from other stakeholders, practitioners, and policymakers, and further the expansion of microinsurance to all low-income households.

3.6 Distribution Models

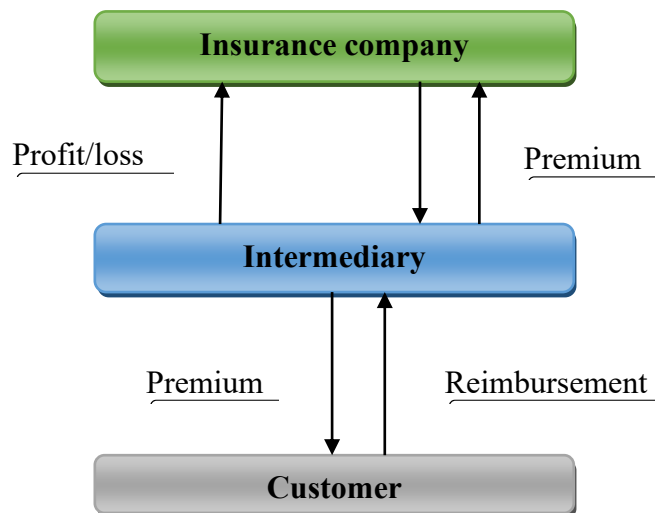
Microinsurance distribution in India involves various models aimed at reaching the vast population, especially those in rural and low-income segments, with affordable insurance products. These distribution models are structured to overcome challenges such as accessibility, affordability, and awareness among underserved communities. Each of these distribution models plays a crucial role in expanding the outreach of microinsurance in India, ensuring that insurance protection reaches the marginalized and economically vulnerable sections of society, thereby promoting financial inclusion and security. In general, there are four primary approaches to MI

distribution that are seen globally (Acha & Ukpong 2012; Churchill 2006). Following are the major microinsurance distribution models.

3.6.1 Partner Agent Model

The Partner Agent Model in microinsurance involves collaborating with local individuals or entities to act as intermediaries between insurance companies and the target customer base. These partner agents, also known as microinsurance agents or intermediaries, play a pivotal role in distributing insurance products, especially to underserved communities in remote or rural areas. Here's an overview of the Partner Agent Model in microinsurance:

- ◆ ***Local Presence and Understanding:*** Partner agents usually belong to the same communities or areas they serve. They possess a deep understanding of the local culture, language, and the specific needs of the population.
- ◆ ***Educating and Selling Insurance Products:*** Partner agents are responsible for educating individuals about the importance and benefits of insurance. They play a crucial role in selling insurance products directly to customers, explaining the terms, coverage, and premiums in a way that's accessible and understandable to the community.
- ◆ ***Building Trust and Relationships:*** These agents establish trust with the community members by being accessible, reliable, and offering personalized assistance. This trust is essential in overcoming skepticism or lack of awareness regarding insurance.
- ◆ ***Facilitating Claims and Services:*** Partner agents often continue to support customers even after the sale by assisting in the claims process, servicing policyholders, and addressing any queries or concerns related to insurance policies.

Figure 3.3*Partner Agent Model*

Source: World Bank Report

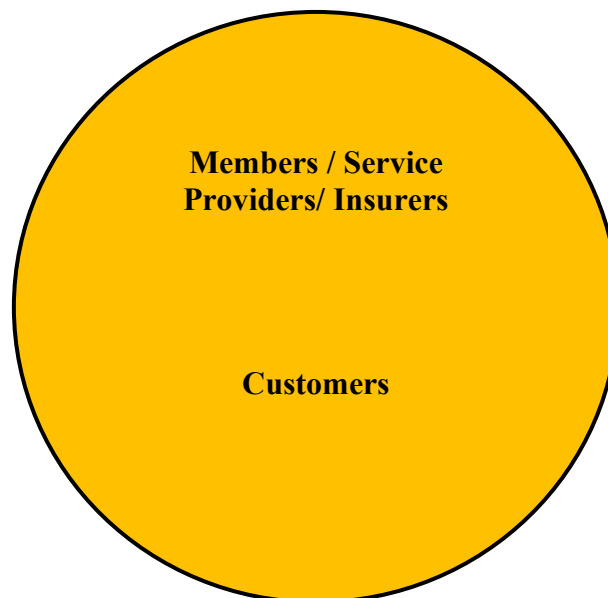
As the name suggests, this model entails a partnership between an insurer and an agent who offers some sort of financial service to a sizable number of low-income people. A microfinance institution, an NGO, or a company that sells pre-cuts to a lot of low-income customers, like a fertilizer provider, could be this. This individual is a salesperson who, typically on behalf of the insurance company and in return for a commission or fee, sells insurance products to customers. The insurance provider makes use of the existing channels of distribution of this agency and its financial dealings with low-income groups that would otherwise be too expensive to set up. The partnership model makes use of each partner's comparative advantage so that they can concentrate on their core competencies: the insurance provider is in charge of product design and pricing, final claims management, reserve investment, and the assumption of all insurance risks. The agent offers its infrastructure for product maintenance in addition to selling the policies, including marketing the product, premium collecting, and assistance with claims administration.

3.6.2 Community-based / Mutual Model

One creative method of distributing microinsurance is through a community-based model. Here, the entire microinsurance operation is managed by the policyholders or clients themselves. To expand the services of health microinsurance, they collaborate with medical providers. The ease of selling the products in rural areas is the main advantage of this model. The scope of operation is, however, constrained and small.

Figure 3.4

Community-based / Mutual Model



Source: World Bank Report

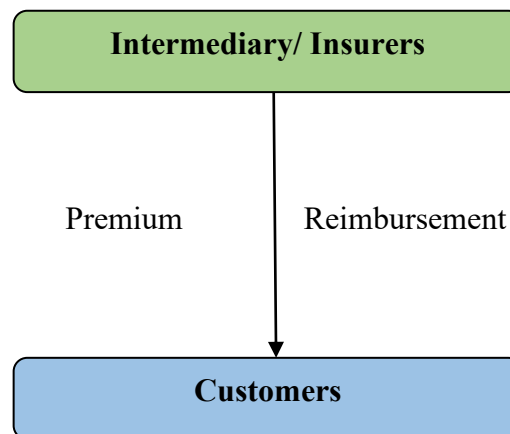
3.6.3 Full-Service Model

According to this model, all services related to product design, sales, and servicing are provided by the insurer or insurance provider. The insurer controls all profit or loss and bears responsibility for operating costs. They might collaborate with an outside healthcare provider to provide health-related services. This model's main benefit is that the insurer has complete control, but there are significant risks involved. Insurance companies operate under the full-service model in India. In this case, businesses either use their regular agency offices or set up specialized

microinsurance offices. In the first scenario, the insurer begins operations from the current offices and does not need to make any additional investments in infrastructure or other facilities. One drawback is that the business finds it more challenging to establish itself in the rural area. Regarding the second, the insurance provider offers microinsurance via specialized offices referred to as microinsurance offices. It is typically located in rural or semi-urban areas where people can easily access it for all purposes.

Figure 3.5

Full-Service Model



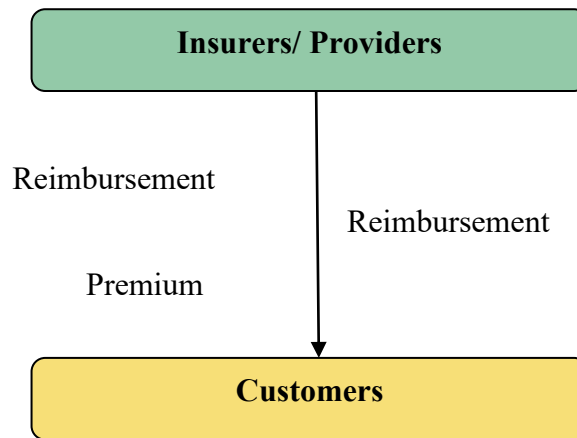
Source: World Bank Report

3.6.4 Provider-driven Model

This model and the full-service model are identical. When it comes to micro health insurance, it is essentially noticed. Here, the supplier of health services and the supplier of microinsurance, or insurer, are the same. For instance, Reputable physicians or hospitals in India provide individual or group policies. They have complete control over the products and services that are offered.

Figure 3.6

Provider-driven Model



Source: World Bank Report

3.7 LIC Microinsurance Products

Life Insurance Corporation of India (LIC) stands as a pioneer in the insurance sector, offering a diverse range of insurance products tailored to meet the varying needs of individuals across different segments of society. Among its array of offerings, LIC has developed Microinsurance Plans that cater specifically to the needs of individuals from low-income and economically vulnerable backgrounds. Microinsurance plans provided by LIC are designed to offer financial protection and security to individuals and families who may have limited access to traditional insurance products. These plans aim to provide coverage against various risks such as life, health, and assets at affordable premiums, ensuring that even those with modest means can safeguard their future and that of their loved ones.

LIC's microinsurance plans typically offer simplified and easily accessible policies, keeping in mind the specific requirements and constraints faced by the economically underserved population. These plans often come with flexible terms, easy premium payment options, and minimal documentation, making them more accessible and feasible for those with limited resources. With a commitment to financial inclusion and social welfare, LIC's microinsurance plans play a crucial role in extending

insurance coverage to marginalized communities, empowering them to mitigate risks and uncertainties while promoting financial stability and resilience. In this section will explore the key features, benefits, and types of Microinsurance Plans offered by LIC, highlighting how these initiatives contribute to fostering a more inclusive and secure society for all.

3.7.1 Bhagya Lakshmi

Bhagya Lakshmi microinsurance plan, a limited premium paying individual life microinsurance plan from LIC, is non-linked, non-participating, and offers a return of 110% of the total amount of premiums due at maturity.

1. Benefits:

- a. Maturity Benefit:* "Sum Assured on Maturity," which is equivalent to 110% of the total premiums payable during the contract's term, will be paid to Life Assureds who survive to the end of the policy term, provided that all outstanding premiums have been paid. The above-mentioned premium does not include any taxes or additional premiums, if any.
- b. Death Benefit:* "Sum Assured on Death" is payable if the life assured passes away before the due date of maturity, provided that the policy is in effect and premiums are paid on time. The maximum of seven times the annualized premium or 105% of all premiums paid up to the date of death or Sum Assured is what is meant by "Sum Assured on Death." Taxes and any additional premium, if any, are not included in the premium mentioned above.

2. Eligibility Conditions and Other Restrictions:

a) Minimum Sum Assured	50,000/-
b) Maximum Sum Assured per life*	`Rs.2,00,000/- (The Sum Assured will be in multiples of `Rs.1,000/-) *Total sum assured under all the policies issued to an individual under this plan and all policies issued in the earlier versions of this plan shall not exceed `Rs.2,00,000.
c) Minimum age at entry	18 years (completed)
d) Maximum age at entry	42 years (nearer birthday) for Premium Paying Term 5 years 55 years (nearer birthday) for Premium Paying Term 6 to 13 years subject to Maximum Maturity Age of 65 years
e) Minimum Premium Paying Term	5 years
f) Maximum Premium Paying Term	13 years
g) Policy Term	Premium Paying Term + 2 years
h) Maximum age at maturity	65 years (nearer birthday) (depending on the Premium Paying Term chosen)
i) Minimum Instalment Premium	Rs.`500

3. Payment of Premiums:

Premiums can be paid regularly at yearly, half-yearly, quarterly or monthly mode during the premium paying term of the policy.

4. Grace Period:

If the premium is not paid before the days of grace expire, the policy lapses. A grace period of 30 days will be allowed for monthly premium payments and 60 days for other modes of premium payments from the date of the first unpaid premium. During this time, the policy will be considered in force with the risk cover without any interruption in accordance with the terms of the policy.

5. Revival:

If premiums are not paid within the grace period then the policy will lapse. A lapsed policy can be revived within five consecutive years from the date of the first unpaid premium but before the date of maturity as the case may be. The revival shall be effected on payment of all the arrears of premium(s) together with interest (compounding half-yearly) at such rate as may be fixed by the Corporation from time to time and on satisfaction of Continued Insurability of the Life Assured based on information, documents and reports that are already available and any additional information in this regard if and as may be required following the Underwriting Policy of the Corporation at the time of revival, being furnished by the Policyholder/Life Assured. The Corporation reserves the right to accept at original terms, accept with modified terms or decline the revival of a discontinued policy. The revival of a discontinued policy shall take effect only after the same is approved, accepted and revival receipt is issued by the Corporation.

6. Paid-up Policy:

If less than one year's premiums have been paid and any subsequent premium is not duly paid, all the benefits under the policy shall cease after the expiry of the grace period from the date of the first unpaid premium and nothing shall be payable. If at least one full policy year's premiums have been paid and any subsequent premium is not duly paid, this policy shall not be wholly void, but shall continue as a paid-up policy. The Sum Assured on Death under a paid-up policy shall be reduced to such a sum, called 'Death Paid-up Sum Assured' and shall be equal to Sum Assured on Death multiplied by the ratio of the total period for which premiums have already been paid bears to the maximum period for which premiums were originally payable. The Sum Assured on Maturity under a paid-up policy shall be reduced to such a sum called 'Maturity Paid-up Sum Assured' and shall be equal to the Sum Assured on Maturity multiplied by the ratio of the total period for which premiums have already been paid bears to the maximum period for which premiums were originally payable. In any case, the Death Paid-up Sum Assured or Maturity Paid-up

Sum Assured mentioned above shall not be less than the total premiums paid under the policy.

7. Surrender:

The policy can be surrendered provided at least one full policy year's premiums have been paid. On surrender of the policy, the Corporation shall pay the Surrender Value equal to higher of Guaranteed Surrender Value or Special Surrender Value. The Special Surrender Value is reviewable and shall be determined by the Corporation from time to time subject to prior approval of IRDAI. The Guaranteed Surrender Value (GSV) payable during the policy term shall be equal to the total premiums paid (excluding taxes & extra premium, if any) multiplied by the Guaranteed Surrender Value factors applicable to total premiums paid. These Guaranteed Surrender Value factors expressed as percentages will depend on the policy term and policy year in which the policy is surrendered

3.7.2 New Jeevan Mangal

The New Jeevan Mangal plan from LIC is a protection-focused, individual, micro-insurance, non-linked plan. The built-in Accident Benefit feature of this plan offers double risk coverage in the event of an accident-related death.

1. Benefits:

Under this plan, there are maturity benefits as well as death benefits

- a. *Maturity Benefit:* If the Life Assured survives to the maturity date, they will receive "Sum Assured on Maturity," which is equal to the total amount of premiums paid throughout the contract's term, as long as they have paid all outstanding premiums. The premium mentioned above does not include any applicable taxes or additional premiums.
- b. *Death Benefit:* The following payment schedule will be made if the policy is in effect: - Death from a cause other than accident:

The highest of seven times the annualized premium or 105 percent of the total premiums paid up to the date of death or Sum Assured is what is meant by "Sum Assured on Death" for regular premium policies.

2. Eligibility Conditions and Other Restrictions:

a) Minimum Sum Assured	50,000/-
b) Maximum Sum Assured per life*	2,00,000/- (Sum Assured shall be in multiples of ` 1000/-)
c) Minimum age at entry	18 years (completed)
d) Maximum age at entry	55 years (nearer birthday)
e) Minimum Premium Paying Term	5 years
f) Maximum Premium Paying Term	13 years
g) Policy Term	10 to 15 years for regular premium. 5 to 10 years for a single premium.
h) Maximum age at maturity	65 years (nearer birthday)
i) Minimum Instalment Premium	Rs. 500

*The total amount guaranteed under all individual policies issued under this plan and under all policies issued under previous iterations of this plan will not exceed Rs. 2,00,000/-.

3. Payment of Premiums:

Throughout the duration of the policy, premiums may be paid on a yearly, half-yearly, quarterly, or monthly basis. An alternative is to pay a single premium.

4. Grace Period (applicable to regular premium policies only):

From the date of the first unpaid premium, a grace period of 30 days will be granted for monthly premium payments and 60 days for other modes of premium payment. The policy lapses if the premium is not paid before the grace period expires.

The policy will be deemed to be in effect during this time, providing uninterrupted risk coverage by the policy's terms. The policy lapses if the premium is not paid by the end of the grace period.

5. Revival

The policy will expire if premiums are not paid within the grace period. If an insurance policy lapses, it may be renewed within five years of the first unpaid premium date but not before the maturity date, whichever comes first.

The revival will take place upon payment of all outstanding premium arrears, along with interest compounded half yearly at a rate that the Corporation may determine from time to time, and upon the satisfaction of the Life Assured's Continued Insurability based on information already available, documents, and reports, as well as any additional information that may be needed in this regard in accordance with the Corporation's Underwriting Policy at the time of revival and provided by the Policyholder/Life Assured.

The Corporation retains the right to approve a discontinued policy at its original terms, approve it with modifications, or reject it. A discontinued policy may only be revived after it has been approved, accepted, and issued a revival receipt by the Corporation.

6. Surrender Value

The policyholder may surrender the policy at any point during the policy term under a single premium payment. As long as premiums are paid for a full year, the policyholder may surrender the policy under regular premium payment at any time. The Corporation will pay the surrender value upon policy surrender, which is the greater of the guaranteed surrender value and the special surrender value. The Corporation will periodically review and determine the Special Surrender Value, subject to IRDAI's prior approval.

The following is the Guaranteed Surrender Value offered by this plan:

Single-premium insurance: 75 percentage of the single premium within three policy years of the policy's commencement date; 90 percentage of the single premium after that. The premium mentioned does not include any applicable taxes or additional premiums.

Standard premium plans: The percentage of all premiums paid aside from taxes and additional premiums, if any that constitute the guaranteed surrender value. The policy year and term in which the policy is surrendered will determine this percentage.

7. Policy Loan:

Under this plan, there will be no loan facility available.

3.7.3 LIC's Micro Bachat

Micro Bachat is a regular premium, non-linked, participating individual life insurance plan from LIC that combines savings and protection. This plan offers a lump sum payout to the surviving policyholder at maturity, as well as financial support for the family in the event of the policyholder's untimely death during the policy term. Through its Loan facility, this plan also addresses liquidity requirements.

1. Benefits:

a. Death Benefit: Assuming all required premiums have been paid, this benefit is paid upon the death of the life insured during the policy's term. The "Sum Assured on Death" will be paid upon death within the first five years of the contract. After five policy years have passed but before the maturity date, the "Sum Assured on Death" and any applicable loyalty addition will be paid out. Where the terms "Basic Sum Assured" or "Sum Assured on Death" are used to determine the higher of the two;

- Seven times the annualized premium.
- When it comes to premiums paid as of the death date, the death benefit cannot be less than 105 percentages. Taxes, additional premiums, and rider premiums, if any, are not included in the quoted premiums.

b. Maturity Benefit: "Sum Assured on Maturity" and any applicable loyalty addition will be paid out if the life assured survives to the end of the policy term and

all outstanding premiums have been paid. Where Basic Sum Assured equals "Sum Assured on Maturity".

c. Optional Benefit:

Under this plan, the next two optional riders are available for an additional premium. The policyholder, however, is free to choose between the two riders.

a) LIC's Accidental Death & Disability Benefit Rider (UIN: 512B209V02):

The rider can be selected at any time during the Base Plan's policy term, as long as the remaining policy term of the Base Plan is at least five years. If this rider is selected, the Accident Benefit Sum Assured will be paid as a lump sum along with the death benefit under the base plan in the event of accidental death. In the event of accidental disability resulting from an accident (within 180 days of the date of the accident), an amount equal to the Accident Benefit Sum Assured will be paid in monthly installments spread over ten years, as well as future premiums for the Accident Benefit Sum Assured as well as premiums for the portion of Basic Sum Assured that is equal to the Accident Benefit Sum Assured under the policy.

b) LIC's Accident Benefit Rider (UIN: 512B203V03) :

The rider can be added at any time during the Base Plan's policy term, as long as the remaining policy term is at least 5 years. This rider's benefit coverage will be available throughout the policy term. If this rider is selected, the Accident Benefit Rider Sum Assured will be paid as a lump sum along with the death benefit under the base plan in the event of accidental death. The LIC Accident Benefit Rider or Accidental Death & Disability Benefit Rider premium cannot be more than 100% of the base plan premium. The Rider Sum Assured is limited to the Basic Sum Assured.

4. Eligibility Conditions and Other Restrictions:

a) Minimum Sum Assured	Rs.50,000/-
b) Maximum Basic Sum Assured per life*	RS. 2,00,000/- The Basic Sum Assured shall be available in multiples of ` Rs.5,000/-.
c) Minimum age at entry	18 years (completed)
d) Maximum age at entry	55 years (nearer birthday)
e) Premium Paying Term	Same as Policy Term
g) Policy Term	10 to 15 years
h) Maximum age at maturity	70 years (nearer birthday)

* For each individual life, the total Basic Sum Assured under all policies issued under this plan may not surpass 2 lakh.

Date of risk commencement: As per this plan, the risk will start as soon as it is accepted.

5. Payment of Premiums:

Throughout the policy's term, premiums may be paid regularly, at quarterly, half-yearly, monthly, or annual intervals.

6. Grace Period:

A grace period of thirty days will be granted under this plan for the payment of all premium modes starting on the date of the first unpaid premium. During this time, the policy will be regarded as being in effect, with the risk covered continuously following the conditions of the strategy. If the premium is not paid before the days of grace, the Agreement expires. The grace period mentioned above will also apply to rider premiums, which are payable in addition to the base policy's premium.

7. Revival:

The policy will expire if the premiums are not paid by the end of the grace period. A policy that has lapsed may be revived within five years of the first unpaid premium date and, if applicable, before the date of maturity. The revival will take place upon payment of all outstanding premium arrears, interest (compounding half-yearly), and

any other amounts as determined from time to time by the Corporation. It will also be carried out upon the assurance of the life insured's continued insurance ability based on information, records, and reports that are currently on file and any further information in this regard that the Policyholder or Life Assured may be required to provide at the time of revival in compliance with the Corporation's Underwriting Policy.

The Corporation retains the right to approve a discontinued policy at its original terms, approve it at amended terms, or reject it. The resuscitation of a discontinued policy will only occur following approval by the Corporation and specific written notification to the Policyholder. The renewal of the base policy will take precedence over the renewal of any riders, if any. The Revival Period and the Auto Cover Period will run simultaneously; that is, the Auto Cover Period will not prolong the Revival Period.

As long as premiums are paid for a minimum of one full policy year, the policy can be surrendered at any point. When the policy is surrendered and paid up, the Corporation will pay the Surrender Value, whichever is greater than the Guaranteed Surrender Value or the Special

8. Surrender Value.

If premiums have been paid for at least a full policy year, the policy can be resigned at any time. The Corporation will pay the Surrender Value upon surrender of the in-force/paid-up policy, whichever is greater the Guaranteed Surrender Value or the Special Surrender Value. The Corporation may review and decide on the Special Surrender Value at any time, with IRDAI's prior approval required. The entire premiums paid multiplied by the Guaranteed Surrender Value factor that applies to the total premiums paid under the policy will be the Guaranteed Surrender Value payable during the policy term. The policy term and policy year in which the policy is surrendered will determine these Guaranteed Surrender Value factors, which are expressed as percentages.

3.8 Insurance and Risk Management

Risk is the possibility that a decided action or activity, such as the choice of an effective, will result in a loss or some undesired result. The concept indicates the existence of a decision that affects the result. Risks can also refer to potential losses itself. Every human pursuit carries some risk, but some are significantly riskier than others. The main goal of social security, according to the idea of risk, is to give people the tools they need to deal with a set of common risks in their lives. Additionally, social security programs shield society against risks that are generally shared by everyone, such as poverty, epidemics, marginalization, crime, etc. In contrast to social assistance and income redistribution, the concept of social security as insurance offers an alternative approach to social policy. The idea of the global village, or civil society, is highlighted by this approach, which goes beyond the concepts of global markets and the global network of states to include specific beliefs about the core elements of the welfare society and its internal logic. Social security benefits could be strictly interpreted as precautions meant to protect against certain risks. Insurance is implied by the concept of security in its truest sense, not only social aid or economic redistribution.

3.9 Concept of Risk

Risk cannot be defined in a single way. Risk is viewed differently by statisticians, actuaries, risk theorists, behavioural scientists, and economists. Nonetheless, risk has historically been described in terms of uncertainty. This idea defines risk as not knowing with certainty whether a loss will occur. There are two types of risk: objective and subjective. Subjective risk is defined as uncertainty based on an individual's mental state or condition, whereas objective risk is defined as the relative variation of actual loss from expected loss.

The terms perils and hazard should not be confused with the concept of risk mentioned earlier. Peril is defined as the cause of loss. A hazard is a condition that creates or increases the chances of loss. There are major four kinds of hazards:

- *Physical hazard*: a physical condition that increases the chance of loss

- *Moral hazard*: arising from human nature or mental attitude and from general economic and social conditions it is associated with intentional actions, dishonesty or character defects in an individual that increase the frequency or severity of loss.
- *Morale hazard*: mental attitude of a careless or accident-prone person or indifference to a loss because of the existence of insurance.
- *Legal hazard*: it refers to characteristics of the legal system/ regulatory environment that increase the frequency or severity of loss.

3.10 Pure risk

Those risks where there might be a chance of loss or no loss, but never a gain. Pure risk can be explained as a physical loss sustained by the insured on account of a peril insured against. If an insurance policy is bought for the purpose, then if the loss does not occur, there is no gain to the insured. Contrarily, if the loss occurs, the insurance company will indemnify the loss. The major type of pure risk that is associated with great economic and financial insecurity is personal risk.

3.10.1 Personal Risks

Risks that directly impact an individual are known as personal risks. They entail the potential for total income loss or reduction, which ultimately leads to the selling of financial assets. There are four main risks associated with being human.

1. ***Risk of Premature Death***: When a household head passes away before their financial obligations are fulfilled, it is referred to as premature death. The family members who are still alive might not have enough money to replace lost income if they don't have enough assets to cover their expenses or don't get enough extra money from other sources. Financial difficulties resulting from an early death may arise only if the deceased had unmet financial obligations or dependents to support. Consequently, in terms of economics, a five-year-old's death is not considered premature.

2. **Risk of Poor Health:** It tells about the possibility of a person's being ill or disabled in order to obtain the necessities of life. The person will be in unstable financial circumstances if he does not have sufficient health insurance, personal savings, or other sources of income to cover these losses. If there is a severe disability, there is a significant loss of insecurity. If a person is disabled for an extended period of time, their condition will become worse and someone will need to care for them. Financial hardship can result from losing earned income.
3. **Risk of Insufficient Income during Retirement:** This refers to the risk that an individual will not have enough money when they reach retirement age or when they get older and might not be able to support themselves. A person loses their earned income upon retirement. Retired individuals may face financial instability if they do not possess adequate financial assets to draw from or if they do not have access to alternative retirement income streams like social security or private pensions.
4. **Risk of Unemployment:** Unemployment risk is yet another significant danger to financial security. Seasonal factors, business cycle downturns, technological advancements, structural changes in the economy, etc. can all lead to unemployment. In an effort to lower labour costs, employers are increasingly using temporary or part-time employees. Workers lose their employee benefits because they are temporary employees. Financial insecurity will be experienced by the workers (unemployed, part-time, and temporary) unless they have sufficient replacement income or past savings to draw from. Savings from the past and unemployment benefits may run out over time.

3.11 Personal Risk Management

Personal risk management refers to the determination and classification of pure risks faced by an individual or family and selection of the most appropriate technique for treating such risks. The principles of risk management are also applicable to personal risk management programme. It is usually looking around one's life, recognizing risk and planning what to do about it. Personal risk management also considers another method for handling this in addition to insurance

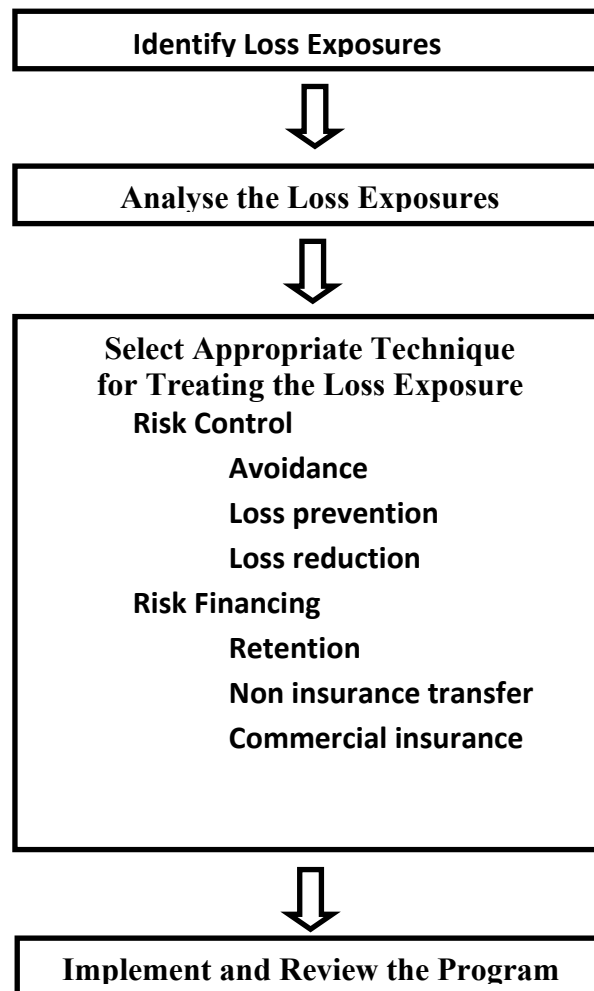
3.11.1 Steps in Personal Risk Management

Personal risk management program involves fourth step

1. Identify loss exposures
2. Analyse the loss exposures (measure impact)
3. Select appropriate technique for treating the loss of exposure
4. Implement and review the program periodically

Figure 3.7

Steps in Personal Risk Management



Source: Jatinder Loomba (2014)

1. Identify Loss Exposure

The first step is to identify all lost exposures that can cause serious financial problems serious financial losses can result from the following

- Personal loss exposures
- Loss of earned income to the family because of the premature death of the family head
- Insufficient income and financial assets during retirement
- Catastrophic medical bills and a loss of ending during an extended period of disability
- Loss of earned income from unemployment
- Identity theft

2. Analyse the Loss Exposures

The second step is to analyse the loss exposures. The frequency and severity of potential losses should be estimated so that the most appropriate technique can be used to deal with the exposure. After predicting frequency and severity consider the impact of maximum possible loss and maximum probable loss

3. Select the Appropriate Technique

The third step is to select the most appropriate technique for treating each loss exposure; the major methods are avoidance, risk control, retention, non-insurance transfer and insurance.

a. Risk Control

This means using those techniques that reduce the frequency and/or severity of losses, and the control is a conscious act or decision that reduces the frequency and/or severity of losses or makes the losses more predictable. Risk control is a broad term to describe techniques for reducing the frequency and/or severity of losses. Many risk managers use techniques in different combinations for treating each loss exposure. Major risk control techniques include the following

b. Avoidance

It is a risk control technique that involves abandoning or never undertaking a particular activity so that the possibility of the loss from that activity is eliminated. It says voluntarily desisting to no longer participate in the activity that causes or creates the loss which makes the probability of loss approximately zero. The sole objective of our dance is not just to reduce the lost frequencies but to eliminate them. However, avoidance can either be proactive or reactive.

1. Proactive avoidance seeks to avoid a loss exposure before it exists.
2. Reactive order to eliminate the loss exposure that already exists.

Risk avoidance is common, particularly among those with a strong aversion to risk. However, avoidance is not always feasible and may not be desirable when an activity is possible. Risk managers must always look at the relative cost and benefit associated with activities that give rise to risk when a risk is awarded the potential benefits as well as course and given up therefore it is not possible to award these core activities

c. Retention

To fully or partially retain the risk, when a person actively chooses to maintain a risk despite being fully aware of it and its effects, the risk is said to be actively retained. The contrary is true; it is referred to be passive if the exposed person is careless or unaware of the risk.

After deciding on risk measures and risk factors, we may concentrate on choosing the best risk management strategy. There are generally four attitudes towards risk management:

1. Avoidance,
2. Minimization – either probability of occurrence or severity of loss,
3. Risk transfer,
4. Retention.

Various risk management strategies and some risk factors are provided in Table 1. These methods are broken down into the four groups listed above. The risk

management approaches listed in the table are just a few of the many different steps that can be taken to control a certain risk. Which approach to use depends on several factors, including: age, risk tolerance, wealth etc. However, a household should generally adhere to the "rule of thumb" shown as a risk matrix in Table 3.5

Table 3.5

Various Risk Management Strategies and Risk Factors

		Risk Management Techniques			
		Avoidance	Minimization	Risk Transfer	Retention
Risk Factors	Length of Life -Premature Death -Longevity	-no possibilities -no possibilities	-Healthy Lifestyle; Cautiousness -Unhealthy lifestyle; lack of Cautiousness	-Life insurance -endowment	-self insurance -self insurance
	Market Risk	Lack of investment	Diversification	Hedging	No action
	Interest rate risk	Lack of debt	Fixed rate debt; debt selection	Swaps (theoretically)	No action
	Inflation risk	No possibilities	Savings reinvestment	Investing in inflation indexed instruments	No action
	Health risk	No possibilities	Healthy lifestyle, prevention	Health insurance	-self insurance
	Financial goals risk	Not to have financial goals	More feasible financial goals; dedicated investments	Dedicated investments	Increased savings
	Durable goods risk	Not to possess any high value durable goods	Purchase of less expensive goods; repairs; additional features	Property insurance; car insurance	-self insurance

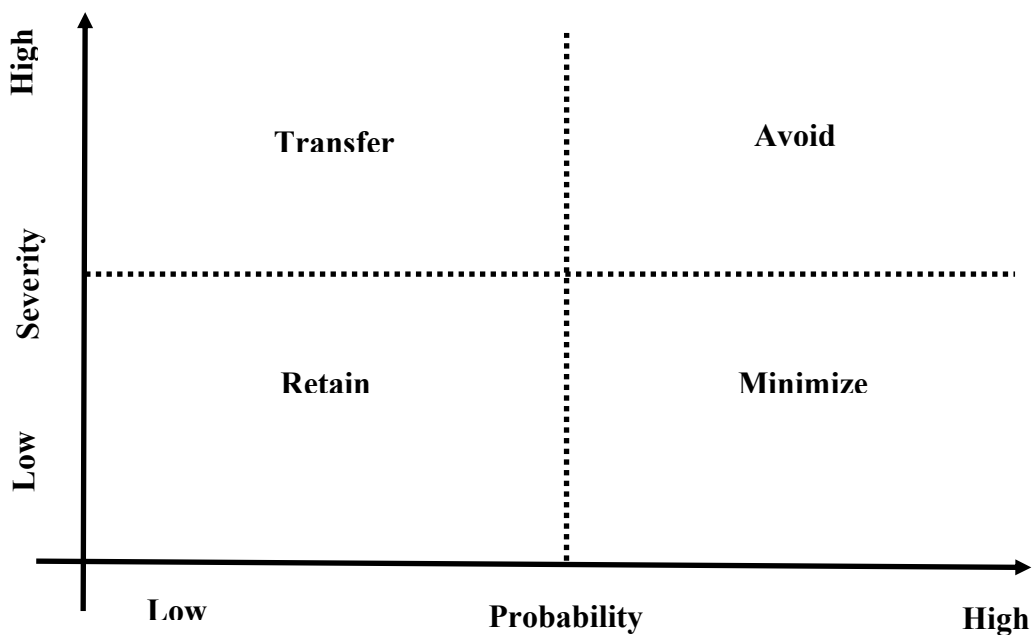
The greater the severity of the loss resulting from the occurrence of a certain risk factor, the greater the need for risk management. The requirement to control risk increases as the likelihood rises. The limits and usage guidelines for the methods discussed above exist. Simply avoiding the risk is the greatest way to manage it. The vast majority of risk factors that affect a household's financial condition, meanwhile, are unavoidable. Examples of risks that cannot be controlled in this way are income

risk and life expectancy risk. Additionally, the risk should be shifted in cases of high severance or loss. But there are some restrictions that may apply here. Some hazards are either impossible to transfer or would be extremely expensive to do so.

Additionally, the insurance coverage may be rejected by the insurer or restricted to a certain set of circumstances, resulting in the transfer of only a portion of the risk. The third method of risk management is mitigation, which can be used to reduce either the likelihood of an incident occurring or its impact. Individual actions typically handle risk in both positive and negative ways. Retention is the last strategy for dealing with the risk. This method should be applied when there is a low likelihood of an event occurring and a negligible likelihood that it will be severe.

Figure 3.8

Risk Matrix and Risk Management Techniques



Source: Baranoff, Brockett, Kahane (2010)

3.12 Perceived Risk Concept

The feeling of uncertainty that a consumer gets when acquiring items is referred to as perceived risk. A consumer's perceived risk is a subjective idea that they have

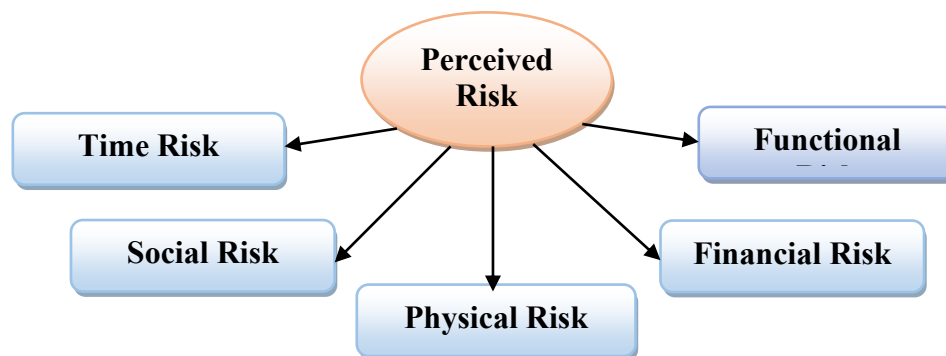
when purchasing a product or service. Perceived risk is typically considered when the product or service in question is costlier or significant enough to affect the buyer's life. Every product or service may have some risk. However, perceived risk is something that consumers believe is a risk if they purchase a product, which implies that it is the seller's or business owner's responsibility to ensure and make the consumers confident in their product. Perceived risk, on the other hand, remains a behavioural feature of consumers, and business managers should address it at frequent intervals. Perceived risk is a psychological behaviour that consumers exhibit before purchasing a product or service. Perceived risk is very subjective and varies from person to person depending on their life objectives and circumstances.

3.12.1 Perceived Risk Classification

Perceived risks are classified into five categories. These are perceived time-related, social, physical, financial, and functional risks. Each perceived risk element impacts individuals differently depending on their risk tolerance, hunger, and so on.

Figure 3.9

Types of Perceived Risk



The five major types of perceived risks are described in detail below.

3.12.1.1 Time-based Perceived Risk

Time-based perceived risk results from a concern about usability prior to a specific date. Concerns about time spent when purchasing new products/services may also be

referred to as time-based perceived risk. In this case, the consumer is anxious about how much time and energy the product/service will require.

3.12.1.2 Social Perceived Risk

Social perceived risk is a risk assessment based on the customer's status and social positioning. Consumer behaviour is heavily influenced by social risk. The customer may have preconceived beliefs about what functions well and how their social standing in society is portrayed. The perceived social risk is that if a person chooses to buy anything outside the social norm, such as a new hot product, friends and family would frown upon the purchase. Because of that purchase, the person's social standing could be negatively impacted.

3.12.1.3 Perceived Physical Risk.

The risk that a product is unsafe and could potentially harm or injure the user or another person is referred to as perceived physical risk. Perceived physical risk evaluates the physical features of the product in question. Customers may be hesitant to purchase things if the safety or physical qualities are not up to quality. The provider of goods readily solves physical perceived threats since they can reduce their customer's anxieties by providing details about the item's safety.

3.12.1.4 Financial Risk

The customer's notion that they are wasting money by acquiring goods or services is referred to as perceived financial risk. Financial perceived risk also arises when consumers examine their return on investment and their sense of financial risk. Common types of perceived financial risk include determining if the things they intend to purchase are worth the price and whether the advantages of the product outweigh the investment they make. When a consumer believes that an impulsive purchase would deprive him of crucial funds, the purchase is deemed financially risky. The most crucial factor is perceived financial risk, because the current market pushes consumers to spend more and preserve less. This is because capitalism is meant to stimulate more money flow.

3.12.1.5 Functional Risk

The risk associated with the product's functional value is referred to as functional perceived risk. When purchasing goods or services, novice customers frequently have little experience of how well they perform, especially if the product is new. The customer may consider whether the benefits offset the product's expense. It can also be problematic if the functions are too complex for the customer. As a result, the customer should be made aware of it in a method that is easy to understand and described in a relatable manner.

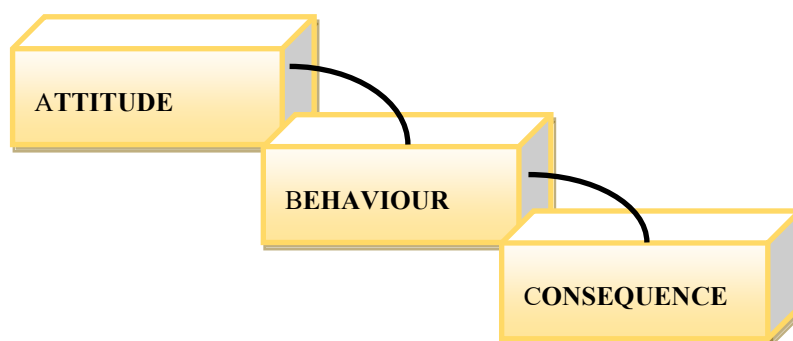
3.13 Attitude towards Risk

Combining the definitions of "risk" and "attitude," which are each defined as "a chosen state of mind, mental view, or disposition about a fact or state," yields a working definition of "risk attitude" as "a chosen state of mind about those uncertainties that could have a positive or negative effect on objectives," or more simply "a chosen response to perception of significant uncertainty."

A variety of attitudes can be taken towards the same circumstance, resulting in different behaviour and consequences, both planned and unintended. Indeed, because behaviour is the only accurate diagnostic sign of inner attitude, people wanting to understand and manage the consequences of human dynamics in business have given close attention to behavioural psychology and management. However, rather than focusing on the presenting behavioural symptoms, another method that may be more successful is to aim to understand and change the underlying attitudes.

Figure 3.10

Attitude Outcome Relationships



Although attitude is manifested through behaviour, other factors of behaviour might displace the selected or favoured attitude. The degree to which this occurs is determined by the perception of the situation towards which the attitude is directed. This is best appreciated by contrasting the two extremes, where the situation is thought to be good or neutral, and when it is perceived to be negative.

3.14 Concept of Perceived Value

The way a customer feels about a product or service is known as customer perceived value. The success of a product or service is attributed to the perceived value that customers place on it. According to the theory of customer perceived value, every consumer assesses their purchases to see if they satisfy their needs or wants before comparing the assessment to the price they are paying. According to several scholars (Zeithaml, 1988; Monroe, 1990; Lovelock, 1991; Gale, 1994; Bigne et al., 2000; Teas and Agarwal, 2000), perceived value can be broadly defined as the customer's assessment or judgment of the comparison between the benefits or utility obtained from a product, service, or relationship and the perceived sacrifices or costs. Zeithaml (1988) defined value as the outcome of an individual's personal evaluation of the advantages and disadvantages they have experienced. There are two main approaches to the conceptualization and dimensionality of perceived value can be distinguished when looking into the idea of perceived value.

According to the first approach, perceived value is defined as a construct that is composed of two parts: the benefits that the customer receives (economic, social, and relational) and the sacrifices that they make (cost, effort, time, risk, and convenience) (Dodds et al., 1991; Rapp and Collins, 1991, 1996; Grewal et al., 1998; Cronin et al., 2000; Bigne' et al., 2000). According to Zeithaml (1988), the perceived quality of the service and a number of psychological advantages are included in the benefits component, or what the customer gains from the purchase. The sacrifices component, or what the customer must give up, is formed by the monetary and non-monetary prices, i.e., money and other resources like time, energy, effort, etc. The quality of service is a fundamental component in the perception of perceived value.

The notion that perceived value is a multidimensional construct is the foundation of the second approach (Woodruff, 1997; De Ruyter et al., 1997 and 1998; Sweeney and Soutar, 2001; Sa'nchez et al., 2006). In addition to the functional dimension, this value perspective includes an affective dimension that examines social and emotional facets of the individual and delves deeper into topics related to the purchasing behaviour of the consumer. The rational and economic assessments of individuals define the functional value. This dimension includes the quality of the product and the quality of the service. There are two categories for the affective dimension: the emotional (which deals with feelings or internal emotions) and the social (which deals with the social impact of the purchase).

3.14.1 Types of Perceived Utility Value

Product providers aim to shape consumers' perceptions of value by framing a product's features in terms of utility, or the added benefits and values that users anticipate from using or utilizing it. Even between nearly identical or similar products, there can be significant differences in how useful people believe various goods and services to be. Through product marketing campaigns, businesses seek to develop five different kinds of utilities:

1. The physical design of a product or service has aesthetic appeal, which is known as form utility.
2. A service that saves the client money, time, or effort is said to have task utility.
3. The "time utility" describes how simple it is to use a service or product.
4. Convenience of location is referred to as "place utility"
5. The ease of purchasing the product is referred to as "possession utility".

3.14.2 Customer Value Perceptions and Approaches

Customer perceived value is the notion that the success of a product or service is largely based on whether customers believe it can satisfy their wants and needs. According to Lemon et al. (2001), Customer value, is the source of all values.

Customer value is determined by customers' perceptions, not by suppliers' assumptions or intentions (Woodruff & Gardial, 1996). Three major customer value approaches: the benefit/sacrifice approach, the means-end approach and the experiential approach, each with specificities and limitations.

The benefit/sacrifice approach, the means-end approach and the experiential approach are discussed below

3.14.2.1 Benefits and Sacrifices Approach

Benefits and costs are defined using this approach based on how consumers view the activities of acquisition, consumption, and maintenance, as well as their expectations regarding the satisfaction of personal values prior to purchase (Huber et al., 2001). A trade-off between favourable consequences (benefits) or desired outcomes and unfavourable consequences (sacrifices) or costs results in the total benefits, which are comprised of utility value and psychic value (Groth, 1994; Khalifa, 2004). (Woodruff & Gardial, 1996).

3.14.2.2 Means-End Approach

According to Woodruff (1997), value is defined as the perceived preference of the customer for a product, as well as their assessment of the attributes, performances, and outcomes that result from using it and either help or hinder them in reaching their objectives.

3.14.2.3 Experiential Approach

A relativistic and preference experience that arises from customer activities is referred to as customer value (Holbrook, 1999; Steenkamp & Geyskens, 2006). Utilitarian and hedonistic experiences can be viewed at a higher level of abstraction than the benefit-sacrifice approach, which focuses on more tangible ideas like saving time or effort. This approach goes beyond customer perceptions and examines what customers do and how they feel (Klanac, 2013).

3.14.3 Models of Customer Value

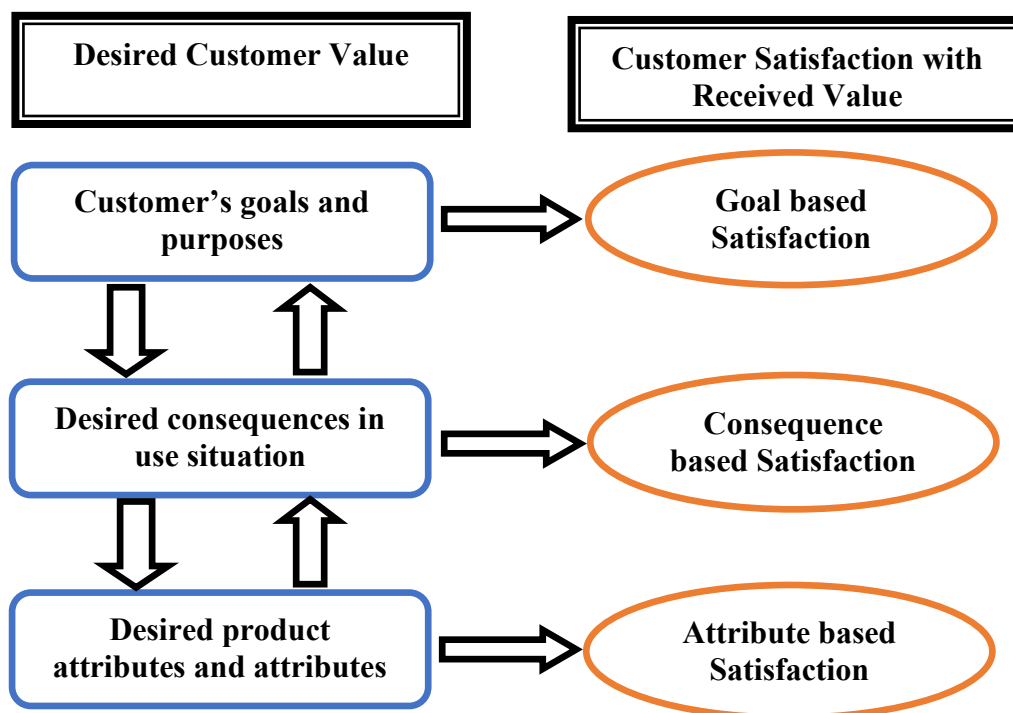
Different models of customer value are discussed below

3.14.3.1 Value Hierarchy Model

In the value hierarchy model, desired attributes, desired consequences, and desired end-states, goals, and purposes are conceptualized as value. The lower levels serve as the means through which the higher levels are accomplished. "Customer's perceived preference for an evaluation of those products attributes, attribute performances, and consequences arising from use that facilitate (or block) achieving the customer's goals and purpose in use situations" is how Woodruff (1997) defined perceived value in this model.

Figure 3.11

Value Hierarchy Model



Source: Woodruff (1997)

3.14.3.2 Utilitarian and Hedonic Model

According to Holbrook and Hirschman (1982), value should be considered from both experiential and utilitarian perspectives. In the former case, the product's value is determined by its effects or functions, while in the latter case, it is valued for its symbolic and hedonistic qualities. The complexity of customer-perceived value is still, however, too broadly represented by this model. The dimensions of value that may come from different sources of value could become confused as a result. For example, the emotional value of a product can originate from personal sources, such as connections between personal characteristics and consumption experiences, or from product-related sources. Since both of these dimensions of value are part of hedonic value, it is challenging to distinguish them when looking at them from this angle.

3.14.3.3 Consumption Value Theory

Sheth et al. (1991) developed the broader theoretical framework of perceived value, which is based on the customer's choice to buy or not buy, to choose between two products, or to choose one particular brand over another. This theory of consumption value is underpinned by utilitarian and hedonic perspectives. The authors proposed five dimensions of value: functional value, which pertains to the product's utilitarian or functional purpose; social value, which is associated with the product's image acquired from society; emotional value, which is associated with the emotion evoked by using the product; and epistemic value, which is associated with curiosity, the desire for knowledge, or the pursuit of novelty; and conditional value, which is determined as a result of particular events or situations that the customers encounter.

3.14.3.4 Holbrook Typology of Consumer Value

Holbrook (1996) defined perceived value as "an interactive relativistic preference experience." Value, according to him, is a contextually specific, subjective, and comparative concept that encompasses the relationship between the consumer and the product. The customer realized the value during the consumption phase rather

than the purchase phase. He created a framework that generates the value dimension using the following three dichotomies, or essential value dimensions:

- 1) Extrinsic and Intrinsic
- 2) Self-oriented and Other-oriented and
- 3) Active and Reactive.

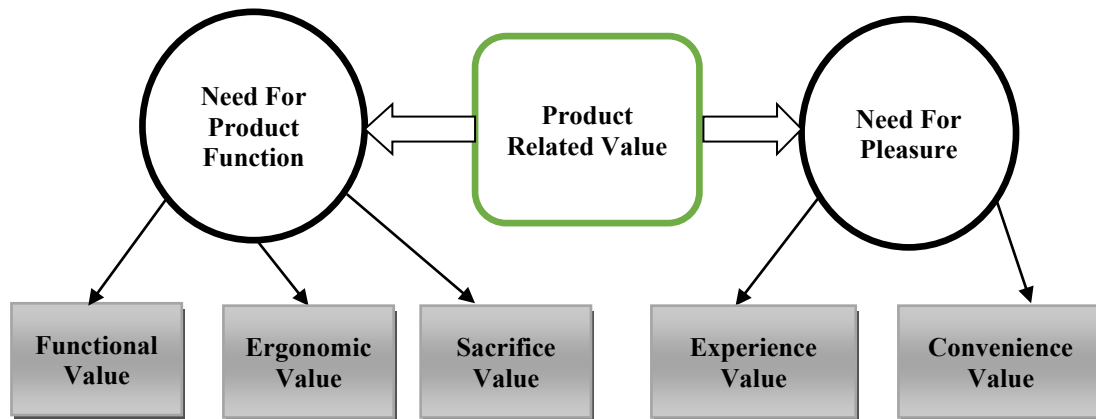
These dichotomizations provide Efficiency value; play value, excellence value, aesthetic value, status value, ethics value, esteem value, and spirituality value are the eight dimensions of consumer value that he proposed. He stated that all dimensions are connected to one another.

3.15 Value Dimension Category

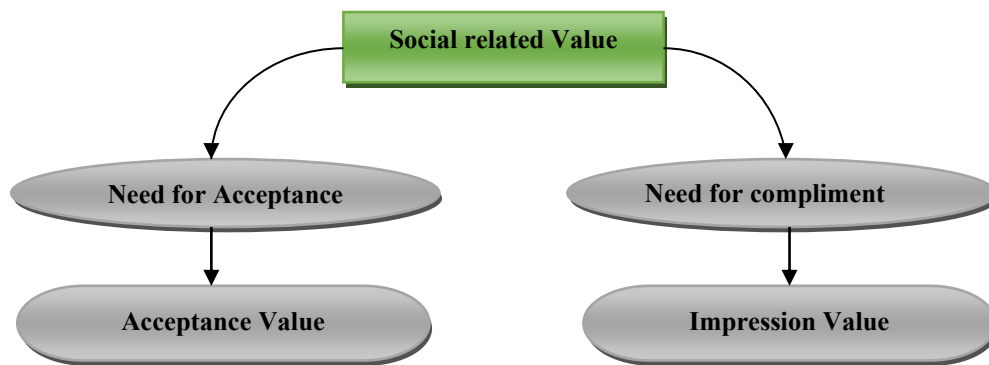
Value dimensions that are most important to a person can vary greatly depending on their needs, preferences, and circumstances. Understanding these dimensions is crucial for businesses and organizations to meet and exceed customer expectations.

3.15.1 Product-Related Value

Customer perception that the product is the source of value is known as "product-related value." As per Peter and Olson (1990), the term "source" refers to the perception that the product offers a combination of advantages over a set of characteristics. Due to the fact that the product is the primary reason for which customers spend their money during purchase activities, they naturally anticipate some advantages. The requirements for the product's functionality and its enjoyment of use are the two primary viewpoints from which these advantages or values can be viewed in relation to customer needs. From the first point of view, the consumer views the product as a tool that can be used to either to solve their problem or make their task easier. From this angle, the product's worth is determined only by how well it fulfils its intended purpose. This need can be thought of as the fundamental requirement that all products satisfy before the consumer can assess the product in any other way. According to Joiner (1994) and Thompson (1998), Kano's model refers to this need as a "must be" need, meaning that if the product function is not provided, it will lead to customer attrition and defection.

Figure 3.11*Product-Related Value Dimension***3.15.2 Social-Related Value**

The customer's viewpoint that society is the source of value is referred to as social-related value in this category. By source, people mean that the clients see society as a place where they can interact with others and gain certain advantages. These advantages can be viewed from the two basic needs perspectives; the need for praise and the need for acceptance. In the first, the effectiveness of the product is assessed from the standpoint of how well it can assist the client in becoming accepted by society. Since the consumer is a member of society, whether on a small or large scale such as in their community or family they must interact with others. In this context, the results of their use of the product carry greater weight than its actual functionality (Cova, 1997). As stated differently, value is realized when the client perceives themselves as a part of a community (Sheth et al., 1991a). Being accepted in society is one of the basic needs, or deficit needs, as defined by Maslow (1943), and when a product fails to meet this need, it creates an uncomfortable feeling that influences behaviour and attitude toward that product.

Figure 3.13*Customer Needs in Social-Related Value*

3.15.3 Personal-Related Value

Personal-related value is defined as the benefits (value) of consumption that are closely tied to the customer's personal values, which are enduring beliefs that direct people's behaviour in day-to-day activities (e.g., Rokeach, 1968; Kahle, 1989). Every individual (customer) has values, which affect how valuable they think a product is (Oliver, 1996; Huber et al., 2001). Customer self-concept and personal-related value are closely associated. As previously mentioned in the context of socially relevant values, a customer must have respect for themselves in order to be treated well, and as such, they will typically look for products that will improve their perception of themselves. To put it another way, the social self-concept, that is, the way a person presents themselves to others or is perceived by others, is the belief that one exists solely for the purpose of obtaining respect from others (Burns, 1979).

3.16 Concept of Perceived Benefits

The perceived benefit concept refers to an individual's subjective assessment or perception of the advantages, gains, or positive outcomes they believe they will derive from a specific action, decision, product, service, or situation. Perceived benefits are highly subjective and vary from person to person. What one individual perceives as a benefit may not be the same for another person, depending on their unique preferences, values, needs, and experiences. Perceived benefits play a

significant role in influencing an individual's decision-making process. When people perceive that the benefits of taking a particular action or making a specific choice outweigh the costs or risks, they are more likely to pursue that course of action. Perceived benefits act as positive reinforcement, motivating individuals to engage in behaviours or adopt products or services. When people believe they will experience positive outcomes or gains, they are more inclined to act in a certain way. Businesses and marketers leverage the concept of perceived benefits to persuade consumers to make purchasing decisions. They emphasize the advantages and positive outcomes associated with their products or services to create a positive perception in consumers' minds. Customer Benefit encompasses all the perceived advantages or benefits that a customer believes they will receive from a product or service. It includes both the functional benefits (e.g., performance, features, quality) and the emotional or psychological benefits (e.g., convenience, enjoyment, prestige) that customers associate with the offering. Total Customer Benefit is a holistic measure of the value that customers expect to derive from their purchase.

3.16.1 Types of Perceived Benefits

Perceived benefits can be categorized into several types, each representing a different aspect of the positive outcomes or advantages that individuals associate with a specific action, decision, product, service, or situation. These types of perceived benefits help people assess the value and desirability of their choices. Here are some common categories of perceived benefits:

3.16.1.1 Functional Benefits:

Perceived functional benefits are critical in many industries and product categories. When consumers perceive that a product or service effectively addresses their practical needs, solves problems, and enhances efficiency, they are more likely to choose it over alternatives. Businesses often focus on communicating these functional benefits to attract and retain customers, as meeting practical needs is a significant driver of consumer satisfaction and loyalty. Perceived functional benefits often revolve around how well a product or service meets specific needs or

requirements. Individuals assess whether the offering aligns with their particular goals or objectives.

- **Utility:** Functional benefits relate to the practical advantages or utility a product or service provides. These benefits address specific needs and problems and are often associated with convenience, efficiency, and effectiveness.
- **Cost Savings:** Products or services that offer cost savings are seen as providing a financial benefit. This could include discounts, promotions, or features that help individuals reduce their expenses.
- **Time Savings:** Time-saving benefits are associated with actions or products that help individuals save time and effort. Time-saving features can be particularly appealing in today's fast-paced world.

3.16.1.2 Emotional Benefits:

Perceived emotional benefits are a category of perceived benefits that individuals assess based on the positive emotions and psychological well-being they expect to experience as a result of a particular product, service, action, or decision. These benefits are closely linked to how a choice or experience affects an individual's emotional state and overall satisfaction. Perceived emotional benefits are a critical factor in consumer decision-making, as they influence choices that are driven by the desire for happiness, contentment, and emotional well-being.

- ❖ **Happiness and Satisfaction:** Emotional benefits are associated with the positive emotions and feelings individuals experience as a result of their choices or interactions. Products and experiences that bring joy, contentment, or satisfaction provide emotional benefits.
- ❖ **Enjoyment and Pleasure:** Many products and services aim to offer enjoyment and pleasure, leading to emotional benefits. Entertainment, leisure activities, and luxury experiences often fall into this category.
- ❖ **Peace of Mind:** Peace of mind is a valuable emotional benefit. Choices that alleviate worries, reduce stress, or provide a sense of security offer peace of

mind. This can be found in various contexts, such as insurance and safety features.

- ❖ **Stress Relief:** The relief from stress, pressure, or burdens can be a significant emotional benefit. Products or services that help individuals manage stress are highly valued.

3.16.1.3 Social Benefits:

Perceived social benefits are a category of perceived benefits that individuals assess based on the positive outcomes and advantages they expect to experience in their social interactions, relationships, and status as a result of a particular product, service, action, or decision. These benefits are closely related to how a choice or experience influences an individual's social connections, relationships, and overall status. Perceived social benefits are important in consumer decision-making, as they often reflect a person's desire for social inclusion, recognition, and improved interpersonal interactions.

- **Social Interaction:** Social benefits relate to how a product or service helps individuals connect with others. Social media platforms, for example, provide a means for social interaction, networking, and maintaining relationships.
- **Status and Prestige:** Products or experiences that enhance an individual's social status, prestige, or image can be seen as providing social benefits. Luxury goods, high-end fashion, and exclusive memberships offer this type of benefit.
- **Belongingness:** People seek a sense of belonging, and products or services that foster a feeling of belongingness to a community or group can be highly valued. Social clubs, online communities, and shared experiences contribute to this benefit.

3.16.1.4 Psychological Benefits:

Perceived psychological benefits are a category of perceived benefits that individuals assess based on the positive impact on their mental well-being, emotions, and overall psychological state resulting from a specific product, service, action, or decision. These benefits are closely related to how a choice or experience

influences an individual's confidence, self-esteem, sense of control, and overall mental health. Perceived psychological benefits are crucial in consumer decision-making, as they reflect a person's desire for improved mental well-being and emotional satisfaction.

- ✓ **Confidence and Self-Esteem:** Choices that boost an individual's confidence and self-esteem are associated with psychological benefits. Achieving personal goals, learning new skills, or overcoming challenges provide this benefit.
- ✓ **Sense of Control:** Psychological benefits can also include a sense of control. Choices that empower individuals to have more control over their lives or circumstances are valued. This can be found in financial planning tools and decision-making processes.
- ✓ **Mental Well-Being:** Products and services that contribute to an individual's mental well-being, reduce anxiety, or promote a positive outlook offer psychological benefits. Wellness apps and mental health services fall into this category.

3.16.1.5 Financial Benefits:

Perceived financial benefits are a category of perceived benefits that individuals assess based on the positive impact on their financial well-being, savings, or economic status resulting from a specific product, service, action, or decision. These benefits are closely related to how a choice or experience influences an individual's financial security, wealth accumulation, cost savings, and overall economic satisfaction. Perceived financial benefits are critical in consumer decision-making, as they reflect a person's desire for improved financial stability and economic success. Here's a more detailed description of perceived financial benefits:

- **Wealth Accumulation:** Investments, savings plans, and financial products that contribute to wealth accumulation and financial security offer financial benefits.
- **Financial Freedom:** Financial freedom or independence is a significant financial benefit, where individuals have the resources and control to pursue their desired lifestyle and goals.

- **Income Growth:** Choices related to career advancement, entrepreneurship, or investment can lead to increased income, which is seen as a financial benefit.
- **Cost Savings:** Perceived financial benefits often revolve around how a choice or experience helps individuals save money. This can include discounts, promotions, efficient products, or strategies that reduce expenses.
- **Debt Reduction:** Reducing debt and financial obligations can be perceived as a financial benefit. Choices that help individuals pay off loans, mortgages, or credit card balances contribute to financial well-being.
- **Retirement Planning:** Financial benefits may also include secure retirement planning. Individuals assess whether financial choices support a comfortable and secure retirement.
- **Investment Gains:** Choices related to investments, such as stocks, real estate, or retirement accounts, can offer financial benefits by generating returns and capital appreciation.
- **Savings and Budget Management:** Perceived financial benefits can encompass effective savings strategies and budget management. Choices that help individuals save for future expenses or maintain a balanced budget are financially beneficial.
- **Tax Efficiency:** Individuals seek choices and financial products that offer tax efficiency, reducing the amount of tax they owe and enhancing their after-tax income.
- **Emergency Fund Creation:** Building an emergency fund for unexpected expenses is a financial benefit. Choices that contribute to emergency fund savings enhance financial security.
- **Financial Risk Mitigation:** Choices that help individuals manage and mitigate financial risks, such as insurance products, provide a sense of financial security and peace of mind.

- **Financial Literacy and Education:** Gaining financial knowledge and education is a financial benefit. Learning about personal finance and investment strategies can lead to better financial decisions.

3.17 Financial Capability

“Financial capabilities are the motivational forces to effectively manage finances and effect change in day-to-day management of finances. In other words, it can be said that financial capability is the ability to understand finance. More specifically, it refers to the set of skills and knowledge that allows an individual to make his/her decisions. More money, more spending choices, and more financial products do not necessarily mean that people have the financial knowledge or are well-equipped to operate their finances to their best advantage. Many factors which make financial education increasingly important. Demographic profiles are changing, prices of all the goods are continuously increasing, financial sectors are growing more and more complex, personal savings are decreasing, rich people are becoming rich, poor poorer and the government has limited resources (Organisation for Economic co-operation and Development- OECD, 2007)”.

Basic money management, financial planning, and investment know-how are the three tiers of financial literacy content that the core financial capabilities are built upon. The capabilities are meant to assist customers in applying the data from all three tiers to their financial decision. Figure 3.14 depicted the three tire financial capability model.

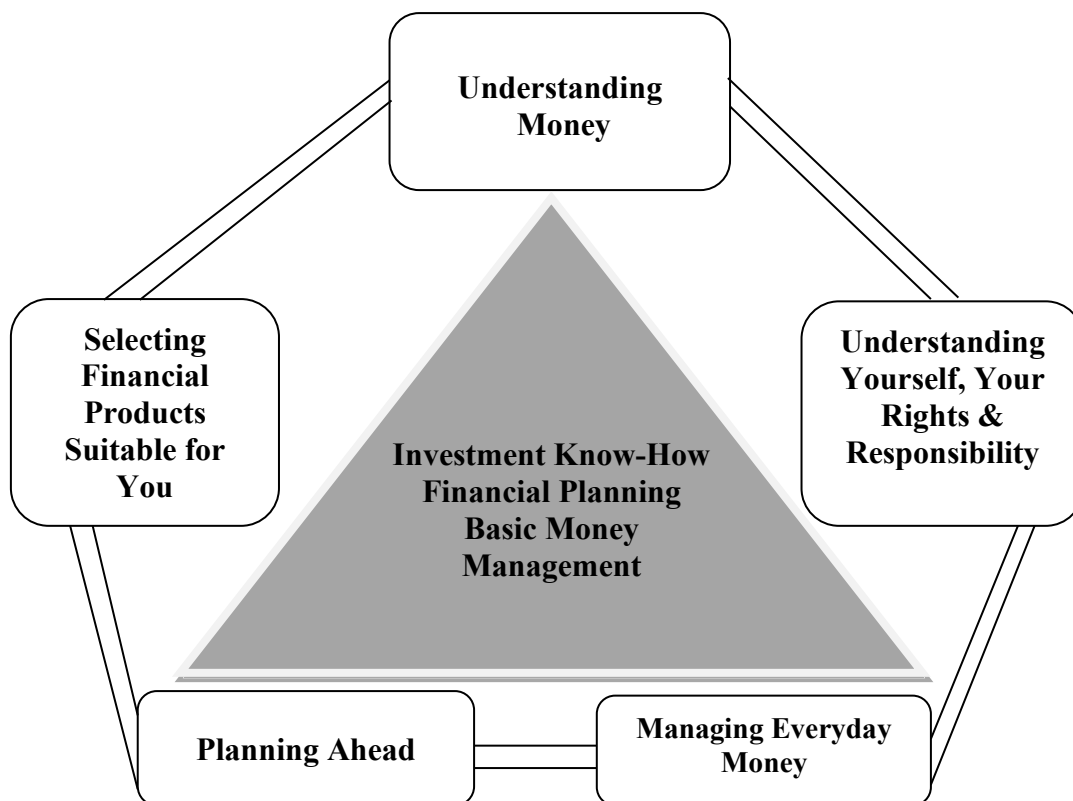
The following are the five essential financial capabilities:

1. Having the numeracy abilities to weigh the advantages and disadvantages of various options is essential to understanding finance. It also discusses the impact that economic conditions can have on consumers.
2. Knowing how one's individual circumstances, such as age, number of children, and income, influence financial decisions is part of understanding oneself, your rights, and responsibilities. Understanding your obligations and rights as a customer is also crucial.

3. Being able to budget, live within one's means, and use credit facilities responsibly (e.g., for major items like buying a home) are all important aspects of managing everyday money.
4. Being able to create a financial plan to assist in the prudent management of one's resources (such as income, debt, savings, and investments) is a key component of planning ahead.
5. Choosing financial products entails being aware of the objectives, characteristics, risks, and expenses of popular financial products (such as loans, credit and debit cards, insurance, and investments), as well as the important variables to take into account and inquiries to make before committing to a product.

Figure 3.14

Financial Capability Cycle



3.17.1 Financial Capability Models

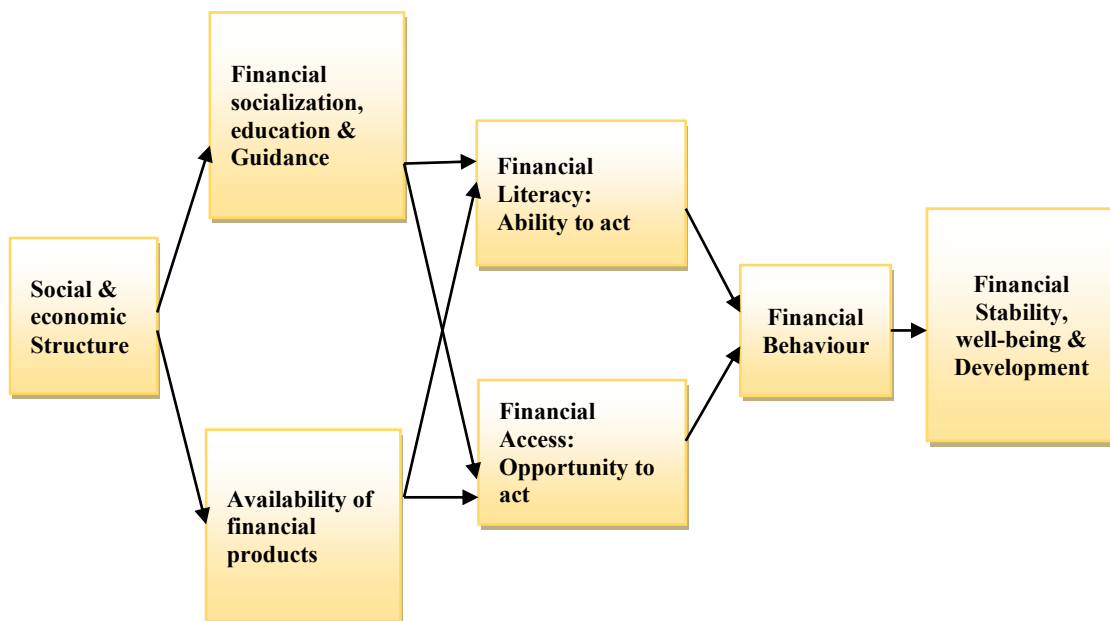
A financial capability model is a framework or conceptual structure designed to assess and enhance an individual's or household's ability to manage their financial resources effectively, make informed financial decisions, and achieve their financial goals. Some of the models developed by different authors will be discussed here

3.17.1.1 M. S. Sherraden Financial Capability Model

The Financial Capability Framework developed by Michael Sherraden in 2013 is a conceptual model that provides a structured approach to understanding and enhancing an individual's financial capabilities. It is designed to help individuals and households improve their financial well-being by acquiring the knowledge, skills, and resources necessary to make informed financial decisions and achieve their financial goals.

Figure 3.15

Financial Capability Model by M. S. Sherraden



Source: M. S. Sherraden (2013)

The Financial Capability Framework developed by Michael Sherraden in 2013 is a conceptual model that provides a structured approach to understanding and

enhancing an individual's financial capabilities. It is designed to help individuals and households improve their financial well-being by acquiring the knowledge, skills, and resources necessary to make informed financial decisions and achieve their financial goals. Sherraden's framework is particularly relevant in the context of financial literacy and financial education initiatives. The framework consists of four key components:

1. **Financial Access:** This component focuses on ensuring that individuals have access to the necessary financial tools and resources. It includes access to basic financial services, such as savings accounts, credit, insurance, and affordable financial products. Without adequate access, individuals may struggle to engage in the financial system.
2. **Financial Knowledge:** Financial knowledge refers to the understanding of financial concepts, products, and principles. It encompasses basic financial literacy, including budgeting, saving, investing, and debt management. Education and information dissemination play a crucial role in enhancing financial knowledge.
3. **Financial Behaviour:** The Financial Capability Framework places a significant emphasis on translating knowledge into action. It recognizes that having financial knowledge alone is insufficient; individuals must also exhibit responsible financial behaviour. This component addresses aspects such as budgeting, saving, investing, managing debt, and making informed financial decisions.
4. **Financial Attitudes and Aspirations:** Attitudes and aspirations encompass an individual's beliefs, motivations, and aspirations related to their financial future. Positive financial attitudes, such as a desire for financial security and a willingness to learn and adapt, can contribute to sound financial behaviour and decision-making.

Sherraden's framework highlights the interdependence of these four components. A lack of access to financial services can hinder the development of financial

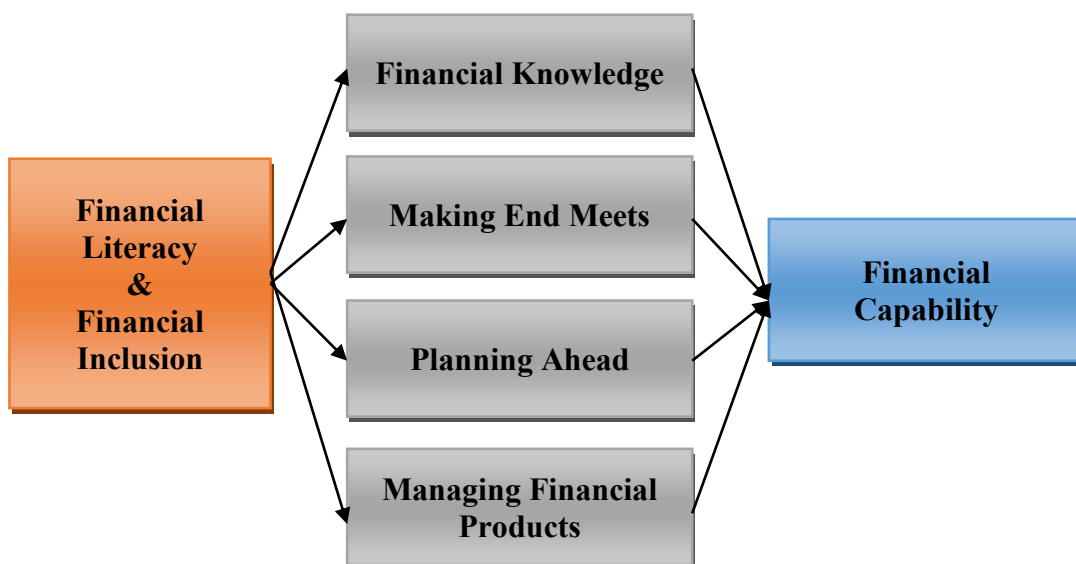
knowledge, which, in turn, can impact financial behaviour. Similarly, negative attitudes and beliefs can impede the adoption of positive financial behaviours.

3.17.1.2 RBI Proposed Model of Financial Capability

The Reserve Bank of India (RBI) has emphasized the importance of financial capability and literacy in India, but it may not have a specific financial capability model. However, the RBI has outlined various guidelines, initiatives, and recommendations to enhance financial capability among Indian citizens. The RBI encourages financial education programs that aim to enhance individuals' understanding of financial concepts, products, and services. This education helps individuals make informed decisions about saving, investing, borrowing, and managing their finances effectively.

Figure 3.16

RBI Proposed Model of Financial Capability



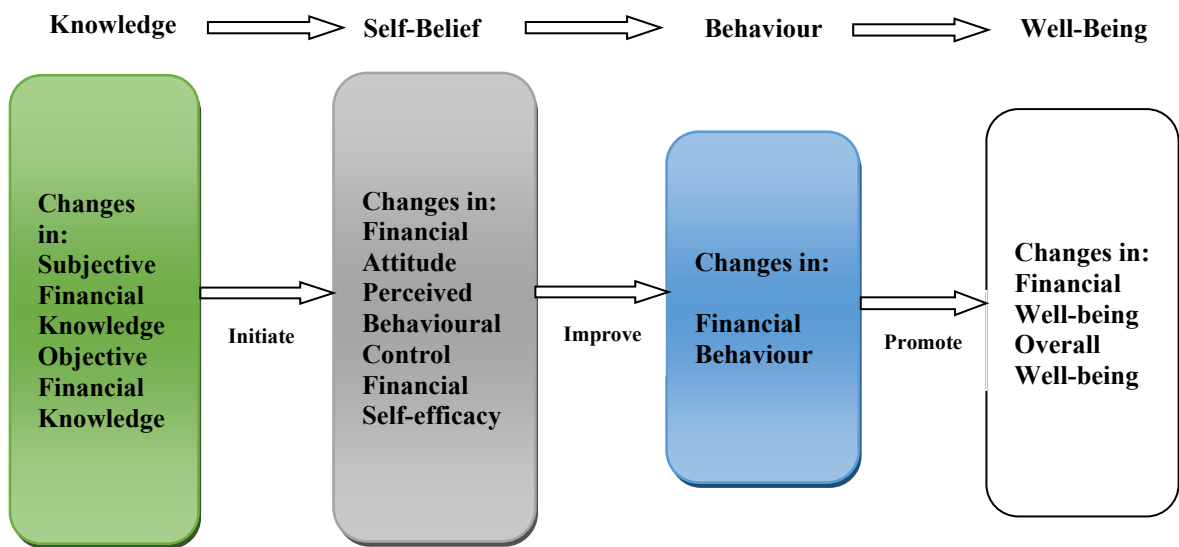
Source: D.V. Ramana & Silu Muduli (2018)

3.17.1.3 Financial Capability Model (By Joyce Serido , Soyeon Shim , & Chuanyi Tang)

In order to comprehend the route to financial capability, Joyce Serido, Soyeon Shim, and Chuanyi Tang (2014) suggest a conceptual framework that integrates two theories of development: social cognitive theory (Bandura, 1989) and cognitive development theory (Piaget, 1972; Sinnott, 1998). According to their argument, the development of financial capability occurs through a dynamic process in which knowledge about financial matters is internalized before being expressed as actions that impact one's well-being.

Figure 3.17

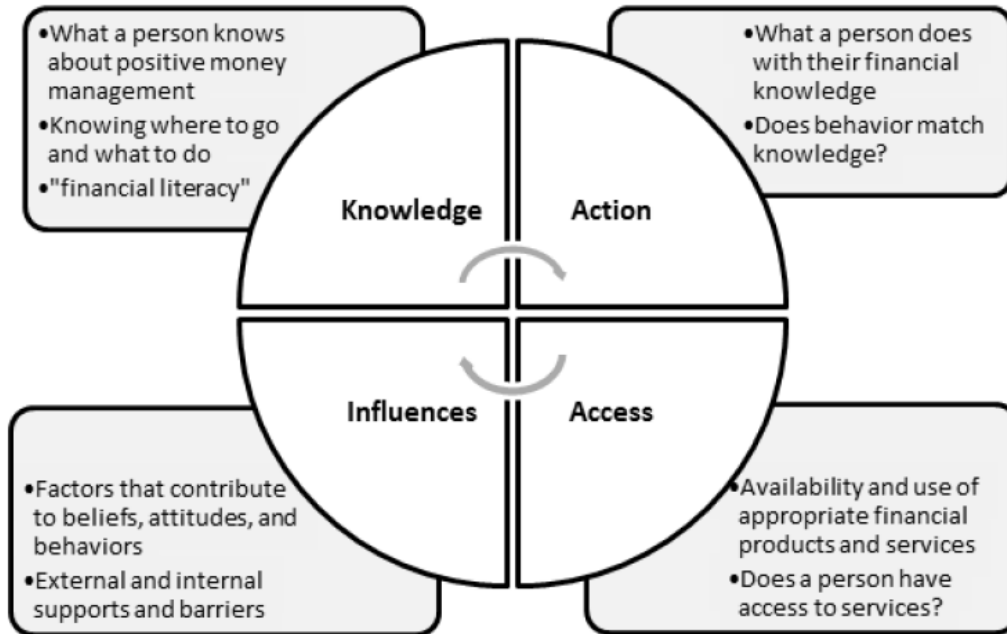
FC Model By Joyce Serido , Soyeon Shim , & Chuanyi Tang



Source: Joyce Serido , Soyeon Shim , & Chuanyi Tang (2014)

3.17.1.4 Olive's Financial Capability Model

"Financial Capability Model" or "Olive's Financial Capability Model." This model is designed to help individuals and households improve their financial well-being by focusing on key elements and building blocks of financial capability. Here is an overview of Olive's Financial Capability Model:

Figure 3.18*Olive's Financial Capability Model*

Source: Peggy Olive

Income and Spending: This component focuses on managing income effectively and controlling spending. It includes budgeting, tracking expenses, and aligning spending with income to ensure financial stability.

Saving and Investing: Saving and investing are key components of building financial capability. This element encourages individuals to save for emergencies, retirement, and other financial goals. It also includes understanding and engaging in investments to grow wealth over time.

Credit and Debt Management: This component addresses how individuals manage credit and debt. It emphasizes responsible borrowing, understanding credit scores, and effectively managing debt to avoid financial strain.

Consumer Protection: This element is about understanding consumer rights, financial regulations, and the importance of being an informed consumer. It also includes recognizing and avoiding scams and fraudulent financial schemes.

Risk Management: Risk management includes insurance and estate planning. Individuals should be aware of the role of insurance in protecting their assets and consider estate planning to ensure their financial affairs are in order.

Financial Information and Decision-Making: This component focuses on acquiring and using financial information effectively. It involves making informed decisions, comparing financial products, and understanding the implications of financial choices.

Communication and Self-Esteem: Effective communication is crucial for discussing financial matters with family members, financial professionals, and others. Building self-esteem and confidence in managing finances is also an essential part of this model.

Goal Setting: Setting financial goals is a fundamental element of financial capability. Individuals should define their financial objectives and develop a plan to achieve them.

Consumer Skills: Consumer skills encompass practical financial skills, such as using banking services, understanding taxes, and managing accounts. These skills are essential for day-to-day financial management.

Life Events and Transitions: This component addresses how individuals adapt their financial plans and decisions to major life events and transitions, such as marriage, childbirth, divorce, job loss, or retirement.

Access to Financial Services: Ensuring that individuals have access to essential financial services, including savings accounts, credit options, and insurance, is an important aspect of financial capability.

Peggy Olive's Financial Capability Model serves as a comprehensive guide for individuals to enhance their financial well-being. It provides a holistic view of the various components that contribute to financial capability and empowers individuals to make informed financial decisions, set goals, and navigate life's financial challenges. It is widely used in financial education and literacy programs to improve the financial capabilities of individuals and households.

3.18 Conclusion

The chapter explains the relevant theories in the field of microinsurance, insurance and risk management, perceived value, perceived benefits, perceived risk, attitude towards risk and financial capability in general and an overview of LIC microinsurance products and their features. The theoretical framework discussed in this chapter highlights the significance of microinsurance in promoting financial inclusion and mitigating risks for low-income individuals and vulnerable communities. The exploration of investment determinants reveals that various factors play a crucial role in shaping the investment landscape of microinsurance.

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Chapter 4

GROWTH OF MICROINSURANCE IN THE INDIAN SCENARIO

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4.1 Introduction

Over the past few years, microinsurance has been steadily growing in India. Microinsurance products are becoming more widely used, particularly among low-income and rural populations. In India, however, microinsurance is still not widely used or known, especially when compared to more conventional insurance products. A variety of microinsurance products have been created and made available by insurance firms in India to meet the demands of low-income sectors. For greater accessibility among the target market, these products frequently include straightforward features, affordable rates, flexible payment option etc. Microinsurance products are distributed through a variety of channels such as rural banks, self-help groups, NGOs, and microfinance institutions to reach the underserved population. Insurers are also utilizing technology and digital platforms to increase accessibility and expand their distribution networks.

India's microinsurance market confronts several obstacles, including the target population's lack of financial literacy and awareness, the cost of premiums, and the requirement for efficient distribution channels in remote areas. To safeguard consumers and keep microinsurance companies viable, regulatory frameworks and monitoring are essential. By 2021, microinsurance in India was gaining attention and displayed the potential for expansion. To promote and expand the reach of microinsurance, the government has been working with insurance regulators and several insurance companies. To specifically meet the requirements of low-income people and rural communities, both public and private insurance companies have developed microinsurance products.

In this section, researcher tries to analyse the status of Microinsurance from LIC and industry-level perspectives by analysing different parameters regarding Microinsurance products available in India. For evaluating the trend and growth pattern 15-year data published by IRDA Annual Reports and IRDA handbook were used. Annual Change, 14-year Compounded Annual Growth Rate and regression coefficient for each parameter are identified. The growth performance of microinsurance in India can be studied with the help of the most important indicators like Social sector obligation, Rural sector obligation, Number of policies sold in Individual category, Amount of Premium Collected under Individual category, Number of policies claimed under individual category, Number of claims settled under individual category, Number of claims rejected under individual category, Total amount of claims under individual category, Total amount of claims settled under individual category, Total amount of claims rejected under individual category.

4.2 Social Sector Obligation

All insurers from the life, non-life, and health segments operating for 10 years or more must have at least five percentages of their total policies from the social sector, according to the Insurance Regulatory and Development Authority of India (IRDA). The unorganized, informal, and economically disadvantaged classes in both urban and rural settings come under the social sector umbrella. Insurers should guarantee a 0.5% coverage from this segment in the first year of operations. IRDA stated that every insurer must conduct business in the rural and social sectors in its guidelines on requirements for these sectors. Life Insurance Corporation of India is a government-owned insurance company in India that provides various insurance and investment products to individuals and organizations. LIC has a significant role in the Indian social sector because of its obligations and responsibilities towards society. LIC plays a crucial role in promoting financial inclusion by offering life insurance and investment products to people across different socio-economic backgrounds. It extends its services to both urban and rural areas, ensuring that a

wide range of individuals can access insurance coverage. Social sector obligation of LIC and industry for the last six years analysed in Table 4.1

Table 4.1

Trends in social sector obligation during 2016-2022

Year	LIC		Industry
	Target	Achieved	Achieved
2016-17	5	27.2	21.8
2017-18	5	41.4	28.4
2018-19	5	16.5	30.6
2019-20	5	10.4	21.6
2020-21	5	8	14.9
2021-22	5	11.5	19.4

Source: Annual Reports & Handbook of IRDA

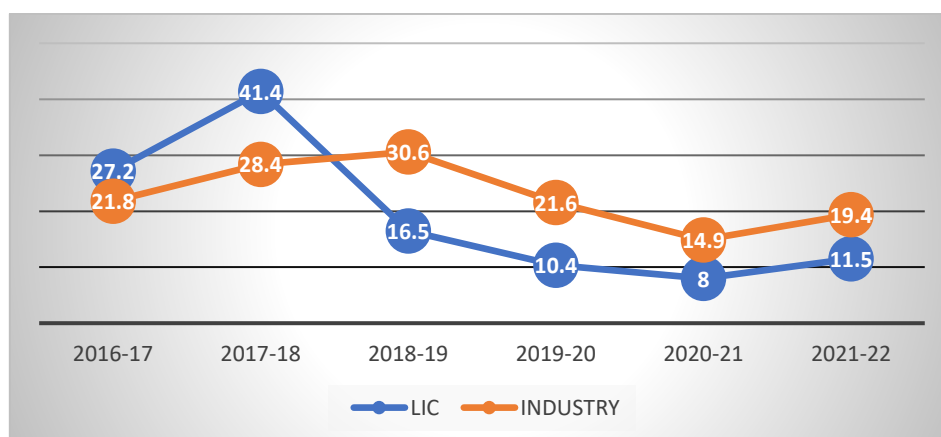
The Table 4.1 represents data related to LIC (Life Insurance Corporation) and its performance in the industry over the years. For every fiscal year, LIC had a target of 5, and it achieved more than the target by a significant margin. It provides insights into LIC's ability to achieve its set target during the period 2016 to 2022. In fiscal year 2016-17, LIC obtained a percentage of 27.20%. This represents the level of performance or success in social sector obligations. In the next fiscal year, 2017-18, LIC's accomplishment percentage rose to 41.40%. This signifies a considerable improvement in performance over the previous year. However, in fiscal year 2018-19, LIC's achieved percentage fell to 16.50%, indicating a reduction in performance compared to the previous fiscal year. In 2019-20, LIC's achieved percentage fell to 10.40%, demonstrating a sustained drop in performance. In fiscal year 2020-21, LIC's achieved percentage fell to 8%, suggesting a further reduction in performance. However, in the most recent fiscal year 2021-22, LIC's achieved percentage improved to 11.50%, indicating a little improvement over the previous year.

While analysing industry-level social sector obligation it can be observed that the industry obtained a percentage of 21.80% in fiscal year 2016-17. Moving forward to the fiscal year 2017-18, the industry's achievement percentage improved to 28.40%,

signifying a significant gain over the previous year. In fiscal year 2018-19, the industry's achievement percentage increased to 30.60%, indicating continuing performance development. However, the industry's achievement percentage fell to 21.60% in the fiscal year 2019-20, suggesting a decline in performance compared to the previous year. The next year, 2020-21, the industry's achievement rate fell significantly to 14.90%. The industry's achievement percentage grew to 19.40% in the most recent fiscal year 2021-22, signifying a little gain over the previous year. Figure 4.1 also reflects the performance of the industry over the years, with fluctuations in achievement percentages. It indicates both improvements and declines in performance, suggesting variability in the industry's success rate during the mentioned period.

Figure: 4.1

Trends in social sector obligation during the period 2016-22



Source: Compiled by the researcher

4.3 Rural Sector Obligation

After the commencement of the Insurance Regulatory and Development Authority Act, 1999, every insurer shall discharge the obligations specified in section 32B to provide life insurance or general insurance policies to persons residing in the rural sector, workers in the unorganized or informal sector, economically vulnerable or backward classes of society, and other categories of persons as may be specified by the Authority's regulations. An amendment was made by the IRDA in the year 2002, to understand the rural sector obligation made by LIC and Industry as a whole, data

collected from the IRDA annual reports and handbook for the last six years were analyzed and presented in Table 4.2

Table 4.2

Trends in Rural Sector Obligation during 2016-2022

Year	LIC		Industry
	Target	Achieved	Achieved
2016-17	20	22.4	22.9
2017-18	20	22.4	23
2018-19	20	22.3	23.2
2019-20	20	21.4	22.5
2020-21	20	21.5	22.7
2021-22	20	20.7	22.3

Source: Annual Reports & Handbook of IRDA

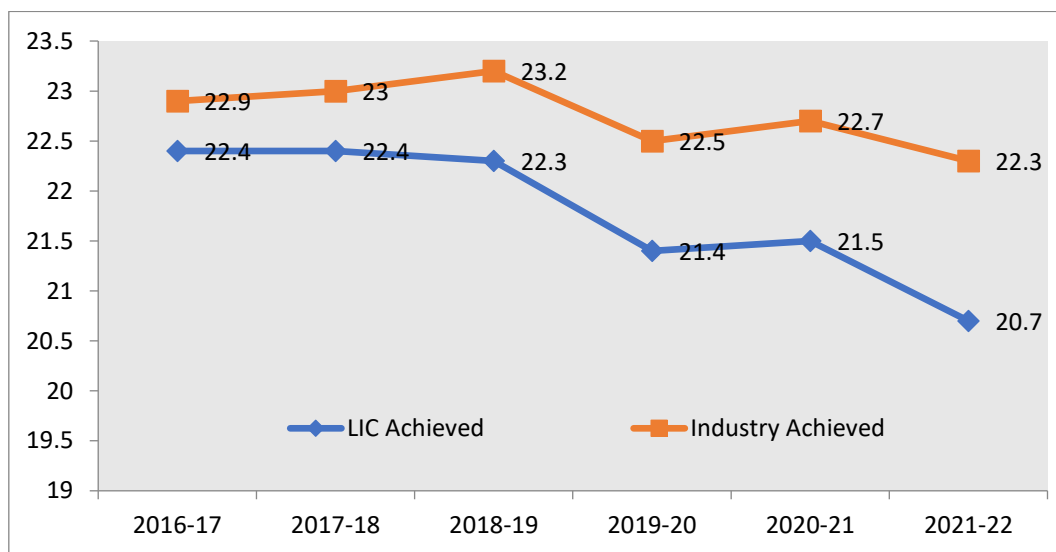
LIC obtained a percentage of 22.40% in fiscal year 2016-17. During the fiscal year 2017-18, LIC's achieved percentage stayed constant at 22.40%, signifying no change in performance from the previous year. LIC's achieved percentage fell slightly to 22.30% in fiscal year 2018-19, indicating a little reduction in performance compared to the previous year. Continuing the pattern, LIC's achieved percentage fell to 21.40% in fiscal year 2019-20, showing a continuous drop in performance. In the next fiscal year, 2020-21, LIC's achieved percentage increased slightly to 21.50%, indicating a little improvement over the previous year. LIC's achieved percentage fell to 20.70% in the most recent fiscal year 2021-22, showing a sustained drop in performance.

The industry attained a rate of 22.90% in the fiscal year 2016–17. The industry's achieved rate climbed marginally to 23.00% in the 2017–18 fiscal year. Accordingly, it appears that performance has somewhat improved over the previous year. The industry's achievement rate peaked in 2018–19 at a rate of 23.20 percent. This denotes the greatest degree of achievement or performance for the sector within the specified period. The industry's achievement rate dropped to 22.50% in 2019–20. In 2020–21, the sector had very little improvement, with a success rate of 22.70%.

The achievement rate for the industry fell to 22.30% in the final year of the data set, 2021–2022. This is the lowest achievement rate throughout the specified period and indicates a decline in performance relative to the prior year. Figure 4.2 shows the trends in rural sector obligation during the period 2016-22.

Figure 4.2

Trends in Rural sector obligation during the period 2016-22



Source: Compiled by the researcher

4.4 Trends in Number of Policies Sold

Insurance companies closely monitor the number of policies sold as a key performance indicator. It reflects their ability to attract and retain customers, as well as their overall competitiveness in the insurance industry. Number of policies sold is a critical metric in the insurance industry, providing insights into an insurance company's sales performance, market presence, and customer base. It helps assess the company's ability to attract and serve policyholders and is essential for measuring growth and profitability in the insurance business. Here fifteen years of data regarding number of policies sold by LIC as well as industry were collected from Annual Reports of IRDA and annual change occurred in policy sold by LIC and Industry evaluated. Finally, CAGR was measured to understand the growth rate of microinsurance policies during the study period was presented in Table 4.3

Table 4.3*Trends in Number of policies sold during the period 2007-2022*

Year	LIC	% of change	Industry	% of change
2007-08	854615		937768	
2008-09	1541218	80.34	2152069	129.49
2009-10	1985145	28.80	2983954	38.66
2010-11	2951235	48.67	3650968	22.35
2011-12	3826783	29.67	4620443	26.55
2012-13	4340235	13.42	5036139	9.00
2013-14	2205820	-49.18	2767159	-45.05
2014-15	400341	-81.85	816368	-70.50
2015-16	452291	12.98	910946	11.59
2016-17	480892	6.32	956161	4.96
2017-18	564541	17.39	839011	-12.25
2018-19	617653	9.41	865097	3.11
2019-20	859375	39.14	1028392	18.88
2020-21	992200	15.46	1069664	4.01
2021-22	732007	-26.22	956161	-10.61
CAGR	-1.10%		0.14%	

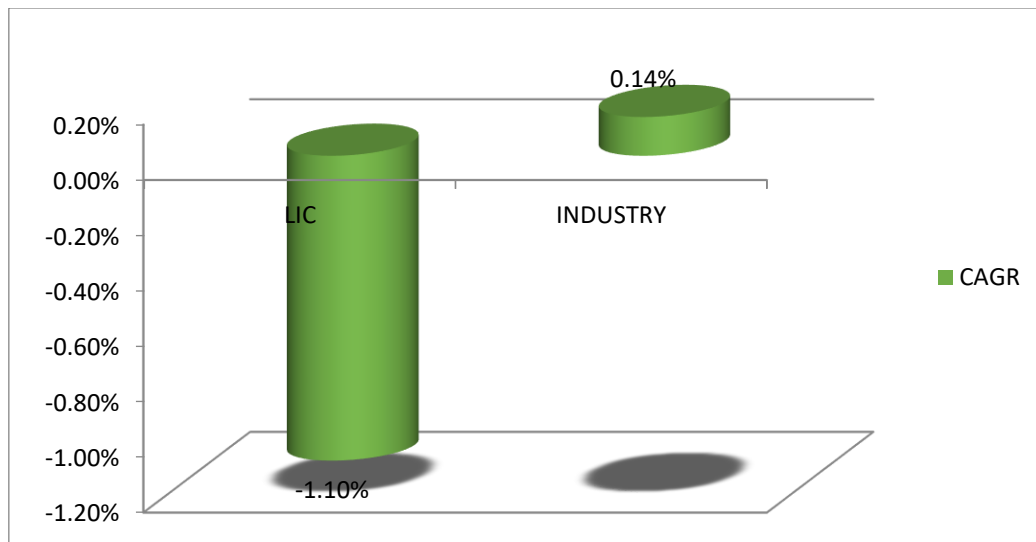
Source: Annual Reports & Handbook of IRDA

It was found that the number of policies sold under individual categories under the microinsurance of LIC was increasing from 2007 to 2013. It is identified that a decrease of 49.18 percent occurred from 2012-13 to 2013-14. The highest negative growth was reported during the period 2014-15 where a number of policies were sold during 2012-13. From 2014 to 2021 number of policies sold under the microinsurance individual category shows an increasing trend but the annual growth that occurred during that period was at a lower rate. 2021-22 financial years also show a negative growth rate of 26.22 percent from the previous year. It is also found that the CAGR for 14 years regarding the number of policies sold is negative 1.10 percent. A similar trend pattern occurred during the study period at Microinsurance industry in India. Industry level CAGR for 14 years regarding the number of policies

sold is 0.14 percent. The CAGR of the number of policies sold under individual categories under microinsurance of LIC as well as industry is presented in Figure 4.3

Figure 4.3

CAGR of Number of Policies Sold



Source: Compiled by the researcher

4.5 Trends in Amount of Premium Collected

Insurance companies collect premiums from all policyholders, and the sum of all these payments represents the total premiums collected by the company within a specific period, such as a month, quarter, or year. For insurance companies, premiums collected are a primary source of revenue. These funds are used to pay out claims to policyholders who experience covered events or losses. Insurance companies invest a portion of these funds to generate additional income. The trend in premium collections over time is a critical metric for assessing an insurer's growth and market performance. Steady or increasing premium collections may indicate a healthy and expanding customer base. In this study, fifteen years of data on the total amount of premium collected by LIC as well as the industry was gathered from IRDA Annual Reports, and the annual change in the amount of premium collected by LIC and the industry was assessed. Finally, CAGR was calculated to understand the growth rate of microinsurance policies over the study period, as shown in Table 4.4

Table 4.4*Trends in Amount of Premium Collected during the Period 2007-2022*

Year	LIC (In lakhs)	% of change	Industry (In lakhs)	% of change
2007-08	1613.36		1823.10	
2008-09	3118.74	93.31	3656.55	100.57
2009-10	14982.50	380.40	15822.30	332.71
2010-11	12305.80	-17.87	13040.90	-17.58
2011-12	10603.50	-13.83	11567.70	-11.30
2012-13	9949.05	-6.17	10769.60	-6.90
2013-14	8635.77	-13.20	9565.06	-11.18
2014-15	1640.23	-81.01	2889.45	-69.79
2015-16	1953.78	19.12	3171.73	9.77
2016-17	1587.13	-18.77	3821.50	20.49
2017-18	1786.81	12.58	4703.83	23.09
2018-19	2091.43	17.05	3209.87	-31.76
2019-20	22208.97	961.90	22665.70	606.13
2020-21	35293.20	58.91	35527.10	56.74
2021-22	25792.36	-26.92	29714.20	-16.36
CAGR	21.89%		22.06%	

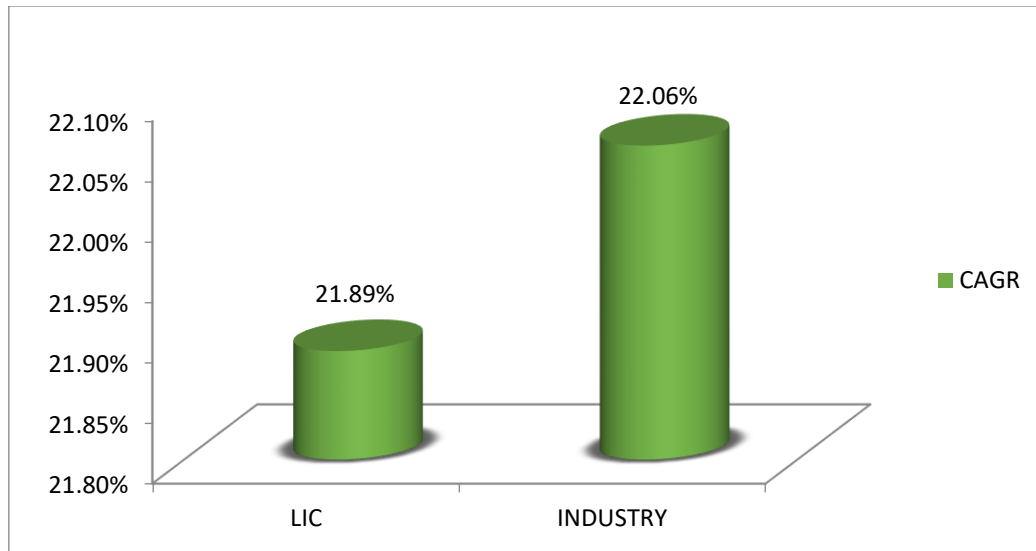
Source: Annual Reports & Handbook of IRDA

The amount of microinsurance premium collected under the individual category of LIC reported a 21.89 percent CAGR which is more than the industry-level CAGR of 22.06 percent. It is identified that during the period of 2019-20, LIC collected the highest amount of premium under microinsurance (Rs.22208.97 crore, 961.90%). From 2010 onwards amount of premium collected by LIC shows a negative annual growth rate till the year 2014. During 2015-16 amount of premium collected was Rs. 1953.78 crore, which declined to Rs. 1587.13 crore during the period 2016-17. After 2016-17, the annual growth rate of amount of premium collected under microinsurance shows an increasing trend but the rate of growth was not consistent, last year amount of premiums collected was Rs. 25792.36 crore with a negative

growth rate of 26.92 percent. The major contribution to industrial growth is from the public sector.

Figure 4.4

CAGR of Amount of Microinsurance Premium Collected



Source: Compiled by the researcher

4.6 Trends in the Number of Policies Claimed

The Number of policies claimed is another key metric for insurance companies to evaluate the utilization of their insurance products and assess their financial obligations to policyholders. It plays a crucial role in risk assessment, financial planning, and maintaining good customer relationships within the insurance industry. When policyholders experience events or losses covered by their insurance policies, they have the right to file claims with their insurance company. These claims seek financial compensation or coverage for the damages, losses, or expenses incurred due to the insured event. The number of policies claimed provides insights into how often policyholders are using their insurance coverage and the nature of the events triggering claims. Table 4.5 outlined the annual change in the number of policies claimed under microinsurance and its fourteen-year CAGR.

Table 4.5*Trends in Number of Policies Claimed during the Period 2007-2022*

Year	LIC	% of change	Industry	% of change
2007-08	318		500	
2008-09	1854	483.02	2637	427.40
2009-10	4133	122.92	7574	187.22
2010-11	7320	77.11	11391	50.39
2011-12	9615	31.35	14648	28.59
2012-13	11753	22.24	15042	2.69
2013-14	12136	3.26	15719	4.50
2014-15	11582	-4.56	13396	-14.78
2015-16	9749	-15.82	14239	6.29
2016-17	8898	-8.73	13190	-7.37
2017-18	7353	-17.36	10278	-22.08
2018-19	6741	-8.32	9450	-8.06
2019-20	6571	-2.52	8386	-11.26
2020-21	7212	9.75	8350	-0.43
2021-22	9929	37.67	10898	30.51
CAGR	27.86%		24.62%	

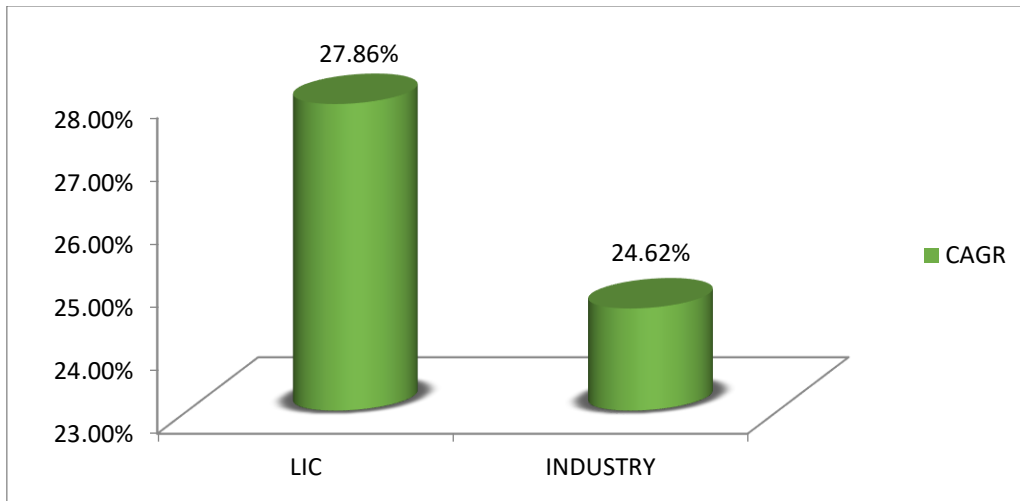
Source: Annual Reports & Handbook of IRDA

It was found that the number of policies claimed under the microinsurance individual category was increasing from the base year (i.e., 2007-08) to the next six years. From 2014 to 2020, the number of policies claimed reported a declining trend. This means the annual growth rate of these periods was negative. A greater number of microinsurance policies were claimed under the individual category during the financial year of 2013-14(12136 policies) whereas the highest annual change was reported during 2008-09 (483.02%). When looking into an industry-level trend, it is evident that the number of policies claimed under the microinsurance individual category was increasing from 2007-2013. 2015-16 shows a positive growth, after that it reports a decline till 2020-21. 31.51 percentage increases occurred from the 2020-21 financial year to the 2021-22 financial year. CAGR regarding the number of policies claimed under the microinsurance individual category was 27.86 (LIC)

and 24.62 percent (Industry). LIC's CAGR was more than three percent of Industry's CAGR.

Figure 4.5

CAGR regarding Number of policies claimed



Source: Compiled by the researcher

4.7 Trends in the Number of Claims Settled

The number of claims settled represents those claims that have been approved and paid out to the policyholders or beneficiaries. It signifies that the insurance company has reviewed the claim, found it valid, and provided the agreed-upon benefits or compensation. The "number of claims settled" is a key performance metric for insurance companies, representing the total count of insurance claims that have been successfully processed and paid out to policyholders or beneficiaries within a specific period. This metric is essential for evaluating an insurer's ability to fulfil its obligations to its policyholders and maintain customer satisfaction. It also reflects an insurance company's ability to honour its contractual commitments to policyholders and provide financial support during times of need. It is a key factor in evaluating an insurer's financial stability, customer service quality, and overall performance in the insurance industry. The number of claims settled during the period 2016-2022 was analyzed and presented in Table 4.6

Table 4.6*Trends in the Number of Claims Settled during the Period 2007-2022*

Year	LIC	% Of change	Industry	% of change
2007-08	309		439	
2008-09	1825	490.61	2527	475.63
2009-10	4102	124.77	7508	197.11
2010-11	7244	76.59	11283	50.28
2011-12	9499	31.13	14509	28.59
2012-13	11647	22.61	14900	2.69
2013-14	12048	3.44	15610	4.76
2014-15	11365	-5.67	13138	-15.84
2015-16	9632	-15.25	14059	7.01
2016-17	8470	-12.06	12714	-9.57
2017-18	7228	-14.66	10137	-20.27
2018-19	6707	-7.21	9395	-7.32
2019-20	6516	-2.85	8321	-11.43
2020-21	7140	9.58	8276	-0.54
2021-22	9805	37.32	10770	30.13
CAGR	28.01%		25.68%	

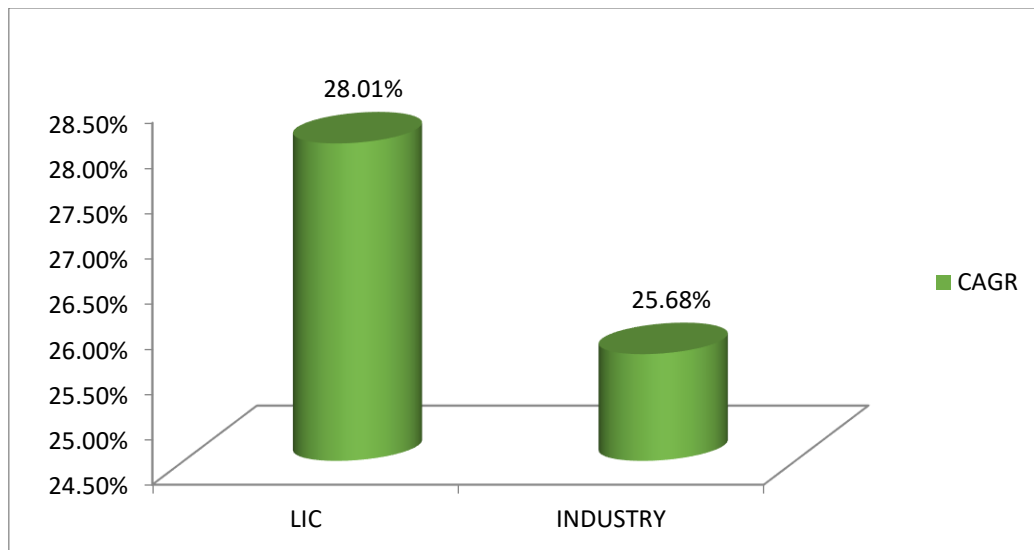
Source: Annual Reports & Handbook of IRDA

Trend pattern regarding the number of claims settled by LIC under Individual category is analyzed here. It is identified that the first six years from the base year selected for study show an increasing trend, but the growth rate for this period shows a declining trend. The highest growth was reported during 2008-09 which was 490.61 percent. From 2014 to 2020, the number of claims settled declined year by year which indicates a negative growth pattern. Last two year under study shows a positive growth percentage of 9.58% and 37.32% respectively. Highest number of claims was settled during the period of 2013-14, (12048 policies) in case of LIC whereas 2012-13 in case of industry-level, (14900 policies). Almost the same trend can be observed in the microinsurance industry-level regarding CAGR regarding the number of policies claimed and number of claims settled under the study period except during 2015-16 which showed positive growth. 2020-21 again shows a

negative growth rate. CAGR during the study period of LIC is 28.01 percent, microinsurance industry as a whole is 25.68 percent.

Figure 4.6

CAGR of Number of policies claimed



Source: Compiled by the researcher

4.8 Trends in the Number of Claims Rejected

The number of claims rejected is another aspect considered to evaluate the status of microinsurance, which reflects the instances where insurance claims do not meet the criteria for approval based on policy terms and other relevant factors. It is a significant indicator of an insurance company's ability to enforce policy terms and conditions, manage risk, and protect the interests of policyholders and the overall stability of the insurance business. The number of claims rejected is used to calculate the claims rejection rate, which is the ratio of rejected claims to the total number of claims filed during a specific period. This rate helps insurers and analysts assess the effectiveness of underwriting, claims processing, and policyholder communication. Insurers are required to provide clear and transparent communication to policyholders regarding the reasons for claim rejections. This communication is essential for maintaining trust and managing policyholder expectations. Here the researcher analyzed trends in number of claims rejected

during the period 2007-2022 and calculated CAGR for the same. Table 4.7 shows the trend analysis and CAGR of Number of claims rejected, Figure 4.7 depicts the CAGR of LIC and Industry.

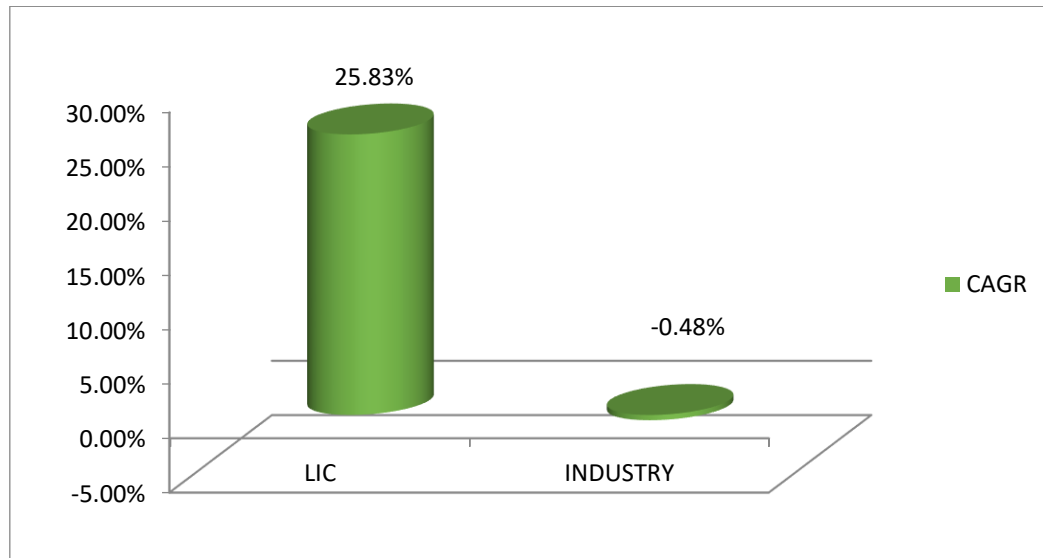
Table 4.7

Trends in Number of Claims Rejected during the Period 2007-2022

Year	LIC	% of change	Industry	% of change
2007-08	1		31	
2008-09	11	1000	64	106.45
2009-10	28	154.54	53	-17.19
2010-11	28	0	88	66.04
2011-12	20	-28.57	119	35.23
2012-13	26	30	93	-21.85
2013-14	52	100	71	-23.65
2014-15	207	298.08	247	247.89
2015-16	102	-50.72	165	-33.19
2016-17	406	298.04	454	175.15
2017-18	108	-73.39	122	-73.13
2018-19	10	-90.74	30	-75.41
2019-20	6	-40	14	-53.33
2020-21	24	300	26	85.71
2021-22	25	4.17	29	11.54
CAGR	25.85%		-0.48%	

Source: Annual Reports & Handbook of IRDA

When analyzing the number of claims rejected under the individual category, 25.85 percent CAGR was reported by LIC during the period of 2007-08 to 2021-22 and a negative CAGR of 0.48 was reported by microinsurance industry. 406 and 454 claims were rejected in the financial year 2016-17, which was the highest number of claims rejected by both LIC and Industry respectively. Positive growth occurred during the financial years of 2008-09, 2009-10, 2012-13, 2013-14, 2014-15, 2016-17, 2020-21, 2021-22 and all other period shows a negative growth rate in number of claims rejected.

Figure 4.7*CAGR of Number of Claims Rejected*

Source: Compiled by the researcher

4.9 Trends in Total Amount of Claims

When a policyholder experiences a covered event or loss and files a valid claim, the insurance company is responsible for making payments to compensate the policyholder or beneficiary. The amount of each claim payment can vary widely based on the policy's coverage limits, deductibles, and the extent of the loss or damage. Some claims may involve small payments, while others may involve significant payouts, depending upon the extent of losses. The total amount of claims represents the cumulative sum of money that an insurance company pays out to policyholders or beneficiaries as compensation for covered events or losses within a specific period. Timely and fair claim payments are crucial for maintaining customer satisfaction and trust. A positive claims experience can lead to increased customer retention also. In this study, data regarding the total amount of claims made by LIC and the industry over fifteen-year period was obtained from IRDA annual reports, and the annual change in the total amount of claims made by LIC and the industry was evaluated. To assess the growth rate of microinsurance policies over the study

period, CAGR was also determined, as shown in Table 4.8 and Figure 4.8 shows the CAGR of LIC and Industry

Table 4.8

Trends in Total Amount of Claims during the Period 2007-2022

Year	LIC (In lakhs)	% of change	Industry (In lakhs)	% of change
2007-08	47.25		70.32	
2008-09	285.75	504.76	384.95	447.43
2009-10	642.92	124.99	831.23	115.93
2010-11	1190.17	85.12	1704.76	105.09
2011-12	1558.06	30.91	2138.89	25.47
2012-13	1974.00	26.70	2300.74	7.57
2013-14	2022.98	2.48	2384.43	3.64
2014-15	1845.48	-8.77	2250.87	-5.60
2015-16	1584.27	-14.15	2192.09	-2.61
2016-17	1547.44	-2.32	2145.2	-2.14
2017-18	1324.68	-14.40	1596.29	-25.59
2018-19	1193.29	-9.92	1497.63	-6.18
2019-20	1136.07	-4.80	1290.18	-13.85
2020-21	1846.74	62.56	1999.46	54.98
2021-22	4049.7	119.29	4105.74	105.34
CAGR	37.43%		33.71%	

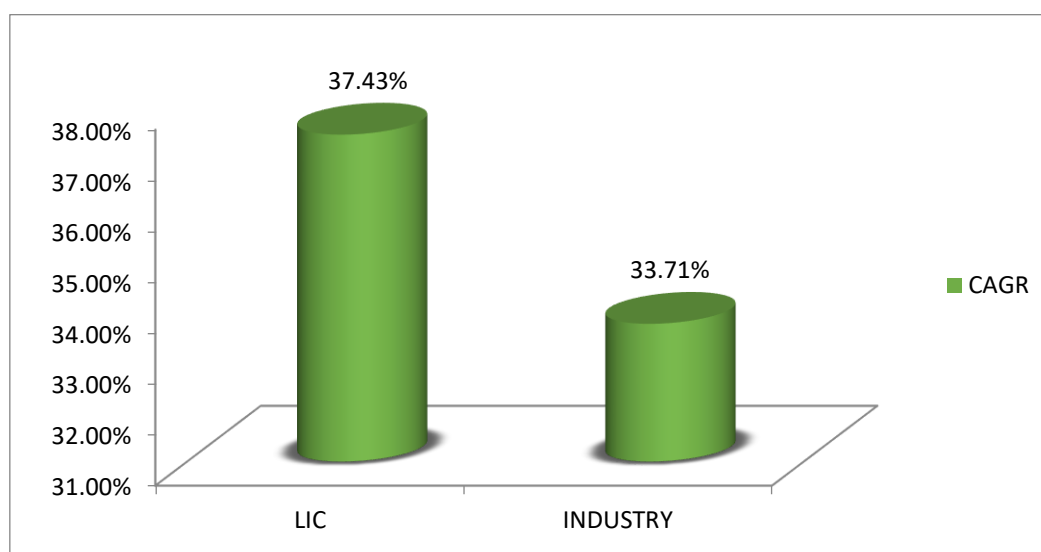
Source: Annual Reports & Handbook of IRDA

On analyzing the data, it can be seen that the total amount of claims under the microinsurance individual category for the first six years shows an increasing trend but at a diminishing rate. During the fiscal year 2014-15, growth rate of the total amount of claims becomes negative. The total amount of claims declined year by year till 2019-20. Further significant improvement occurred during the fiscal year of 2020-21, similarly a drastic increase (more than 50 percent) happened in the total amount of claim under microinsurance in the year 2021-22. The highest growth rate

was reported during the period of 2008-09 whereas the lowest growth rate was reported during the period of 2016-17. When analyzing total amount of claims under the individual category, a CAGR of 37.43 percent was reported by LIC during the period 2007-08 to 2021-22 whereas 33.71 percent CAGR was reported by the microinsurance industry.

Figure 4.8

CAGR of Total Amount of Claims



Source: Compiled by the researcher

4.10 Trends in Total Amount of Claims Settled

The "total amount of claims settled" represents the sum of all individual claim payments made by the insurer during a specific period, the total amount of claims settled is an expense for the insurance company, and it is typically covered using the premiums collected from policyholders and any investment income generated from invested premiums. Monitoring the total amount of claims settled helps insurers assess the adequacy of their reserves and make adjustments as needed to ensure financial stability. Monitoring the total amount of claims settled helps to assess the company's effectiveness in processing claims promptly, which can positively impact customer satisfaction. Table 4.9 analyzes the total amount of claims settled from 2007 to 2022 under the microinsurance category of LIC's and Industry as a whole with the help of percentage of annual change and CAGR.

Table 4.9*Trends in Total Amount of Claims Settled during the Period 2007-2022*

Year	LIC (In lakhs)	% of change	Industry (In lakhs)	% of change
2007-08	45.82		62.15	
2008-09	280.7	512.61	331.18	432.87
2009-10	637.17	126.99	819.22	147.36
2010-11	1174.12	84.27	1679.35	104.99
2011-12	1540.38	31.19	2109.1	25.59
2012-13	1954.95	26.91	2270.42	7.65
2013-14	2005.35	2.58	2362.97	4.08
2014-15	1817.67	-9.36	2157.53	-8.69
2015-16	1563.55	-13.98	2046.88	-5.13
2016-17	1494.9	-4.39	2021.85	-1.22
2017-18	1304.15	-12.76	1564.56	-22.62
2018-19	1181.4	-9.41	1476.56	-5.62
2019-20	1117.49	-5.41	1271.08	-13.92
2020-21	1807.05	61.71	1959.47	54.16
2021-22	3971.26	119.76	4025.96	105.46
CAGR	37.54%		34.71%	

Source: Annual Reports & Handbook of IRDA

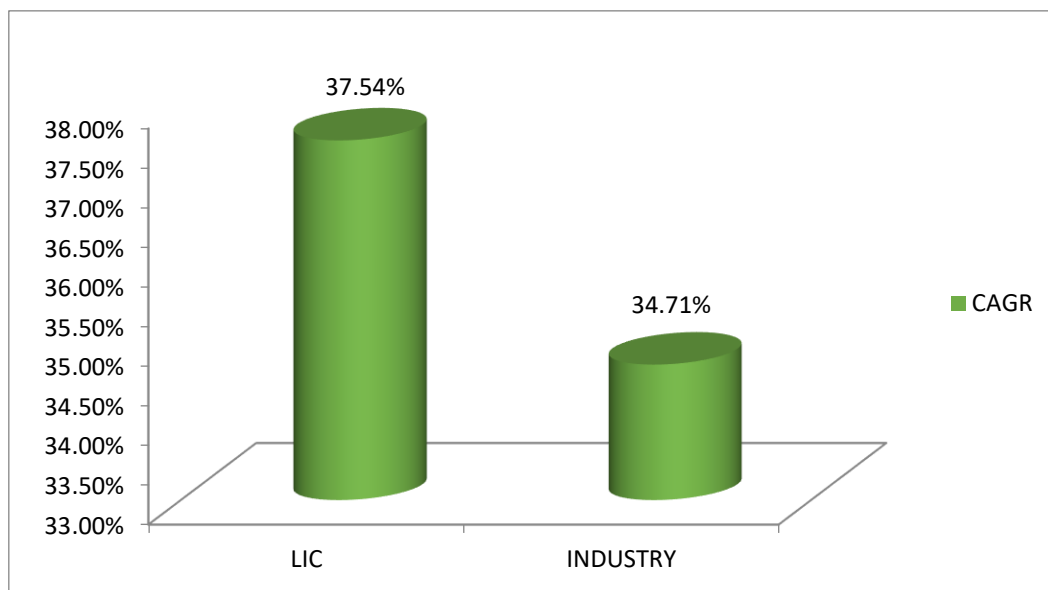
From the Table 4.9 it can be seen that LIC's total amount of claims settled started at 45.82 lakhs in the fiscal year 2007-08. The company experienced substantial growth in the fiscal year 2008-09, with a 512.61% increase from the previous year. The growth remained impressive in the fiscal years 2009-10 and 2010-11, with percentages of 126.99% and 84.27%, respectively. From 2011-12 to 2015-16, the growth rate gradually decreased each year, with percentages ranging from 31.19% to -13.98%. This indicates a slowdown in the rate of increase and even a decline in some years. The fiscal year 2016-17 experienced a slight decrease of -4.39%, but the following year (2017-18) showed a more significant decline of -12.76%. The declining trend continued until 2020-21, with percentages of -9.41% and -5.41% in fiscal years 2018-19 and 2019-20, respectively. However, in 2020-21, there was a

substantial recovery, with a growth rate of 61.71% compared to the previous year. The fiscal year 2021-22 shows a remarkable surge, with a growth rate of 119.76%, indicating a significant increase in LIC's total amount of claims settled. The CAGR of 37.54% highlights the average annual growth rate of LIC's total amount over the entire study period.

Looking into industry level statistics it can be seen that a similar trend as LIC. The CAGR of 34.71% highlights the average annual growth rate of the industry's total amount of claims settled over the entire study period, which suggests a relatively robust performance for the industry during these years. It is worth noting that the CAGR of the industry (34.71%) is slightly lower than the CAGR of LIC (37.54%), as mentioned in a previous Table 4.9, indicating that LIC's growth outpaced the overall industry's growth during this period.

Figure 4.9

CAGR of Total Amount of Claims Settled



Source: Compiled by the researcher

4.11 Trends in Total Amount of Claims Rejected

The total amount of claims rejected was another measure used to evaluate the growth of microinsurance. Insurance companies carefully review each claim

submitted by policyholders to determine whether it is eligible for payment based on the terms and conditions outlined in the insurance policy. Insurers may analyze trends in claim denial rates over time to identify patterns or issues within their claims processing. This analysis can help insurers to improve their claims handling procedures and minimize unjust claim rejections. In this study data was gathered from IRDA annual reports on total number of claims rejected, detailed information about total claims rejected was presented in Table 4.10 and CAGR of total number of claims rejected by LIC and industry is depicted in Figure 4.10

Table 4.10

Trends in Total Amount of Claims Rejected during the Period 2007-2022

Year	LIC (In lakhs)	% of change	Industry (In lakhs)	% of change
2007-08	0.13		4.19	
2008-09	1.78	1269.23	7.09	69.21
2009-10	4.36	144.94	9.34	31.73
2010-11	13.41	207.57	22.42	140.04
2011-12	14.5	8.13	26.46	18.02
2012-13	12.3	-15.17	20.88	-21.09
2013-14	10.96	-10.89	14.41	-30.99
2014-15	25.45	132.21	89.28	519.57
2015-16	15.77	-38.04	140.37	57.22
2016-17	43.7	177.11	114.51	-18.42
2017-18	12.54	-71.30	23.14	-79.79
2018-19	1.61	-87.16	10.69	-53.80
2019-20	2.46	52.80	2.52	-76.43
2020-21	21.38	769.11	21.68	760.32
2021-22	39.28	83.72	40.29	85.84
CAGR	50.37%		17.55%	

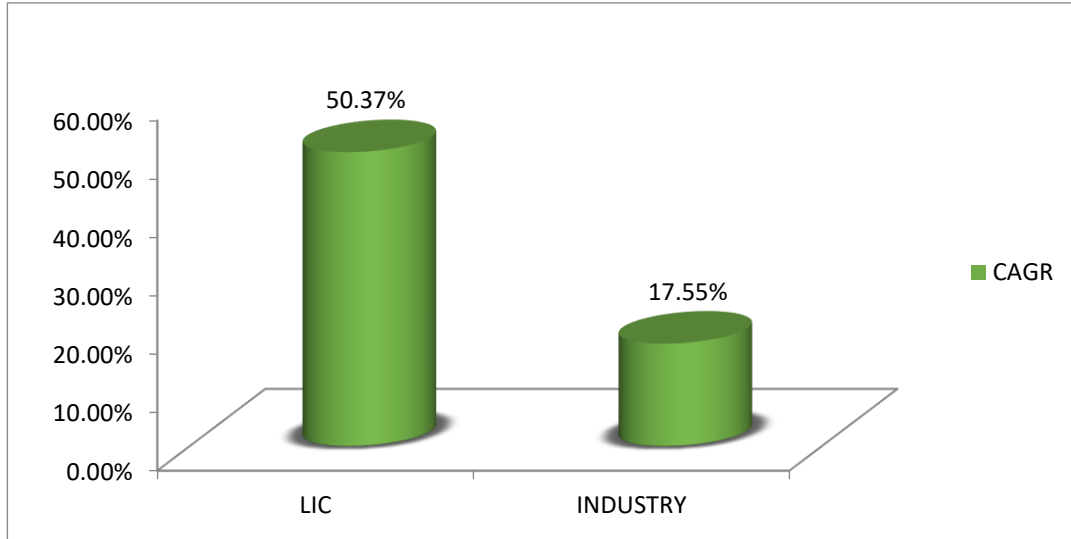
Source: Annual Reports & Handbook of IRDA

Table 4.9 reveals that LIC's total amount of claim rejected started at 0.13 lakhs in the fiscal year 2007-08. The company experienced significant growth in claim

rejection in the fiscal year 2008-09, with a stark 1269.23% increase from the previous year. This substantial increase indicates a significant decline in LIC's performance during that particular year. The growth rate remained high in the fiscal year 2009-10 with a 144.94% increase and continued to be substantial in 2010-11 with a growth rate of 207.57%. This demonstrates continued decline in performance in these years as claim rejection increases. However, from 2011-12 to 2012-13, LIC's claim rejection growth rate gradually decreased, with percentages ranging from 8.13% to -15.17%. The growth rate dropped to single digits in 2011-12 and experienced negative growth in 2012-13 and 2013-14, indicating an improvement in LIC's performance during those years. There was a significant change in LIC's performance in the fiscal year 2014-15, with a growth rate of 132.21%, suggesting more number of claims were rejected during that year. However, this high growth was followed by a significant decline in claim rejection during 2015-16, with a negative growth rate of -38.04%, indicating an improvement in LIC's performance. The fiscal year 2016-17 saw another decline in LIC's performance, with a growth rate of 177.11%, indicating that more claims were rejected during the period. In the following years, LIC experienced fluctuating growth rates in the following years, including a significant decline of -71.30% in 2017-18 and -87.16% in 2018-19. These years were characterized by substantial reductions in LIC's total amount rejected. However, the fiscal year 2019-20 saw a positive growth rate of 52.80%, followed by a substantial increase to 769.11% in 2020-21, indicating a remarkable decline in LIC's performance. The fiscal year 2021-22 also reported positive growth, though not as significant as the previous year, with a growth rate of 83.72%. The CAGR of 50.37% highlights the average annual growth rate of LIC's total amount over the entire study period, which suggests an overall robust performance for the company during these years, despite the ups and downs

Figure 4.10

CAGR of Total Amount of Claim Rejected



Source: Compiled by the researcher

4.12 Statistical Significance of Microinsurance Status Variables

In order to understand the statistical significance of microinsurance status variables compounded annual growth rates were tested using curve estimation method, the results of company-level and industry-level test statistics and their significance values were presented in Table 4.11 and Table 4.12

Table 4.11

Statistical Significance of Growth Variables CAGR at Company-Level

	Variables	CAGR	Test Statistic	P Value
1	Number of policies sold	-1.10%	23.601	.048*
2	Amount of Premium Collected	21.89%	14.516	.359
3	Number of policies claimed	27.86%	20.429	.033*
4	Number of claims paid	28.01%	20.354	.033*
5	Number of claims rejected	25.85%	11.391	.298
6	Total amount of claims	37.43%	20.733	.006*
7	Total amount of claims paid	37.54%	20.614	.006*
8	Total amount of claims rejected	50.37%	12.004	.070

Source: Compiled by the researcher

The Table 4.11 provides insights into the trends and statistical significance of various variables related to number of policies sold, amount of premium collected, number of policies claimed, number of claims settled, number of claims rejected, total amount of claims, total amount of claims settled, total amount of claims rejected. The compound annual growth rates and p-values help to assess the significance of the changes observed in each variable over the study period. Among the eight variables used to explain the status of microinsurance at company-level, only five variables' growth change is found to be significant. These are namely number of policies sold, number of policies claimed, number of claims settled, total amount of claims, total amount of claims settled.

Table 4.12

Statistical Significance of Microinsurance Status Variables CAGR at Industry-Level

Variables	CAGR	Test Statistic	P Value
1 Number of policies sold	0.14%	28.616	.025*
2 Amount of Premium Collected	22.06%	18.750	.140
3 Number of policies claimed	24.62%	20.455	.072
4 Number of claims paid	25.68%	19.843	.070
5 Number of claims rejected	-0.48%	17.580	.438
6 Total amount of claims	33.71%	21.148	.011*
7 Total amount of claims paid	34.71%	20.509	.011*
8 Total amount of claims rejected	17.55%	14.472	.361

Source: Compiled by the researcher

Table 4.12 shows the trends and statistical significance of various variables such as the number of policies sold, the amount of premium collected, the number of policies claimed, the number of claims settled, the number of claims rejected, the total amount of claims, the total amount of claims settled, and the total amount of claims rejected. The compound annual growth rates and p-values helps in determining the significance of the changes observed in each variable throughout the study. Only three of the eight variables considered to describe the status of

microinsurance at the industry-level were found to be significant in terms of growth change. These are the number of policies sold, the total number of claims, and the total number of claims settled.

4.13 Microinsurance Business in Kerala

Microinsurance is a critical financial tool that plays a significant role in providing financial security to low-income individuals and communities. In the Indian state of Kerala, microinsurance has been instrumental in addressing the unique socio-economic landscape and the diverse insurance needs of its population. Microinsurance penetration in Kerala represents a significant step toward financial inclusion and security for low-income individuals and communities. By addressing region-specific risks, promoting awareness, and leveraging partnerships, microinsurance continues to play a vital role in enhancing the resilience and well-being of Kerala's population. To ensure its continued success, it is crucial to address existing challenges and adapt to the evolving needs of the state's diverse population. The LIC of India has played an important role in providing financial security to the marginalised peoples in Kerala. The LIC of India operates five divisional offices in Kerala, with headquarters in Trivandrum, Kozhikode, Thrissur, Ernakulam, and Kottayam. Each of these divisions has a distinct department to deal with micro insurance business, which is led by a Deputy Manager (Micro). Division wise analysis of number of policies sold in Kerala presented in Table 4.13.

Table 4.13*Number of Policies Sold During 2006 to 2019 in Kerala (Division-Wise)*

Year	Thiruvananthapuram	Kottayam	Ernakulum	Thrissur	Kozhikode	Total
2006-07	6018	8717	6238	4822	3261	29056
2007-08	60517	36333	15988	6987	24366	144191
2008-09	62240	40115	31490	13475	71870	219190
2009-10	89555	17589	16168	22010	91280	236602
2010-11	76407	35004	8156	14671	47439	181677
2011-12	93741	45039	7166	21606	76265	243817
2012-13	48651	59892	7173	10970	80140	206826
2013-14	14293	3468	2727	4770	2571	27829
2014-15	1539	1826	676	630	263	4934
2015-16	2347	511	735	694	585	4872
2016-17	2863	527	1150	766	1534	6840
2017-18	3007	553	1208	805	1611	7184
2018-19	3197	588	1284	856	1713	7638
2019-20	3493	643	1403	935	1872	8346

Source: Compiled by the researcher

By analysing the state divisional wise statistics, it can be understood that in most of the financial years, Thiruvananthapuram division sold highest number of policies, 2008-09,2009-10,2012-13 financial years Kozhikode division sold highest number of policies followed by Thiruvananthapuram. Thiruvananthapuram division sold highest number of policies during the period 2011-12, Kottayam division sold highest number of policies in the year 2012-13, Ernakulum division sold highest number of policies in the financial year 2008-09, Thrissur division sold highest number of policies in the year 2009-10 and Kozhikode division sold highest number

of policies during the period of 2009-10. Trend of number of policies sold by each division was inconsistent over the years.

Table 4.14

Number of Policies Sold During 2006 to 2019 in Kerala

Year	Number of Policies Sold by LIC (Kerala)	Percentage of Change
2006-07	29056	
2007-08	144191	396.25
2008-09	219190	52.01
2009-10	236602	7.94
2010-11	181677	-23.21
2011-12	243817	34.20
2012-13	206826	-15.17
2013-14	27829	-86.54
2014-15	4934	-82.27
2015-16	4872	-1.26
2016-17	6840	40.39
2017-18	7184	5.03
2018-19	7638	6.32
2019-20	8346	9.27
CAGR	-9.15%	

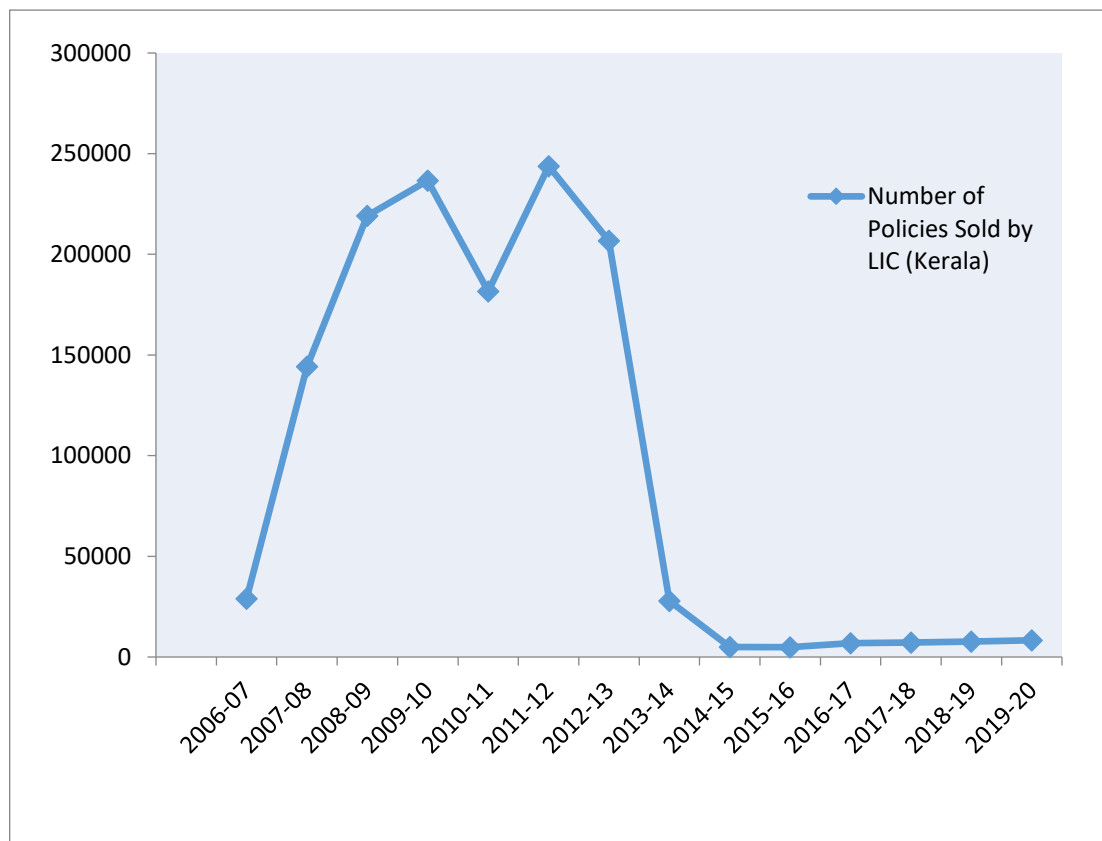
Source: Compiled by the researcher

The Table 4.14 represents the number of insurance policies sold by Life Insurance Corporation (LIC) in the state of Kerala. In 2006-07, LIC sold 29,056 insurance policies in Kerala. There was a significant increase in the number of policies sold in 2007-08, with a growth rate of 396.25%. This indicates a substantial surge in policy sales during that year. From 2008-09 to 2009-10, there was continued growth in the number of policies sold, but the growth rates were comparatively lower at 52.01% and 7.94%, respectively. In 2010-11, there was a notable decrease in the number of policies sold, with a decline of -23.21%. However, the subsequent years from 2011-12 to 2012-13 shows positive growth in policy sales, with growth rates of 34.20%

and -15.17%, respectively. In 2013-14, there was a significant decrease in the number of policies sold, with a decline of -86.54%, indicating a major drop in policy sales during that year. The decline continued in 2014-15 with a percentage change of -82.27%, showing a continued downturn in policy sales. In 2015-16, there was a minor decrease of -1.26% in the number of policies sold. From 2016-17 onwards, there was a positive trend in policy sales, with growth rates of 40.39% in 2016-17, 5.03% in 2017-18, 6.32% in 2018-19, and 9.27% in 2019-20 respectively.

Figure 4.11

Number of Insurance Policies Sold by LIC in Kerala.



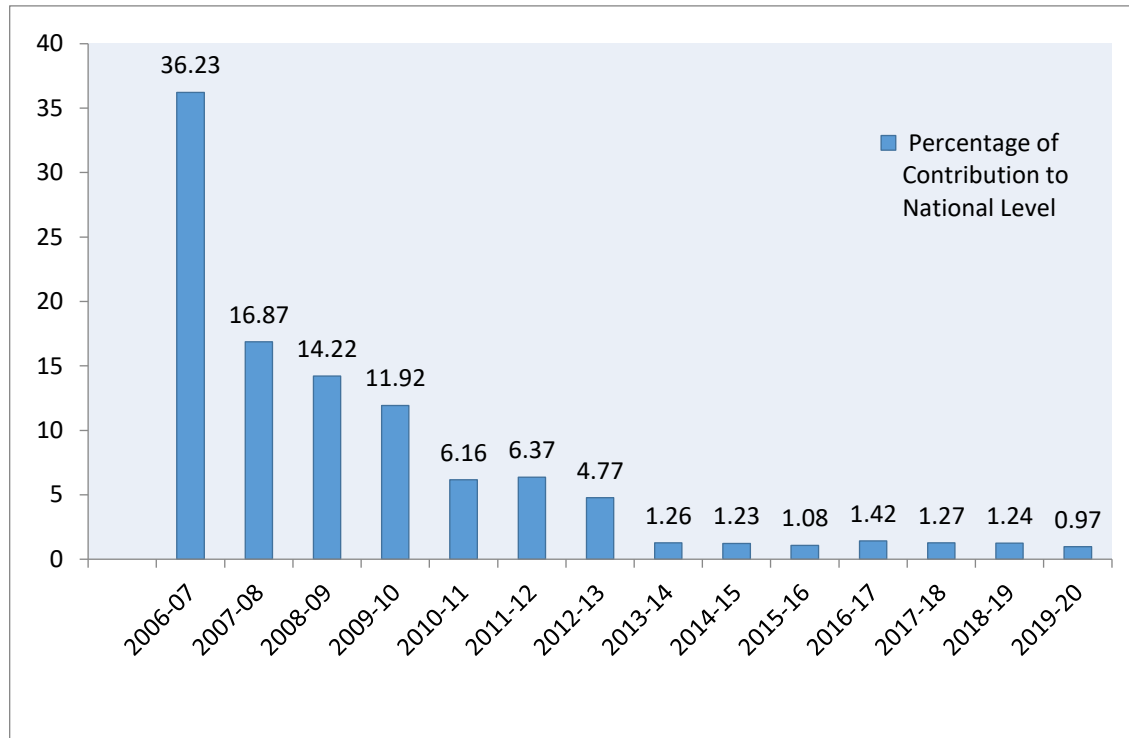
Source: Compiled by the researcher

Table 4.15*Contribution by the State to National Level Microinsurance*

Year	Number of Policies Sold by LIC (India)	Number of Policies Sold by LIC (Kerala)	Percentage of Contribution to National Level
<i>2006-07</i>	80200	29056	36.23%
<i>2007-08</i>	854615	144191	16.87%
<i>2008-09</i>	1541218	219190	14.22%
<i>2009-10</i>	1985145	236602	11.92%
<i>2010-11</i>	2951235	181677	6.16%
<i>2011-12</i>	3826783	243817	6.37%
<i>2012-13</i>	4340235	206826	4.77%
<i>2013-14</i>	2205820	27829	1.26%
<i>2014-15</i>	400341	4934	1.23%
<i>2015-16</i>	452291	4872	1.08%
<i>2016-17</i>	480892	6840	1.42%
<i>2017-18</i>	564541	7184	1.27%
<i>2018-19</i>	617653	7638	1.24%
<i>2019-20</i>	859375	8346	.97%

Source: Compiled by the researcher

The Table 4.15 indicates the percentage of Contribution by the state to the National Level micro insurance over a span of 14 years, from 2006-07 to 2019-20. State contribution to the national level has fluctuated over the years. In 2006-07, it had the highest contribution at 36.23%, Over the next six years (from 2007-08 to 2012-13), the state contribution declined consistently. Starting from 2013-14, the state's contribution appears to stabilize at a relatively low level. In the last four years of the data (2016-17 to 2019-20), the state contribution continued to decline gradually, reaching its lowest point at 0.97% in 2019-20. The data suggests a declining trend in its contribution from 2006-07 to 2019-20. The contribution by the state to national level is presented in the following Figure 4.12

Figure 4.12*Kerala Contribution of Microinsurance to National Level*

Source: Compiled by the researcher

4.14 Conclusion

This chapter analyses the microinsurance status in Indian context as well as state context, compounded annual growth rate was found on different elements of microinsurance business data obtained from IRDA annual reports, IRDA handbooks. From the analysis it is found that trends of microinsurance do not show a consistent growth during the study period, fluctuations occurred in between the years considered for the study. Kerala contribution to national microinsurance was declined year to year, 2021-22 financial year contribution only .97 percentages, this was low percentage of contribution compared to previous years contribution. There is yet the requirement of microinsurance nationwide through states' contribution.

Chapter 5

FINANCIAL CAPABILITY, INSURANCE AWARENESS, AND INFORMAL STRATEGIES: AN ASSESSMENT

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5.1 Introduction

Financial capability refers to an individual's or household's ability to effectively manage their financial resources, make informed financial decisions, and achieve their financial goals. It encompasses a range of knowledge, skills, attitudes, and behaviours related to personal finance and money management. Financial capability begins with having a solid understanding of fundamental financial concepts, such as budgeting, saving, investing, debt management, insurance, and retirement planning. Financially capable individuals know how to make informed decisions. Being able to create and maintain a budget is a crucial aspect of financial capability. This includes tracking income, expenses, and savings goals, and adjusting spending habits as needed to stay within budget.

Financially capable individuals prioritize saving money regularly, whether for short-term goals or long-term objectives. They also understand the importance of building emergency funds to cover unexpected expenses. Some individuals with financial capability are knowledgeable about investing and use this knowledge to build wealth over time. They understand the risks and potential returns associated with different investment options. They engage in financial planning to set clear financial goals and develop strategies to achieve them. Financially capable individuals exhibit responsible financial behaviours, such as avoiding impulsive spending, paying bills on time, and adhering to a well-structured financial plan.

Confidence in one's ability to manage finances and make sound financial decisions is a hallmark of financial capability. It empowers individuals to take control of their financial future. Financial capability is an essential life skill that contributes to

personal financial well-being and economic stability. It empowers individuals to navigate complex financial landscapes, make informed choices, and achieve their financial goals. Educational programs, resources, and access to financial services can help individuals enhance their financial capability

Financial capability and insurance investment are intertwined elements of a holistic approach to personal finance. Financial capability provides the foundation for informed decisions about insurance coverage and investment strategies. These two components work together to help individuals protect their financial well-being, manage risk, and pursue their long-term financial goals. The relationship between financial capability and insurance investment is significant, as it involves the ability of individuals or households to effectively manage their financial resources, make informed investment decisions, and protect themselves financially through insurance coverage.

The primary objective of this study has been to examine the extent of financial capability among microinsurance policyholders in Kerala. The population for the study is made up of bottom of the economic pyramid people who have taken Microinsurance policy provided by Life Insurance Corporation of India. A sample of 325 microinsurance policyholders has been selected from five divisions of Kerala viz. Kozhikode, Thrissur, Ernakulam, Kottayam, Thiruvananthapuram by purposive sampling method. Since the study largely relies on the data provided by these respondents for drawing theoretical conclusions, an analysis of the socio-personal characteristics of the sample is highly relevant. Hence, the first part of this chapter is used to describe the sample characteristics of respondents. The second part of this chapter deals with the microinsurance policyholders' financial capability assessment, the third section evaluates insurance awareness and the last section explores the informal strategies followed by microinsurance policyholders and their relationship with microinsurance investment.

5.2 Personal Profile of Respondents

The relationship between personal profile or demographic variables and insurance investment is significant because these variables can influence an individual's insurance needs, investment goals, risk tolerance, and financial planning strategies. Personal profile and demographic variables play a crucial role in shaping an individual's insurance and investment decisions. Understanding one's unique circumstances based on these variables is essential for developing a comprehensive financial plan that aligns with their goals, risk tolerance, and life stage. Insurance investments should be tailored to the specific needs and characteristics of each household. Data from sample respondents' demographic variables were collected and analysed for an in-depth understanding of sample characteristics, the frequency distribution of sample policyholders was presented in Table 5.1

Table 5.1

Frequency Distribution of Sample Profile Variables

Variable	Levels of Measurement	Observations	Percentage
Gender	Male	143	44
	Female	182	56
Age (In Years)	Between 18 to 25	6	1.85
	Between 26 to 33	64	19.69
	Between 34 to 41	62	19.08
	Between 42 to 49	88	27.08
	50 and Above	105	32.3
Marital Status	Married	281	86.46
	Unmarried	24	7.38
	Divorced	3	0.92
	Widowed	17	5.23
Education	Primary	92	28.31
	High School	137	42.15
	Higher Secondary	76	23.38
	Degree and Above	16	4.92
	No Formal Education	4	1.23

Variable	Levels of Measurement	Observations	Percentage
Occupation	Agriculture & Allied	58	17.8
	Self Employed	38	11.7
	Daily Wage Worker	169	52.0
	Permanent employee	18	5.5
	Temporary employee	42	12.9
Income (In Rupees)	Up to 5000	63	19.3
	Between 5001 to 8000	104	32.0
	Between 8001 to 11000	97	29.8
	Between 11001 to 14000	37	11.4
	14000 and Above	24	7.4
Type of family	Joint Family	108	33.23
	Nuclear Family	217	66.77
Place of Residence	Rural	235	72.3
	Urban	90	27.7
Number of Dependent	Up to Two	45	13.85
	Three to Five	204	62.77
	Six to Eight	63	19.38
	Above Eight	13	4
Membership in Social Group	Member	224	68.92
	Non-member	101	31.08

Source: Primary Data

Table 5.1 shows the profile of the respondents who came under this study. It can be seen that the sample has participation from both genders with female 56 percent (n = 182) and male 44 percent (n = 143).

The age group of 50 and above years dominated the study constituting 32.3 percent of the sample, (n = 105) and the age group of 42 to 49 years constituting 27.08 percent of the sample (n = 88) followed next. Respondents aged 26 to 33 years came next (19.69 percent, n = 64) similarly respondents aged 34 to 41 years have 19.08 percent representation in the sample. Whereas the youngest of the samples selected aged 18 to 25 years came last (1.85 percent, n =6).

The majority of the respondents had a high school education (42.15 percent, n = 137). Followed by primary education (28.31 percent, n= 92). Higher Secondary education comes third (23.38 percent, n = 76), with sample policyholders having Degree and above education only 4.92 percent (n=16). Those who do not have formal education come with the least representation in the sample (1.23 percent, n =4).

Regarding employment status, more than half of the respondents were Daily Wage Workers (52 percent, n =169). Agriculture and allied Employed respondents came next (17.8 percent, n =58). Temporary Employee representation was 12.9 percent (n=42). Self-employed policyholders ranked next (11.7 percent, n = 38) and the least representation came from the permanent employee category (5.5 percent, n = 18).

Of the 325 respondents, 32 percent have a monthly income in the range of Rs.5001 to 8000 (n=104), and 29.8 percent of respondents (n=97) were earning a monthly income in the range of Rs.8001 to Rs.11000. 11.4 percent have a monthly income in the range of Rs.11001 to Rs.14000, and only 7.4 percent of policyholders earn a monthly income of Rs.14000 and above (n=24). Whereas 19.3 percent of respondents (n=63) were earning a monthly income up to Rs.5000.

The data was collected from the respondents have different marital statuses. Most of the respondents are married (86.46 percent n=281). Unmarried policyholder representation was 7.39 percent (n=24). There are 5.23 percent of the policyholders are widowed, and the rest belongs to divorced category among the selected samples for the study.

The respondent's family type was also considered for the study. Among 325 sample respondents, 66.77 percent lives in nuclear family and 33.23 percent of them belong to joint family.

Respondents are classified into four based on the number of dependents at home. The largest group of respondents (62.77 percent) have three to five members in their family. There are 19.38 percent of them have six to eight members in their family.

Up to two-member families come to 13.85 percent and about four percent of families have more than eight members.

Kerala has a high concentration of social groups, including co-operatives, Kudumbashree units, and Ayalkoottam (neighbourhood groups). Social development can be measured by one's membership in these kinds of groups. Based on the study, 68.92% of respondents are members of any social group, while 31.08 percent do not belong to any such group.

5.3 Source of Information

Information about microinsurance, which provides financial protection to low-income individuals, can be obtained from various sources. These sources offer insights into the landscape, benefits, challenges, and developments in the realm of microinsurance. Here are some key sources identified and analysed, the frequency distribution presented in Table 5.2

Table 5.2

Frequency Distribution Regarding Source of Information

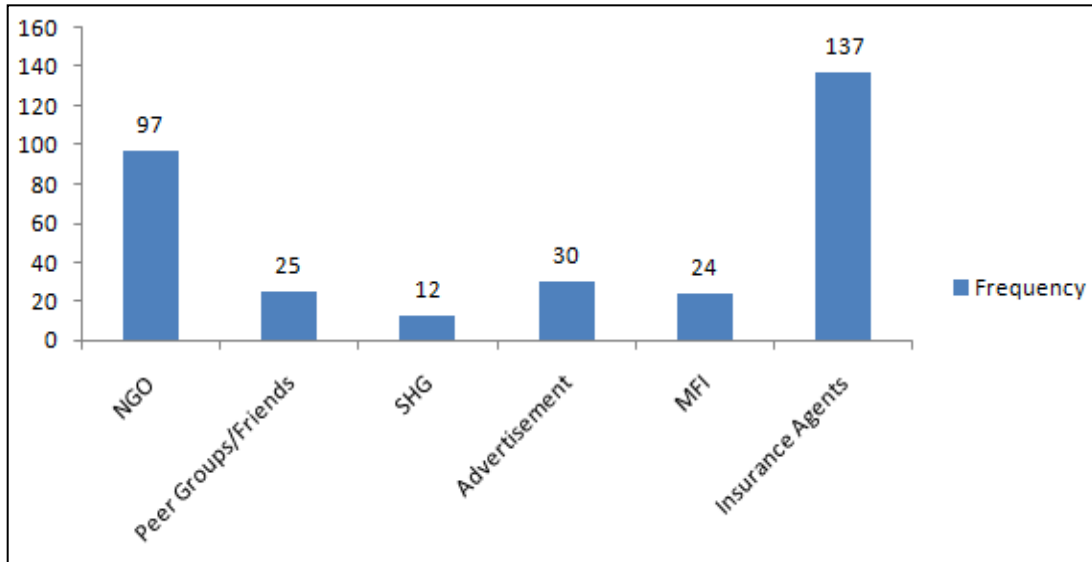
Sources	Frequency	Percentage
NGO	97	29.85
Peer Groups/Friends	25	7.69
SHG	12	3.69
Advertisement	30	9.23
MFI	24	7.39
Insurance Agents	137	42.15
Total	325	100

Source: Primary Data

From the Table 5.2, it can be seen that the majority of the sample respondents (42.15 percent) came to know about micro insurance through microinsurance agents. NGO (29.85 percent), Peer Groups/Friends (7.69 percent), MFI (7.39 percent) and Self-Help Groups- SHGs (3.69 percent) were the next prominent sources from which the respondent's got information about microinsurance. Following Figure 5.1 shows the frequency distribution of different source of information of microinsurance.

Figure 5.1

Source of Information regarding Microinsurance.



Source: Compiled by the researcher

5.4 Premium Payment Channel

Premium payment channels in microinsurance refer to the diverse methods through which policyholders can pay their insurance premiums for microinsurance products. These channels are designed to cater to the specific needs and circumstances of individuals in low-income or underserved communities, offering convenient, accessible, and cost-effective ways to pay their insurance premiums. Most commonly used premium payment channels in microinsurance are analysed in Table 5.3

Table 5.3

Frequency Distribution of Premium Payment Channel

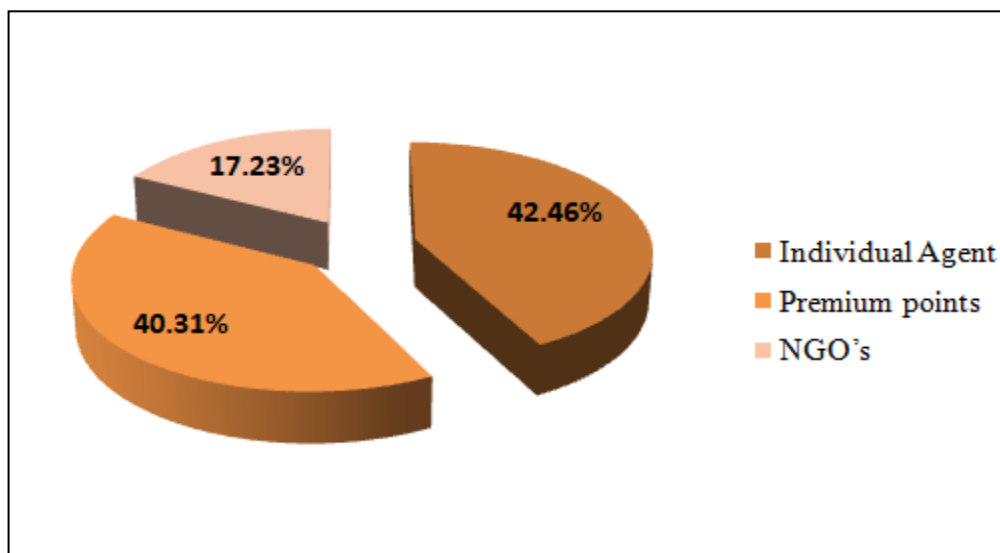
Channel	Frequency	Percentage
Individual Agent	138	42.46
Premium points	131	40.31
NGO's	56	17.23
Total	325	100

Source: Primary Data

LIC of India has been constantly working on widening the premium collection channels across the country. For collecting micro insurance premium, it provides channels such as MI Premium Collection counters (Points), NGOs, individual agents and mobile application. However, the existing system is found inadequate. The overall analysis shows that 42.46 percent of the total respondents pay their premiums through individual agents, 40.31 percent through micro insurance premium points functioning at different locations throughout the state of Kerala and the remaining 17.23 percent pay through NGOs. Figure 5.2 depicts the most common premium payment channels adopted by policyholders in Kerala.

Figure 5.2

Proportion of Premium Payment Channels by Sample Policyholders



Source: Compiled by the researcher

5.5 Mode of Premium Payment

By offering a range of payment methods that cater to the preferences and limitations of their target demographic, microinsurance providers can encourage more individuals to enrol and maintain their insurance coverage. Policyholders' preference of different premium payment methods is analysed and presented in Table 5.4

Table 5.4

Frequency Distribution of Mode of Premium Payment

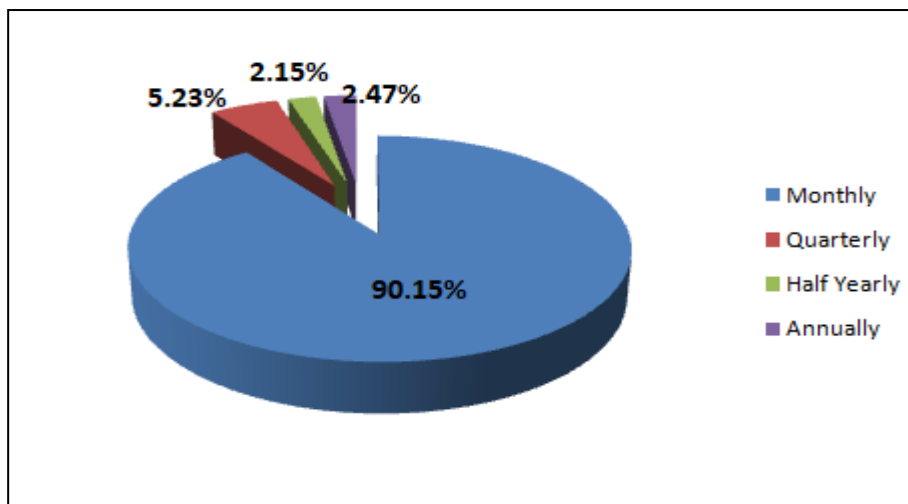
Mode of payment	Frequency	Percentage
Monthly	293	90.15
Quarterly	17	5.23
Half Yearly	7	2.15
Annually	8	2.47
Total	325	100

Source: Primary Data

For payment of premium under micro insurance, different modes such as yearly, half-yearly, quarterly, monthly and single premium are available. A policyholder is free to select any mode depending up on his payment capacity and convenience. It is understood from the Table 5.4 that more than 90 per cent of the respondents have selected monthly mode, while those who opted for half yearly and annually are negligible, graphical representation of premium payment option depicted in Figure 5.3

Figure 5.3

Preference of Premium Payment Option by Sample Policyholders



Source: Compiled by the researcher

5.6 Reason for Microinsurance Policy Purchase

Policyholders opt for microinsurance for several reasons, primarily driven by their specific needs, financial circumstances, and the benefits offered by microinsurance products. Here analysed why policyholders choose Microinsurance products and presented the frequency of different reasons in Table 5.5

Table 5.5

Reason for Taking Microinsurance Policy

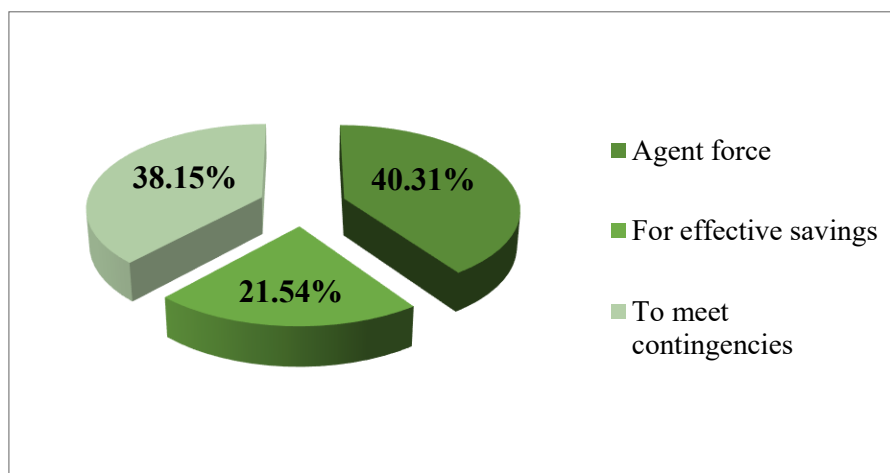
Reasons	Frequency	Percentage
Agent force	131	40.31
For effective savings	70	21.54
To meet contingencies	124	38.15

Source: Primary Data

The overall analysis shows that 40.31 percent of the total respondents purchase Microinsurance policy due to agent's force, 38.15 percent policyholders purchase microinsurance policy for meting contingencies and the rest 21.54 percent policyholders purchase microinsurance policy for effective saving. Figure 5.2 depicts the reasons for purchasing Microinsurance policyholders in Kerala

Figure 5.4

Reason for Taking Microinsurance Policy



Source Compiled by the researcher

5.7 Financial Capability Analysis

To find out the level of financial capability, the researcher used quartiles. Quartiles are the values that divide a list of numerical data into three quarters. The middle part of the three quarters measures the central point of distribution and shows the data that are near the central point. The lower part of the quarters indicates just half information set which comes under the median and the upper part shows the remaining half, which falls over the median. In all, the quartiles depict the distribution or dispersion of the data set. Each element under the financial capability construct is categorized into low, medium, and high with the help of quartiles. The Table 5.6 shows the quartile values under each sub-construct and aggregate of financial capability.

Table 5.6

Quartiles Values of Sub Dimensions of Financial Capability

Quartiles	Financial Knowledge	Financial Attitude	Financial Behaviour	Financial Capability
Q1 (25 Percent)	18	21	16	56
Q2 (50 Percent)	22	24	20	66
Q3 (75 Percent)	25	28	24	75

Source: Primary Data

Table 5.6 describes the quartile values of different sub-constructs used to measure financial capability. In the case of financial knowledge, the first quartile value is 18; the second quartile value is 22, which is the median of financial knowledge and the third quartile value is 25. The values below 18 indicate a low level of financial knowledge. A value that lies between 18 and 25 indicates a moderate level of financial knowledge and a value above 25 indicates a high level of financial knowledge.

For financial attitude, values 21, 24, and 28 are the first quartile, second quartile, and third quartile respectively. If the score is below 21, it indicates that the sample respondent may have a low level of financial attitude. If the score lies between 21

and 28, the sample respondent has a moderate level of financial attitude and a score above 28 indicates that the sample respondent has a high level of financial attitude.

Similarly, in the case of financial behaviour first quartile value is 16, the second quartile value is 20 (median) and the third quartile value is 24. The values below the first quartile (16) indicate a low level of financial behaviour. Whereas a value between 16 and 24 indicates a moderate level of financial behaviour and a value above 24 indicates a high level of financial behaviour among the sample respondents.

To understand the overall financial capability level, the aggregate score of financial knowledge, financial attitude, and financial behaviour are also categorized as low, moderate, and high with the help of quartiles. If the aggregate score is below 56, it indicates a low level of overall financial capability. When the aggregate score lies between 56 and 75, it indicates a moderate level of financial capability, and an aggregate score above 75 indicates a high level of overall financial capability.

5.7.1 Level Classification of Financial Capability Variables

Based on the Quartile values of each sub-construct, sample respondents were categorized into different levels (Low, Moderate, and High), and their frequency distribution along with the percentage of representation in the sample selected under study are also presented in Table 5.7.

Table 5.7

Levels of Categorization of Financial Capability Dimensions

Construct	Levels of Classification		
	Low	Moderate	High
Financial Knowledge	133 (40.9)	98 (30.2)	94 (28.9)
Financial Attitude	97 (29.8)	142 (43.7)	86 (26.5)
Financial Behaviour	92 (28.3)	137 (42.2)	96 (29.5)
Financial Capability	82 (25.2)	161 (49.5)	82 (25.2)

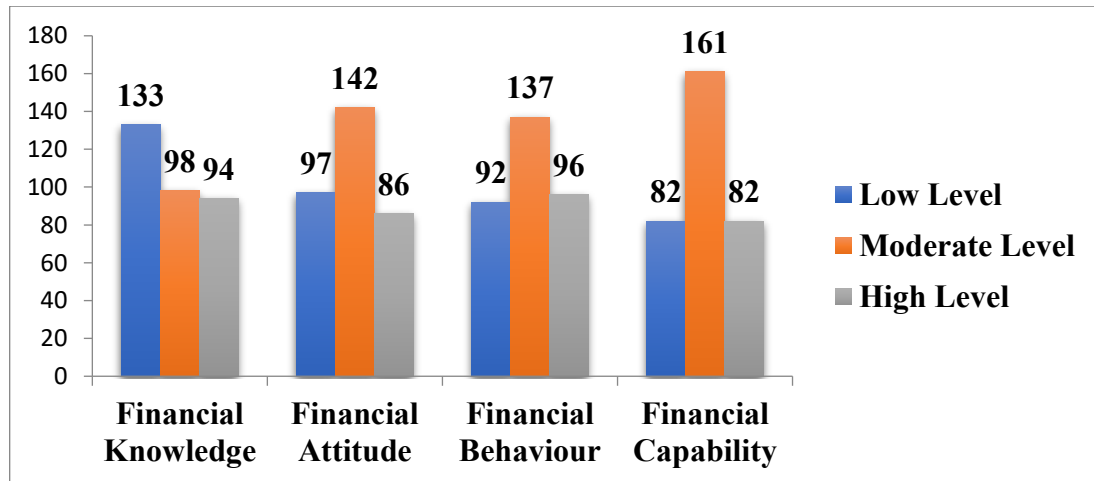
Note: Values in brackets are in percentage

Source: Primary Data

The frequency Table 5.7 reveals that about 50 percent of the policyholders have a moderate level of financial capability and 25.2 percent of sample policyholders have low as well as high levels of financial capability. In the case of financial Knowledge, 40.9 percent of policyholders have with low level of financial Knowledge, 30.2 percent of sample respondents have a moderate level of financial Knowledge and the rest 28.9 percent have a high level of financial knowledge. In the case of Financial Attitude and Financial Behaviour, 43.7 percent and 42.2 percent respectively have moderate levels of financial attitude and behaviour. There are 29.8 percent of sample policyholders have a low-level financial attitude, and only 26.5 percent of policyholders have a high-level financial Attitude. Around 30 percent of the total respondents exhibit both low and high levels of financial behaviour. Figure 5.4 depicts the frequency distribution of each element used to measure the level of financial capability among Microinsurance policyholders.

Figure 5.4

Element-wise Frequency Distribution of Levels of Financial Capability



Source: Compiled by the researcher

5.7.2 Goodness of Fit for Equality of Levels of Financial Capability

In the context of financial capability, the goodness of fittest can be employed to assess whether the distribution of individuals' financial capabilities within a specific population aligns with an expected or hypothesized distribution. It can provide valuable insights into how financial capability is distributed and whether targeted efforts are needed to address disparities. The chi-square test for goodness of fit is a

statistical test used to determine whether observed data or frequencies match an expected distribution or theoretical model. The results are depicted in Table 5.8.

Table 5.8

Chi-Square Test for Goodness of fit of Equality of Levels of Financial Capability of Policyholders

Constructs	Levels of Classification			Chi-Square Test Statistic	P Value
	Low	Moderate	High		
Financial Knowledge	133 (40.9)	98 (30.2)	94 (28.9)	8.498	.014
Financial Attitude	97 (29.8)	142 (43.7)	86 (26.5)	16.252	<.001
Financial Behaviour	92 (28.3)	137 (42.2)	96 (29.5)	11.452	.003
Financial Capability	82 (25.2)	161 (49.5)	82 (25.2)	38.406	<.001

Note: values in brackets are in percentage
Source: Primary Data

From the Table 5.8, it is understood that the test statistic for financial knowledge was 8.498, the financial attitude was 16.252, financial behaviour was 11.452 and financial capability was 38.406 and all the test statistic p-values are significant at a 1 percent level. Since the p-value is less than 0.001, the null hypothesis is rejected at a 1 percent level of significance. Hence, the test concluded that the three constructs of financial capability such as Level of financial knowledge, Level of financial attitude, Level of financial behaviour, and the overall financial capability among policyholders were not equally distributed. Based on percentage, the majority of policyholders belong to a low level of financial knowledge. Both the case of financial attitude and financial behaviour a lion share of the respondents were belongs to the category of moderate-level

5.7.3 Test of Normality of Financial Capability Variables

The normality assumption of the test variables needs to be ensured to determine whether the parametric or non-parametric test will be followed. Normality assumptions were checked with the help of Kolmogorov-Smirnov and Shapiro-Wilk test. Normality test results are given in the Table 5.9.

Table 5.9

Normality Test Results of Financial Capability Variables

Constructs	Kolmogorov-Smirnov ^a			Shapiro-Wilk		
	Statistic	df	P Value	Statistic	df	P Value
Financial Knowledge	.097	325	.000	.974	325	.000
Financial Behaviour	.090	325	.000	.972	325	.000
Financial Attitude	.058	325	.010	.987	325	.004
Financial Capability	.049	325	.006	.982	325	.000

a. Lilliefors Significance Correction

Note. A low p-value suggests a violation of the assumption of normality

Source: Primary Data

Table 5.9 revealed that none of the testing variables are normally distributed as the significance value of each construct was less than 0.05. Hence the null hypothesis for this assumption test “The test distribution is normal” is rejected. Independent sample t-test and Analysis of variance test for non-parametric were applied as variables were not normally distributed.

5.7.4 Assessment of Variation in Financial Capability across Sample Profile Variables

Assessing the variation in financial capability across sample profile variables involves examining how individuals' financial capabilities differ based on various demographic, socioeconomic, or personal characteristics within a given sample. This assessment helps in identifying patterns, disparities, or factors that may influence financial capability. Descriptive statistics and test statistics for financial capability

within each group of the sample profile variables were calculated. These statistics offer a summary of the financial capability of each subgroup. The results of test results are presented along with the descriptive statistics, which will be discussed in the following sections.

5.7.4a Gender and Financial Capability

Both women and men must need a sufficient financial literacy to effectively participate in economic activities and to make appropriate financial decisions. The responses are analysed using a Non-Parametric Independent sample t-test to see whether they vary according to each other. The mean ranks between financial capability variables and respondents' gender are examined in Table 5.10.

H₀: There is no significant difference between financial capability dimensions and gender of the policy holders.

H₁: There is a significant difference in financial capability components among policyholders about their gender.

Table 5.10

Mann-Whitney U Test for Financial Capability Dimensions and Gender of the Policyholders

Constructs	Gender	Median	Mean Ranks	Mann-Whitney U Test Statistic	P Value	Effect Size
Financial Knowledge	Male	20	129.05	8158	<.001	0.373
	Female	23	189.68			
Financial Attitude	Male	24	150.74	11260	.037	0.373
	Female	24	172.63			
Financial Behaviour	Male	19	137.33	9342	<.001	0.373
	Female	22	183.17			
Financial Capability	Male	63	132.79	8693	<.001	0.373
	Female	70.5	186.74			

Source: Primary Data

From the Table 5.10, the test result revealed that there exist significant differences in financial knowledge of male policyholders (Median = 20, n = 143) and female policyholders (Median = 23, n= 182), the test statistics was $U=8158$ and p-value less than 0.001. Since the p-value is less than .05, the test rejects the null hypothesis and hence it supports the alternative hypothesis that there exist significant differences in financial knowledge among male and female policyholders. The effect size (r) is 0.373, which indicates a moderately significant effect according to Cohen's (1988) criteria. It is clear that the male policyholders have less financial knowledge as compared to female policyholders with a mean rank of 129.05 and 189.68, respectively. This may be due to the increased participation of female policyholders in awareness campaigns and financial education programs than male policyholders.

From the result of the analysis, it is evident that there is a difference in male (median=24, n=143) and female (median=24, n=182) policyholders on financial attitude. The test statistics $U=11260$, $p = .037$ which is less than the decision criteria of .05. This means that there is a variation in the financial attitude of male and female policyholders. Mean ranks of financial attitude indicate female (172.63) policyholders had better financial attitude than the male (150.74) policyholders under investigation. The effect size (r) is 0.373, which indicates a moderately significant effect according to Cohen's (1988) criteria.

In the case of financial behaviour, test statistic ($U=9342$, $p = < .01$) were statistically significant as the median score on these indicators of the two independent groups are not equal (male= 19, female=22). Since the p-value is less than .05, the test rejects the null hypothesis and hence it supports the alternative hypothesis that there exist significant differences in financial behaviour among male and female policyholders. The effect size (r) is 0.373, which indicates a moderately significant effect. Observing the mean ranks of financial behaviour among male (137.33) and female (183.17) policyholders, it can be concluded that female policyholders have improved financial behaviour when compared to male policyholders.

5.7.4b Age and Financial Capability

Age has been considered a determinant of Financial Capability. The data were examined with the Kruskal-Wallis H Test to explore variations if any between

financial capability components and the age of policyholders. The influence of age on financial capability variables is depicted in the Table 5.11.

H₀: There is no significant variation between financial capability and the age of Microinsurance policyholders.

H₁: There is significant variation between financial capability and the age of Microinsurance policyholders

Table 5.11

Kruskal-Wallis H test for Financial Capability and the Age of Policyholders

Constructs	Age Group (in years)	Median	Mean Ranks	Kruskal -Wallis H Statistic	df	P Value	Effect Size
Financial Knowledge	Between 18 to 25	24.5	230.17	28.48	4	<.001	0.088
	Between 26 to 33	24.5	212.76				
	Between 34 to 41	22	146.67				
	Between 42 to 49	22	158.93				
	Above 50	20	141.89				
Financial Attitude	Between 18 to 25	27	227.75	8.27	4	.082	
	Between 26 to 33	25	182.82				
	Between 34 to 41	24	157.94				
	Between 42 to 49	24	164.47				
	Above 50	23	148.98				
Financial Behaviour	Between 18 to 25	18.5	142.08	13.23	4	.010	0.041
	Between 26 to 33	23	196.27				
	Between 34 to 41	21	150.65				
	Between 42 to 49	21	169.16				
	Above 50	19	146.05				
Financial Capability	Between 18 to 25	69.5	198.67	21.12	4	<.001	0.065
	Between 26 to 33	73	205.37				
	Between 34 to 41	66	148.86				
	Between 42 to 49	65	165.94				
	Above 50	63	141.02				

Source: Primary Data

From the Table 5.11, it can be observed that there are differences in the mean ranks for financial knowledge, financial attitude, financial behaviour, and overall financial capability concerning the policyholder’s age group implying that they are different in financial capability scores. To check whether this difference is statistically significant or not, the Kruskal-Wallis H test was employed. The result shows significant difference in the mean ranks of all sub-constructs except financial attitude. Financial knowledge is better among the age group of 18 to 25 years, whereas 26 to 33 years had better financial behaviour and overall financial capability. The effect size of the test statistic indicates that very small significant effect among financial knowledge (0.088), financial behaviour (0.041), and overall financial capability (0.065).

Table 5.12

Financial Capability Dimension Post-Hoc Test Pair-Wise Comparison on Age

Sample1	Sample2	Financial Knowledge		Financial Behaviour		Financial Capability	
		Test Statistic	P Value	Test Statistic	P Value	Test Statistic	P Value
Between 18 to 25	Between 26 to 33	-0.283	1.000	1.889	0.669	0.742	0.985
	Between 34 to 41	-3.146	0.171	0.245	1.000	-1.851	0.686
	Between 42 to 49	-2.478	0.402	0.932	0.965	-1.149	0.927
	50 and Above	-3.294	0.136	0.213	1.000	-2.325	0.469
Between 26 to 33	Between 34 to 41	-5.833	<.001	-3.838	0.042	-5.061	0.003
	Between 42 to 49	-4.879	0.005	-2.618	0.344	-3.368	0.120
	50 and Above	-6.565	<.001	-4.662	0.009	-6.032	<.001
Between 34 to 41	Between 42 to 49	1.087	0.940	1.712	0.745	1.496	0.828
	50 and Above	-0.629	0.992	-0.458	0.998	-0.909	0.968
Between 42 to 49	50 and Above	-1.746	0.731	-2.485	0.399	-2.460	0.410

Source: Primary Data

From the post hoc test result Table 5.12, it can be inferred that the age groups between 26 to 33 significantly different in financial knowledge from the age group between 34 to 41, 42 to 49, and “50 and above” years. Further, there is no significant difference is found in financial knowledge among the age groups between 26 to 33 and 18 to 25 years. In the case of financial behaviour among the age groups, between 26 to 33 years age category was significantly different in financial behaviour only from policyholders belonging to the age group between 34 to 41 years. Similarly, between the age groups of 26 to 33 years is significantly different in overall financial capability from between 34 to 41 and “50 and above” years.

5.7.4c Education and Financial Capability

Education is regarded as an important element in financial capability development and it enhances the ability for better decision-making. The Kruskal-Wallis H Test was employed to examine the relationship between education and financial capability. The test results are presented in Table 5.13.

H₀: There is no significant difference in financial capability scores among respondents about their educational level.

H₁: There is significant difference in financial capability scores among respondents about their educational level.

Table 5.13

Kruskal-Wallis H test for Financial Capability and the Educational Level of Policyholders

Constructs	Education	Median	Mean Rank	Kruskal-Wallis H Statistic	P Value	Effect Size
Financial Knowledge	Primary	20	152.93	37.147	<.001	0.115
	High School	21	154.90			
	Higher Secondary	25	171.56			
	Degree and Above	22	217.72			
	No Formal Education	22	132.33			
Financial Attitude	Primary	24	157.16	13.594	.028	0.011
	High School	24	161.15			
	Higher Secondary	25	165.80			
	Degree and Above	23.5	179.81			
	No Formal Education	24	152.92			
Financial Behaviour	Primary	19	141.66	15.158	.004	0.047
	High School	20	162.03			
	Higher Secondary	23	171.59			
	Degree and Above	22.5	193.42			
	No Formal Education	16	98.50			
Financial Capability	Primary	64	137.48	21.882	<.001	0.068
	High School	64	159.05			
	Higher Secondary	73	165.88			
	Degree and Above	68	203.53			
	No Formal Education	62	123.70			

Source: Primary Data

Based on the Kruskal Wallis test result in Table 5.13, it is inferred that the financial capability variables significantly differ in each level of education among the policyholders. All the test statistics of the Kruskal Wallis H test were found significant at a 5 Percent level of significance. Since the p values were less than .05, the null hypothesis formulated for the testing is rejected. This means that the policyholder's financial knowledge, financial attitude, financial behaviour, and overall financial capability vary according to the policyholder's level of education.

Table 5.14

Financial Capability Dimension Post-Hoc Test Pair-Wise Comparison on Education

Sample1	Sample2	Financial knowledge		Financial behaviour		Financial Attitude	
		Test Statistic	P Value	Test Statistic	P Value	Test Statistic	P Value
Primary School	High school	1.2126	0.012	2.313	0.475	1.799	0.709
	Higher Secondary	9.4910	<.001	6.098	<.001	7.886	<.001
	Degree and Above	6.6871	<.001	4.129	0.029	4.859	0.005
	No Formal education	3.2898	0.037	1.331	0.881	1.888	0.669
High school	Higher Secondary	8.2955	<.001	4.344	0.018	5.593	<.001
	Degree and Above	5.5961	<.001	2.946	0.227	3.368	0.120
	No Formal education	2.3931	0.039	0.225	1.000	0.566	0.995
Higher Secondary	Degree and Above	2.0665	0.010	-0.199	1.000	-0.348	0.999
	No Formal education	3.9395	0.043	-2.803	0.275	-3.492	0.028
Degree and Above	No Formal education	3.0823	0.018	-1.963	0.636	2.414	0.031

Source: Primary Data

Post hoc analysis depicted in Table 5.14, the financial knowledge, respondents with primary level of education is significantly different with all other educational

qualifications. Considering the case of financial behaviour and financial attitude, respondents with primary education is different only with respondents having higher secondary education and the educational qualification of degree and above. Respondents having high school level of education is significantly different with all other three educational qualifications (no formal education, higher secondary education and degree and above). With respect to the case of financial behaviour and financial attitude, respondents with high school education are different only with respondents having higher secondary education. Respondents having higher secondary school level of education is significantly different with all other the educational qualifications (no formal education, higher secondary education and degree and above). With respect to the case of financial behaviour and financial attitude, respondents with high school education are different only with respondents having higher secondary education. Finally, the respondent having educational qualification of Degree and above is significantly different with only the no formal education.

5.7.4d Nature of Occupation and Financial Capability

Occupation plays a significant role in determining financial capability, individual financial decisions, habits, and knowledge about managing money are equally important in determining one's financial well-being. The Kruskal-Wallis H Test was used to investigate the relationship between occupation and financial capability. The test results are shown in Table 5.15.

H₀: There is no significant difference in financial capability scores among respondents about their nature of occupation

H₁: There is significant difference in financial capability scores among respondents about their nature of occupation

Table 5.15

Kruskal-Wallis H test for Financial Capability and the Nature of Occupation of Policyholders

Constructs	Education	Median	Mean Rank	Kruskal-Wallis H Statistic	df	P Value	Effect Size
Financial Knowledge	Agriculture & Allied	28	162.63	17.187	4	<.001	0.105
	Self Employed	29.5	198.09				
	Daily Wage Worker	34	153.54				
	Permanent Employee	29	198.39				
	Temporary Employee	27	154.65				
Financial Attitude	Agriculture & Allied	30	160.89	13.534	4	.018	0.011
	Self Employed	34	217.08				
	Daily Wage Worker	36	150.86				
	Permanent Employee	31	203.72				
	Temporary Employee	33	148.37				
Financial Behaviour	Agriculture & Allied	33	147.28	15.198	4	.008	0.037
	Self Employed	31.5	180.88				
	Daily Wage Worker	38	159.38				
	Permanent Employee	31	176.61				
	Temporary Employee	32	177.29				
Financial Capability	Agriculture & Allied	64	147.48	21.582	4	<.001	0.028
	Self Employed	60	169.05				
	Daily Wage Worker	73	175.88				
	Permanent Employee	68	203.53				
	Temporary Employee	62	153.70				

Source: Primary Data

Based on the Kruskal Wallis test results in Table 5.15, it is concluded that the financial capability variables differ significantly in terms of policyholder occupation. All Kruskal Wallis H test statistics were found to be significant at the 5% level. Because the p-values were less than .05, the null hypothesis proposed for testing is rejected. This means that the policyholder's financial knowledge (KW H=17.187; df=4; P Value= <0.001), financial attitude (KW H=13.534; df=4; P Value= 0.018), financial behaviour (KW H=15.198; df=4; P Value= 0.008), and overall financial capability (KW H=21.582; df=4; P Value= <0.001), vary depending on the nature of their occupation. Effect size for all the test statistics shows a small significant difference. Multiple pair wise comparison ensures that, in which group significant differences have. Table 5.16 shows the post hoc test results

Table 5.16

Financial Capability Dimension Post-Hoc Test Pair-Wise Comparison on Nature of Occupation

Sample1	Sample2	Financial Knowledge		Financial Behaviour		Financial Attitude	
		Test Statistic	P Value	Test Statistic	P Value	Test Statistic	P Value
Agriculture & Allied	Self Employed	2.812	0.012	2.542	0.475	1.761	0.709
	Daily Wage Worker	8.691	<.001	6.331	<.001	7.893	<.001
	Permanent Employee	6.385	<.001	4.981	0.021	4.859	0.002
	Temporary Employee	3.889	0.034	1.689	0.881	1.888	0.669
Self Employed	Daily Wage Worker	7.195	<.001	4.755	0.014	5.593	<.001
	Permanent Employee	5.556	<.001	2.916	0.227	3.368	0.120
	Temporary Employee	2.193	0.029	0.295	1.000	0.566	0.995
Daily Wage Worker	Permanent Employee	2.966	0.030	-1.197	1.000	-0.348	0.999
	Temporary Employee	3.032	0.023	2.824	0.025	-3.492	0.028
Permanent Employee	Temporary Employee	3.082	0.016	1.989	0.636	2.414	0.031

Source: Primary Data

Post hoc analysis depicted in Table 5.16, the financial knowledge, respondents with Agriculture and allied is significantly different with all other nature of occupation. Considering the case of financial behaviour and financial attitude, respondent's works in Agriculture and allied sector is different only with respondents working on daily wage basis and those who have permanent job. Financial knowledge of Self-Employed respondents is significantly different with all other three nature of occupation (daily wage worker, permanent employee and temporary employee). With respect to the case of financial behaviour and financial attitude; self-employed respondents are different only with daily wage working respondents. Respondents working on daily wage basis are significantly different with other two nature of occupation (permanent employee and temporary employee). With respect to the case of financial attitude, respondent's works on daily wage basis are different only with temporary employee. Finally, both the case financial knowledge and financial attitude; permanent employee respondents are significantly different with the temporary employee respondents.

5.7.4e Income and Financial Capability

Income is a fundamental driver of financial capability, influencing an individual's ability to meet basic needs, save, invest, manage debt, and achieve financial goals. Additionally, people with varying income levels can exhibit different levels of financial capability based on their financial behaviours and decisions. The difference in education level and financial capability was investigated using the Kruskal-Wallis H Test, and test results are shown in Table 5.17.

H₀: There is no significant difference in financial capability mean ranks among the income level of policyholders.

H₁: There is a significant difference in financial capability mean ranks among the income level of policyholders.

Table 5.17

Kruskal-Wallis H test for Financial Capability and the Income Level of Policyholders

Constructs	Monthly Income (In Rupees)	Median	Mean Rank	Kruskal- Wallis H Statistic	P Value	Effect Size
Financial Knowledge	Up to 5000	20	126.70	63.312	<.001	0.195
	Between 5001 to 8000	20	138.91			
	Between 8001 to 11000	25	225.87			
	Between 11001 to 14000	24.5	220.05			
	14000 and Above	22	171.79			
Financial Attitude	Up to 5000	24	151.08	4.991	.288	Insigni- ficant
	Between 5001 to 8000	25.5	160.00			
	Between 8001 to 11000	25	182.40			
	Between 11001 to 14000	25	173.17			
	14000 and Above	24	158.81			
Financial Behaviour	Up to 5000	18.5	136.18	23.216	<.001	0.072
	Between 5001 to 8000	19	156.30			
	Between 8001 to 11000	23	200.69			
	Between 11001 to 14000	22.5	195.62			
	14000 and Above	22	157.81			
Financial Capability	Up to 5000	63	132.25	35.256	<.001	0.109
	Between 5001 to 8000	63.5	151.22			
	Between 8001 to 11000	73	211.69			
	Between 11001 to 14000	73	200.80			
	14000 and Above	66.5	159.02			

Source: Primary Data

The test showed that the difference in financial knowledge across the income segments (Mean rank of 126.70 for Up to 5000, 138.91 for between 5001 to 8000 income categories, 225.87 for between 8001 to 11000 income group, 220.05 for between 11001 to 14000 income group and 171.79 for 14000 and above income group) are statistically significant ($p = <.001$). Whereas data do not provide evidence to reject the null hypothesis, that there is no difference in financial attitude across various income groups, since P Value <0.05 (0.288). For financial capability variables such as financial behaviour, the test found statistically significant variation across different income levels. The test statistic for financial behaviour is 23.216 which is significant (P Value = $<.001$) at a 5 percent level of significance. While looking into overall financial capability, there exists statistically significant variation across income groups. Since the P Value is less than .05 the null hypothesis formulated for testing, there is no significant variation across income groups, is rejected. It can thus be concluded that all the significant financial capability variables show a small effect size on test statistics.

Pair-wise comparison has been made to find out which income groups significantly differ in financial capability variables. Table 5.18 shows post hoc test results while comparing groups.

Table 5.18

Financial Capability Dimension Post-Hoc Test Pair-Wise Comparison on Income

Sample1	Sample2	Financial Knowledge		Financial Behaviour		Financial Capability	
		Test Statistic	P Value	Test Statistic	P Value	Test Statistic	P Value
Up to 5000	Between 5001 to 8000	1.2126	0.912	2.313	0.475	1.799	0.709
	Between 8001 to 11000	9.4910	<.001	6.098	<.001	7.886	<.001
	Between 11001 to 14000	6.6871	<.001	4.129	0.029	4.859	0.005
	14000 and Above	3.2898	0.137	1.331	0.881	1.888	0.669

Sample1	Sample2	Financial Knowledge		Financial Behaviour		Financial Capability	
		Test Statistic	P Value	Test Statistic	P Value	Test Statistic	P Value
	Between 8001 to 11000	8.2955	<.001	4.344	0.018	5.593	<.001
Between 5001 to 8000	Between 11001 to 14000	5.5961	<.001	2.946	0.227	3.368	0.120
	14000 and Above	2.3931	0.439	0.225	1.000	0.566	0.995
Between 8001 to 11000	Between 11001 to 14000	-0.0665	1.000	-0.199	1.000	-0.348	0.999
	14000 and Above	-3.9395	0.043	-2.803	0.275	-3.492	0.098
Between 11001 to 14000	14000 and Above	-3.0823	0.188	-1.963	0.636	-2.414	0.430

Source: Primary Data

As per the post hoc test, significant pair-wise differences are seen between the mean ranks of the categories: Up to Rs. 5000, the category of between Rs. 8001 to Rs. 11000, and between Rs. 11001 to Rs. 14000 income categories. Policyholder belongs to between Rs. 5001 to Rs. 8000 income levels significantly different from the income category of Rs.8001 to Rs.11000 and between Rs.8001 to 11000. Moreover, policyholders who have income 14000 and above statistically differ from the income group between Rs.8001 to 11000 concerning financial Knowledge. Table 5.18 also reflects a Post Hoc comparison among the income categories of policyholders with the mean ranks of financial behaviour. It is revealed that a significant pair-wise difference can be seen between those income level up to Rs.5000 and between Rs.8001 to 11000. Also, the same can be reflected in the income group between Rs.11000 to 14000. The income category between Rs.5001 to 8000 is significantly different with the income group of between Rs.8001 to 11000. While looking into the multiple comparisons of income groups about overall financial capability mean ranks show similar results as in the case of financial Behaviour.

5.7.4f Marital Status and Financial Capability

Married people enjoy considerable economic benefits that accumulate over the life course. The financial capability variables are examined about the marital status of the policyholders to elicit differences if any between the marital statuses using the Kruskal Wallis H test.

H₀: There is no significant difference in financial capability variables among the Marital Status of respondents.

H₁: There is a significant difference in financial capability variables among the Marital Status of respondents.

Table 5.19

Kruskal-Wallis H Test for Financial Capability and the Marital Status of Policyholders

Construct	Marital Status	Median	Mean Rank	Kruskal-Wallis H Statistic	df	P Value
Financial Knowledge	Married	22	165.50	3.261	3	.353
	Unmarried	20	129.90			
	Divorced	23	160.33			
	Widowed	22	168.82			
Financial Attitude	Married	24	164.82	1.491	3	.684
	Unmarried	24	141.00			
	Divorced	24	151.33			
	Widowed	24	166.00			
Financial Behaviour	Married	20	166.08	5.208	3	.157
	Unmarried	18	129.00			
	Divorced	16	94.67			
	Widowed	22	172.15			
Financial Capability	Married	66	166.29	4.843	3	.184
	Unmarried	64.5	126.21			
	Divorced	55	116.00			
	Widowed	67	168.79			

Source: Primary Data

Table 5.19 illustrates the Kruskal-Wallis H test result. It is inferred that the difference in married, unmarried, divorced and widowed policyholders regarding financial knowledge (Chi-Square=3.261; df=3; P Value= 0.353), financial attitude (Chi-Square=1.491; df=3; P Value=0.684), financial behaviour (Chi-Square=5.208; df=3; P Value= 0.157), and overall financial capability (Chi-Square=4.843; df=3; P Value= 0.184) were not statistically significant. As the p-value is greater than 0.05, the responses do not provide any evidence of variation between the median score of Married, Unmarried, Divorced, and Widowed Policyholders on these indicators. The test result concludes that financial capability variables do not vary with the marital status of the policyholders.

5.7.4g Type of Family and Financial Capability

The type of family of family can be important factors that contribute to the financial capability of an individual. The influence of the type of family is examined here.

H₀: There is no significant difference between financial capability variables and the type of Family.

H₁: There is a significant difference between financial capability variables and the type of Family.

Table 5.20

Mann-Whitney U Test for Financial Capability Dimensions and Family Type of the Policyholders

Constructs	Type of Family	Median	Mean Rank	Mann-Whitney U Test statistic	P Value
Financial Knowledge	Joint Family	22	174.08	10521.000	.133
	Nuclear Family	22	157.48		
Financial Attitude	Joint Family	24	160.63	11461.500	.747
	Nuclear Family	24	164.18		
Financial Behaviour	Joint Family	21.5	174.37	10490.500	.123
	Nuclear Family	20	157.34		
Financial Capability	Joint Family	68	170.54	10904.000	.308
	Nuclear Family	65	159.25		

Source: Primary Data

From the Table, 5.20 the Mann-Whitney U test result revealed that there were no significant differences in financial knowledge, financial attitude, financial behaviour, and overall financial capability of policyholders belonging to the joint family as well as a nuclear family. Since the p-value is greater than .05, the test failed to reject the null hypothesis and hence it retains the null hypothesis that there are no significant differences in financial capability variables among policyholders who belong to joint family and nuclear family.

5.7.4h Number of Dependent and Financial Capability

The number of dependents can have a significant impact on a person's financial situation. More dependents typically mean higher financial responsibilities, as there are more individuals relying on the person for support. To assess someone's overall financial situation, you would need to consider both the number of dependents and their financial capability. Someone with a larger number of dependents may face increased financial challenges, but their financial capability, such as effective budgeting and planning, can also play a crucial role in determining their overall financial well-being. Number of dependent and financial capability of policyholders analysed here.

H₀: There is no significant difference in financial capability variables among the number of dependents.

H₁: There is a significant difference in financial capability variables among the number of dependents.

Table 5.21

Kruskal-Wallis H Test for Financial Capability and the Number Dependents

Constructs	Number of dependents	Median	Mean Rank	Kruskal-Wallis H Statistic	df	P Value	Effect Size
Financial Knowledge	Up to 2	22	146.90	18.422	3	<.001	0.057
	3 to 5	22	179.55				
	6 to 8	19	125.90				
	Above 8	21	138.73				
Financial Attitude	Up to 2	24	154.68	2.665	3	.446	Insignificant
	3 to 5	24	169.02				
	6 to 8	23	148.75				
	Above 8	25	166.42				
Financial Behaviour	Up to 2	21	144.47	12.300	3	.006	0.038
	3 to 5	21	176.47				
	6 to 8	18	142.37				
	Above 8	16	115.77				
Financial Capability	Up to 2	66	144.13	14.818	3	.002	0.046
	3 to 5	68	178.25				
	6 to 8	62	133.38				
	Above 8	61	132.58				

Source: Primary Data

Table 5.21 shows the Kruskal-Wallis test results. The asymptotic significance value for financial knowledge is below 0.001, financial attitude is .446, financial behaviour is .006 and overall financial capability is .002. Since it is smaller than 0.05 (except for financial attitude), the test revealed that there were significant differences in their financial knowledge, financial behaviour, and overall financial

capability. It means that the policyholder's financial knowledge, financial behaviour, and overall financial capability vary based on the number of dependents in the family. Data do not provide evidence of variation in the financial attitude when the number of dependents varies. Effect sizes indicate very small significant differences in units of analysis. Thus, it is found that there are significant differences between the group as a whole, as there are four categories used to evaluate the difference in financial capability and its pair wise comparison has been made to find out which groups are significantly different in financial capability variables. Table 5.22 shows a significant difference while comparing groups.

Table 5.22

Financial Capability Dimension Post-Hoc Test Pair-Wise Comparison on Number of Dependent

Sample1	Sample2	Financial Knowledge		Financial Behaviour		Financial Capability	
		Test Statistic	P Value	Test Statistic	P Value	Test Statistic	P Value
Up to 2	3 to 5	-2.115	.207	.931	.352	-.449	.653
	6 to 8	1.147	.251	.114	.909	1.147	.251
	Above 8	.277	.782	2.521	.012	3.970	<.001
3 to 5	6 to 8	3.970	<.001	.971	.331	-.227	.782
	Above8	1.522	.128	2.262	.024	1.522	.128
6 to 8	Above8	-.449	.653	-2.071	.038	-2.125	.034

Source: Primary Data

From the post-hoc pair-wise comparison Table 5.22, it can be seen that policyholders having 3 to 5 dependents and 6 to 8 dependents in the family significantly differ in their financial knowledge. Whereas policyholders having more than 8 dependents significantly differ from policyholders having Up to 2 dependents, 3 to 5 dependents and 6 to 8 dependents in case of financial behaviour. Similarly, policyholders having more than 8 dependents significantly different from policyholders having Up to 2 dependents and 6 to 8 dependents in the case of overall financial capability. No other groups significantly different from each other.

5.7.4i Area of Residence and Financial Capability

The data is analysed based on the Area of Residence of the policyholder to detect the difference if any, between the financial capabilities of policyholders from rural and urban areas. About 72.31 percent of the respondents belong to rural areas and 27.69 percent are urban resident policyholders.

H₀: There is no significant difference between financial capability and the residential status of the respondents.

H₁: There is a significant difference in financial capability and the residential status of the respondents.

The variation in the area of residence on financial capability variables is examined by using the Mann-Whitney U test. Mean ranks and test results are presented in the Table 5.23.

Table 5.23

Mann-Whitney U Test for Financial Capability and Residential Status of the Policyholders

Constructs	Place of Residence	Median	Mean Rank	Mann-Whitney U Test Statistic	P Value	Effect Size
Financial Knowledge	Rural	21	154.39	8551.000	.007	.022
	Urban	23	185.49			
Financial Attitude	Rural	24	162.03	10347.000	.763	
	Urban	24	165.53			
Financial Behaviour	Rural	20	160.27	9932.500	.396	Insignificant
	Urban	21	170.14			
Financial Capability	Rural	65	158.51	9519.500	.164	
	Urban	68.5	174.73			

Source: Primary Data

The Table 5.23 shows Mann-Whitney U test results (U=8551; P Value= .007; Effect size= .022) which leads to the conclusion that there is a significant variation in the financial knowledge of policyholders residing in rural and urban areas. The effect size of the test reveals a small deviation in the financial knowledge among rural policyholders as well as urban policyholders. Since the p-value is greater than .05, the test failed to reject the null hypothesis that the financial capability variables other than financial knowledge of policyholders who are living in rural and urban areas are not significantly different. The values of tests are: financial attitude U=10347, P Value=.763; financial behaviour U=9932.500, P Value=.39; and overall financial capability U= 9519.500, P Value= .164.

5.7.4j Membership in Social Group and Financial Capability

A social group consists of two or more people who regularly interact based on mutual expectations and who share a common identity. An individual may or may not belong to many types of social groups: families, peer groups, our workplaces, the clubs and organizations to which we belong, and so on. The financial capability variables are examined about the policyholder's membership in the social group using the Mann-Whitney U test.

H₀: There is no significant difference between financial capability and mean ranks of policyholders about their Membership in Social Groups.

H₁: There is a significant difference between financial capability and mean ranks of policyholders about their Membership in Social Groups.

Table 5.24

Mann-Whitney U Test for Financial Capability and Membership in Social Groups

Constructs	Membership in Social Group	Median	Mean Rank	Mann-Whitney U Test Statistic	P Value	Effect Size
Financial Knowledge	Member	24	195.54	7339.000	<.001	0.042
	Non-Member	21	124.09			
Financial Attitude	Member	25	170.06	11848.500	.038	0.078
	Non-Member	22	154.56			
Financial Behaviour	Member	25	181.50	9823.500	<.001	0.056
	Non-Member	21	140.88			
Financial Capability	Member	69	186.04	9020.500	.002	0.079
	Non-Member	62.5	135.45			

Source: Primary Data

Based on Membership in Social Groups, it is clear from the Table 5.24, policyholders who are involved in social groups are more financially capable as compared to those who are not. The mean ranks of financial capability variables about membership in social groups reveals that members belonging to any kind of social group have scored more than the mean ranks of those who are not a member of any social group. From the table it can be seen that Mann-Whitney U test statistic values are significant at a 5 Percent level for financial capability variables. Hence the null hypothesis ‘there is no variability between members and non-members of social groups and financial capability variables (financial knowledge, financial attitude, financial behaviour) is rejected. Thus, it can be concluded that the financial capability variables differ between members and non-members of social groups. Effect size shows a small deviation in financial capability and its dimensions.

5.7.5 Relationship between Overall Financial Capability and its Dimensions

To understand the relationship between financial capability and its sub-variables, a test of correlation has been carried out after satisfying linearity and normality.

H₀: There is no significant relationship between overall financial capability and financial knowledge, financial attitude, or financial behaviour.

H₁: There is a significant relationship between overall financial capability and financial knowledge, financial attitude, or financial behaviour.

Table 5.25*Correlation of Overall Financial Capability and its Dimension*

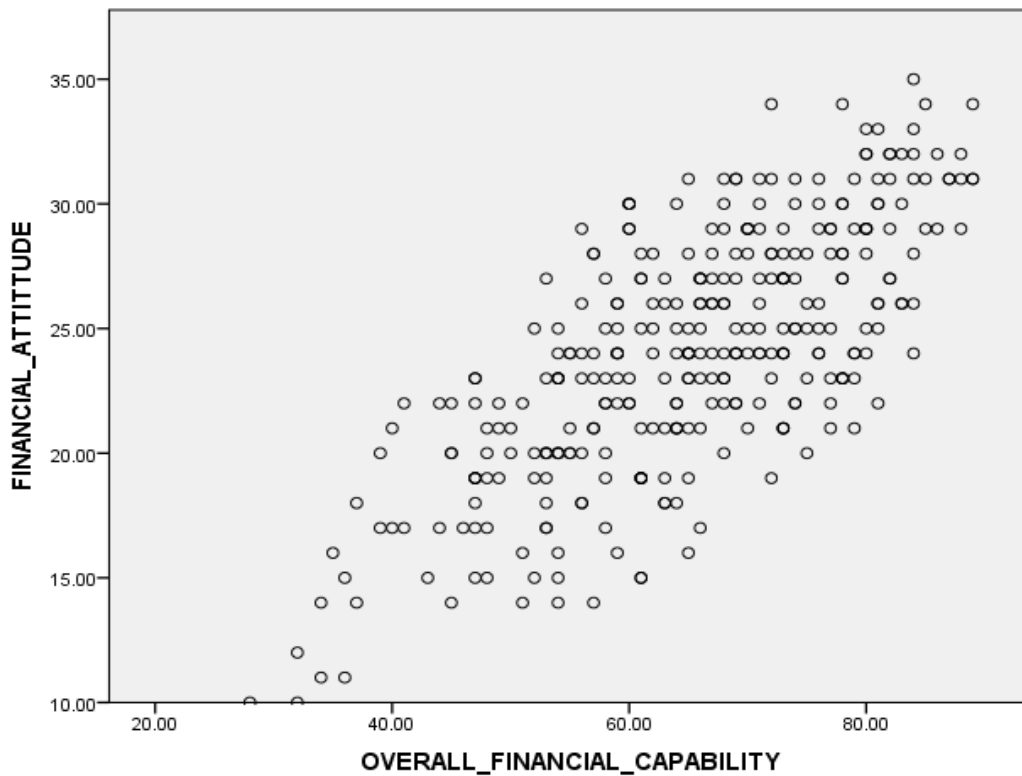
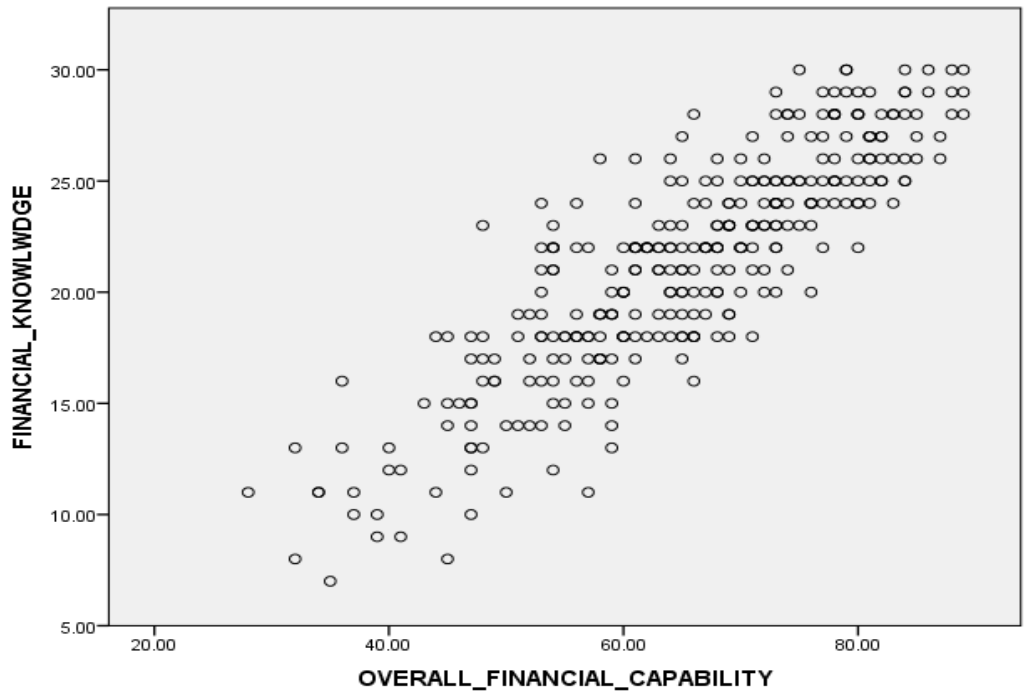
	Spearman's Rho	Financial Knowledge
Overall Financial Capability	Correlation Coefficient	.865**
	Sig. (2-Tailed)	.000
	N	325
	Spearman's Rho	Financial Attitude
Overall Financial Capability	Correlation Coefficient	.700**
	Sig. (2-Tailed)	.000
	N	325
	Spearman's Rho	Financial Behaviour
Overall Financial Capability	Correlation Coefficient	.856**
	Sig. (2-Tailed)	.000
	N	325

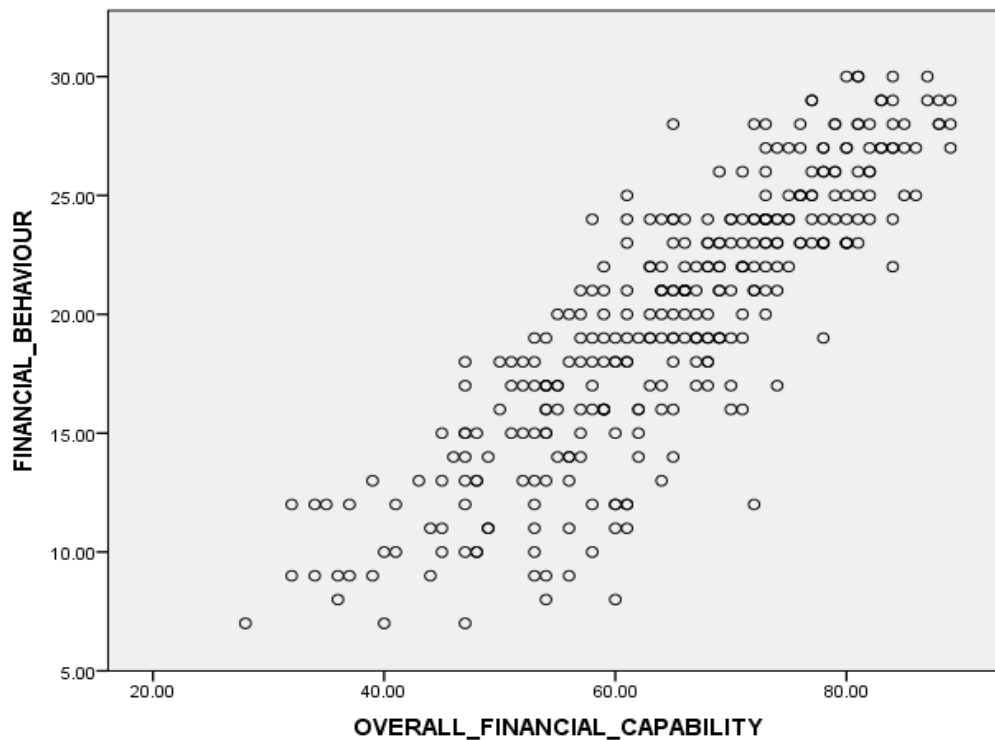
Source: Primary Data

From the correlation result, it is observed that the financial capability dimension had a strong positive correlation with overall financial capability. Since the p-value is less than .05, the test rejects the null hypothesis that there is no significant relationship between overall financial capability and financial knowledge, financial attitude, and financial behaviour. Spearman's correlation coefficient (r_s) between financial knowledge and overall financial capability is 0.865, between financial attitude and overall financial capability, is .700, and between financial behaviour and overall financial capability is .856 respectively. All the Spearman's correlation coefficient (r_s) is found to be statistically significant at a 1Percent level. Hence study concludes that financial capability dimensions and overall financial capability have a strong positive correlation. Higher Rho coefficients denote a stronger magnitude of the relationship between variables. Scatter Plots of Financial Capability Variables are depicted in Figure 5.5

Figure 5.5

Scatter Plots of Financial Capability Variables





5.8 Insurance Awareness Level

Insurance awareness plays a pivotal role in influencing Microinsurance investment decisions among individuals, especially those belonging to low-income or underserved communities. The level of awareness regarding insurance products, including microinsurance, significantly impacts people's perception, understanding, and willingness to invest in such financial protection schemes. Greater awareness about insurance, its concepts, and the risks it covers helps the individuals to comprehend the potential benefits of Microinsurance. This understanding allows them to assess how these products can mitigate risks associated with life, thereby encouraging investment.

On a five-point scale, the sample respondents were asked to state their awareness regarding different aspects of insurance service. The five-point scale ranges from 1 to 5, where 1 represents 'strongly disagree' and 5 represents 'strongly agree'. Thus, the study considers the respondents' perception of their awareness on insurance services, rather than measuring awareness using an objective scale. The total

awareness score is calculated by adding the individual scores of each item. Thus, the maximum score can be 75 (15 * 5), and the minimum score can be 15 (15 * 1). After calculating the awareness score, outliers are removed using a Box plot. Only two cases were removed, and the rest were retained for further analysis. The respondents are classified into those with low levels of awareness, moderate levels of awareness, and high levels of awareness.

5.8.1 Level Classification of Insurance Awareness

To find out the level of insurance awareness, the researcher used quartiles. Quartiles are the values that divide a list of numerical data into three quarters. The middle part of the three quarters measures the central point of distribution and shows the data that are near the central point. The lower part of the quarters indicates just half information which comes under the median and the upper part shows the remaining half, which falls over the median. Overall, the quartiles depict the distribution or dispersion of the data set. For each element under the financial capability construct, three categories: low, medium, and high were made with the help of quartiles. The Table 5.26 shows the quartile values used to classify the level of awareness among policyholders.

Table 5.26

Benchmark Used as Quartiles Values for Levels Identification

Quartiles	Q1 (25 Percent)	Q2 (50 Percent)	Q3 (75 Percent)
Insurance Awareness	44	48	53

Source: Primary Data

To understand the insurance awareness level, the aggregate score was categorized as Low, Moderate, and High with the help of the above-mentioned quartile values. If the aggregate score falls below 44, it would indicate a Low level of insurance awareness. If the aggregate score lies between 44 and 53, it would indicate a Moderate Level of insurance awareness and an aggregate score above 53 would indicate that the respondent possesses High level of insurance awareness. Based on

the Quartile values of the insurance awareness construct, sample respondents were categorized into different levels (Low, Moderate, and High), and their frequency distribution along with the percentage of representation in the sample selected under study are presented below in Table 5.27.

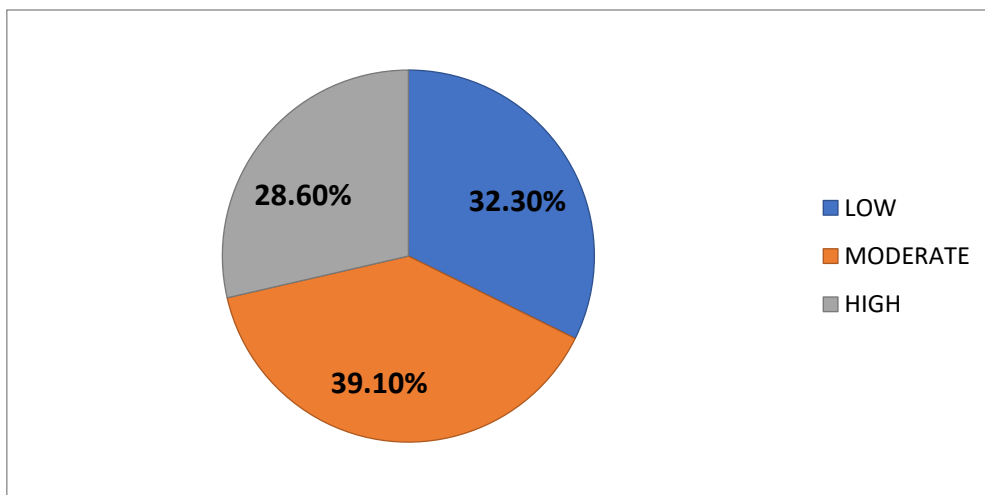
Table 5.27
Frequency distribution of Insurance Awareness level

Levels of Classification	Frequency	Percentage
Low	105	32.3
Moderate	127	39.1
High	93	28.6
Total	325	100.0

Source: Primary Data

The frequency Table 5.27 revealed that 32.3 percent of policyholders have low level of insurance awareness, 39.1 percent of sample respondents have a moderate level of insurance awareness and the rest of the 28.6 percent have a high level of insurance awareness. Levels of insurance awareness are also depicted in the following Figure 5.6

Figure 5.6
Insurance Awareness Levels (in Percentage)



Source: Compiled by the researcher

Wilcoxon Signed Rank test was employed to test the awareness levels of policyholders towards insurance, The test results are portrayed in Table 5.28

H₀: Insurance awareness of Policyholder’s is equal to the median

Table 5.28

Wilcoxon Signed Rank Test of Insurance Awareness

	Median	N	Test statistic	P value
Insurance Awareness	48	325	20776.000	.901

Source: Primary Data

From the Table 5.28, it can be inferred that the p-value of the test statistic is 0.901 which is greater than the significance level of 5 percent. Since the p-value is greater than 0.05, the test retains the null hypothesis and concludes that the policyholder’s insurance awareness does not significantly differ from the median, which means that the policyholder’s insurance awareness is equal to the average. The hypothesized median and observed median in Wilcoxon Signed Rank Test are presented in the Figure 5.7.

Figure 5.7

One Sample Wilcoxon Signed Rank Test Plot

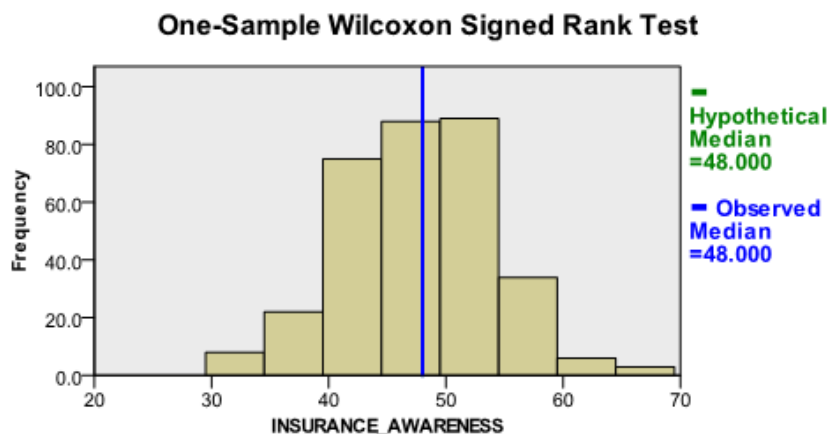


Table 5.29*Chi-Square Test for Goodness of Fit of Equality of Levels of Insurance Awareness*

Levels of Insurance Awareness	Frequency	Percent	Chi-Square Statistic	P Value
Low	105	32.3 Percent	5.489	.044
Moderate	127	39.1 Percent		
High	93	28.6 Percent		
Total	325	100 Percent		

Source: Primary Data

Since the p-value is less than 0.05, the null hypothesis is rejected at a 5 Percent level of significance. Hence the test concluded that the levels of insurance awareness among policyholders are not equally distributed. Based on percentage, the majority of employees belong to the Moderate level (39.1 percent).

5.8.2 Association of Levels of Insurance Awareness and Demographic Profile Variables

The Microinsurance policyholder's level of awareness may vary, and socioeconomic factors may influence it. The current study examined the association of Awareness levels based on gender, age group, educational qualifications, occupation status, monthly income, marital status, place of residence, family type, and number of dependents of the respondent. The Chi-Square test of independence is used in the analysis. Furthermore, Cramér's V coefficient is employed to assess the effect of the magnitude of the association between variables (H.-Y. Kim, 2017). The following hypotheses are developed and tested. Tables 5.30 and 5.31 summarise the findings.

H₀: There is no significant association between socioeconomic variables (gender, age group, educational qualifications, occupation status, monthly income, marital status, place of residence, family type, and number of dependents) and policyholder's awareness level regarding insurance

H₁: There is a significant association between socioeconomic variables (gender, age group, educational qualifications, occupation status, monthly income, marital status, place of residence, family type, number of dependents) and policyholder's awareness level regarding insurance

Table 5.30

Association between Socio-Economic Variables and Levels of Insurance Awareness

Variables	Categories	Observed Frequencies	Chi-Square Statistics	df	P Value
Gender	Male	143	6.258	2	<.001
	Female	182			
	Total	325			
Age (In Years)	Between 18 to 25	6	21.100	8	.007
	Between 26 to 33	64			
	Between 34 to 41	62			
	Between 42 to 49	88			
	50 and Above	105			
	Total	325			
Education	Primary School	92	15.537	8	.019
	High School	137			
	Higher Secondary	75			
	Degree and Above	16			
	No Formal Education	5			
	Total	325			
Income (In Rupees)	Up to 5000	100	11.240	8	.018
	Between 5001 to 8000	104			
	Between 8001 to 11000	67			
	Between 11001 to 14000	30			
	14000 and Above	24			
	Total	325			
Occupation	Agriculture and Allied	58	17.167	8	.019
	Self Employed	38			
	Daily Wage Worker	169			
	Permanent Employee	18			
	Temporary Employee	42			
	Total	325			
Marital Status	Married	281	12.508	6	.052
	Unmarried	24			
	Divorced	3			
	Widowed	17			
	Total	325			

Variables	Categories	Observed Frequencies	Chi-Square Statistics	df	P Value
Place of Residence	Rural	235	14.338	2	.001
	Urban	90			
	Total	325			
Type of family	Joint Family	108	.269	2	.874
	Nuclear Family	217			
	Total	325			
Number of Dependent	Up to Two	45	11.764	6	.067
	Three to Five	204			
	Six to Eight	63			
	Above Eight	13			
	Total	325			
Membership in Social Group	Member	224	15.239	2	.009
	Non-member	101			
	Total	325			

Source: Primary Data

Table 5.31

Cramér's V Co-efficient and Effect Size

Variables	Cramér's V	df	P Value	Effect Size
Gender	0.173	2	<.001	Small to Medium effect
Age Group	0.104	8	.007	Small to Medium effect
Education	0.271	8	.019	Medium to Large effect
Income	0.123	8	.018	Small to Medium effect
Occupation	0.122	8	.019	Small to Medium effect
Marital Status	0.039	6	.052	Insignificant
Place of Residence	0.210	2	.001	Medium to Large effect
Type of Family	0.029	2	.874	Insignificant
Number of Dependent	0.190	6	.067	Insignificant
Membership in social group	0.281	2	.008	Medium to Large effect

Source: Primary Data

The results revealed a significant association between Gender, Age group, education, Occupation status, Monthly income and Place of residence, and

respondent's awareness level on insurance. This is evident because the p-value for the chi-square test statistic of these variables was less than the level of significance $\alpha = 0.05$. Since the p-value is less than the alpha value, the test rejects the formulated null hypothesis and accepts the research hypothesis that "there is an association of demographic variables (gender, age group, education, Occupation status, monthly income, place of residence and membership in social group) and level of insurance awareness. Of these, education, place of residence and membership in social groups has a medium to large effect, and others have only a small to medium effect on the insurance awareness level. Marital status, type of family, and number of dependents showed insignificant association on the level of insurance awareness.

5.9 Informal Strategies Analysis

Different kinds of informal risk-mitigating strategies were adopted by policyholders other than microinsurance. To evaluate respondents' rankings for non-microinsurance Investment informal risk management strategies, the Garrett Ranking Technique is used. Based on the importance of each choice, this technique takes into account the ranks given by the policyholders by assigning rank 1 to the most important informal strategy and rank 10 to the least important. The respondents were asked to assign the rank and then the frequencies of these ranks were converted into scores with the help of a Garret Table.

The procedure includes converting the ranks to percentage positions and Garrett's scores. The Garrett's scores are then averaged over various choices to find out the order and magnitude of importance of the choices to the overall respondents. To find out the garret score about percent position following formula was used.

$$\text{Percent Position} = \frac{100(R_{ij} - 0.5)}{N_j}$$

R_{ij} = Rank gave for the i^{th} variable by the j^{th} respondent

N_j = Number of variables ranked by the j^{th} respondent

The result is provided in the Table 5.32. It shows the percent position calculated value and garret score for each rank given by the sample policyholders.

Table 5.32*Percent Position and Garret Score Value*

SI No.	$100 (R_{ij} - 0.5) / N_j$	Calculated Value	Garret Score Value
1	$100(1-0.5)/10$	5	82
2	$100(2-0.5)/10$	15	70
3	$100(3-0.5)/10$	25	63
4	$100(4-0.5)/10$	35	58
5	$100(5-0.5)/10$	45	52
6	$100(6-0.5)/10$	55	48
7	$100(7-0.5)/10$	65	42
8	$100(8-0.5)/10$	75	36
9	$100(9-0.5)/10$	85	29
10	$100(10-0.5)/10$	95	18

Source: Compiled by the researcher

The percent position value of all sample responses is displayed in the Table 5.32. Garrett value will be estimated for each percent position using the Garrett ranking conversion table. In this case, the calculated value is 5. The percent value corresponding to 5 is 4.92 and so on. The garrett value is required for computing the overall score of the respondents by ranking several informal strategies.

Table 5.33*Garrett Ranking Conversion Table*

The conversion of orders of merits into units of amount of “scores”					
Percent	Score	Percent	Score	Percent	Score
0.09	99	22.32	65	83.31	31
0.20	98	23.88	64	84.56	30
0.32	97	25.48	63	85.75	29
0.45	96	27.15	62	86.89	28
0.61	95	28.86	61	87.96	27
0.78	94	30.61	60	88.97	26
0.97	93	32.42	59	89.94	25

The conversion of orders of merits into units of amount of “scores”

Percent	Score	Percent	Score	Percent	Score
1.18	92	34.25	58	90.83	24
1.42	91	36.15	57	91.67	23
1.68	90	38.06	56	92.45	22
1.96	89	40.01	55	93.19	21
2.28	88	41.97	54	93.86	20
2.69	87	43.97	53	94.49	19
3.01	86	45.97	52	95.08	18
3.43	85	47.98	51	95.62	17
3.89	84	50.00	50	96.11	16
4.38	83	92.02	49	96.57	15
4.92	82	54.03	48	96.99	14
5.08	81	96.03	47	97.37	13
6.14	80	98.03	46	97.72	12
6.81	79	59.99	45	98.04	11
7.55	78	61.94	44	98.32	10
8.33	77	63.85	43	98.58	9
9.17	76	65.75	42	98.82	8
10.06	75	67.48	41	99.03	7
11.03	74	69.39	40	99.22	6
12.04	73	71.14	39	99.39	5
13:11	72	72.85	38	99.55	4
14.25	71	74.52	37	99.68	3
15.44	70	76.12	36	99.80	2
16.69	69	77.68	35	99.91	1
18.01	68	79.17	34	100.00	0
19.39	67	80.61	33		
20.93	66	81.99	32		

Source: Henry Garret

Table 5.34*Frequency of Ranks Given by Respondents to Different Informal Strategies*

Sl. No	Informal Strategies	Rank rendered by the Respondents									
		1 st	2 nd	3 rd	4 th	5 th	6 th	7 th	8 th	9 th	10 th
1	Postpone debt repayment	65	48	9	22	37	17	35	17	40	35
2.	Earning extra income through additional jobs or casual labour	39	5	32	52	28	85	47	15	11	11
3	Selling key production assets, such as livestock and land	71	37	16	32	40	35	24	52	13	5
4	Taking a loan from a money-lender	38	40	32	38	40	43	44	18	30	2
5	Selling consumption assets such as jewellery	26	38	65	47	31	47	13	5	38	15
6	Use savings	68	39	54	32	48	41	15	5	15	8
7	Pawn assets such as land or jewellery	2	23	17	27	16	11	38	78	47	66
8	Asking for donations or loan from family, friends & neighbours	11	77	91	23	22	33	22	19	12	15
9	Send a child to a job	1	3	5	6	36	8	51	69	84	62
10	Reducing consumption	4	15	4	46	27	5	36	47	35	106

Source: Compiled by the researcher

Table 5.34 describes the total rank given by each respondent on different informal strategies followed to reduce the risk. It is observed that the maximum respondents i.e., the technique of selling key production assets, such as livestock and land received the top ranking from 71 respondents. On the other hand, 68 respondents positioned first to use savings. Selling key production assets, such as livestock and land was also preferred by many of the respondents. It can also be noted that amidst adversities, the majority of the respondents neither sent their children to jobs nor reduced their consumption. Pawning assets is also not preferred by many of the respondents. The findings enabled the researcher to understand various informal strategies opted by the policyholders for financial risk mitigation and the order of preference of these strategies.

Table 5.35

Estimation of Total Score by Multiplying Garrett Value with the Respective Rank Garrett Value

Informal Strategies	Weighted score obtained for each Rank										Total score
	1 st	2 nd	3 rd	4 th	5 th	6 th	7 th	8 th	9 th	10 th	
Postpone debt repayment	5330	3360	567	1276	1924	816	1470	612	1160	630	17145
Earning extra income through additional jobs or casual labour	3198	350	2016	3016	1456	4080	1974	540	319	198	17147
Selling key production assets, such as livestock and land	5822	2590	1008	1856	2080	1680	1008	1872	377	90	18383
Taking a loan from a money-lender	3116	2800	2016	2204	2080	2064	1848	648	870	36	17682
Selling consumption assets such as jewellery	2132	2660	4095	2726	1612	2256	546	180	1102	270	17579
Use savings	5576	2730	3402	1856	2496	1968	630	180	435	144	19417
Pawn assets such as land or jewellery	164	1610	1071	1566	832	528	1596	2808	1363	1188	12726
Asking for donations or loans from family, friends, or neighbours	902	5390	5733	1334	1144	1584	924	684	432	270	18397
Send a child to a job	82	210	315	348	1872	384	2142	2484	2436	1116	11389
Reducing consumption	328	1050	252	2668	1404	240	1512	1692	1015	1908	12069

Source: Compiled by the researcher

The Table 5.35 illustrates the total score of each factor ranks estimated by multiplying the Garrett value with the respective given value, eventually by adding each row, the total Garrett score is obtained. Hence, the total score is essential to

calculate the average score given by the total respondents under different strategies of a particular phenomenon.

Table 5.36

Rank Estimation of the Total Respondents

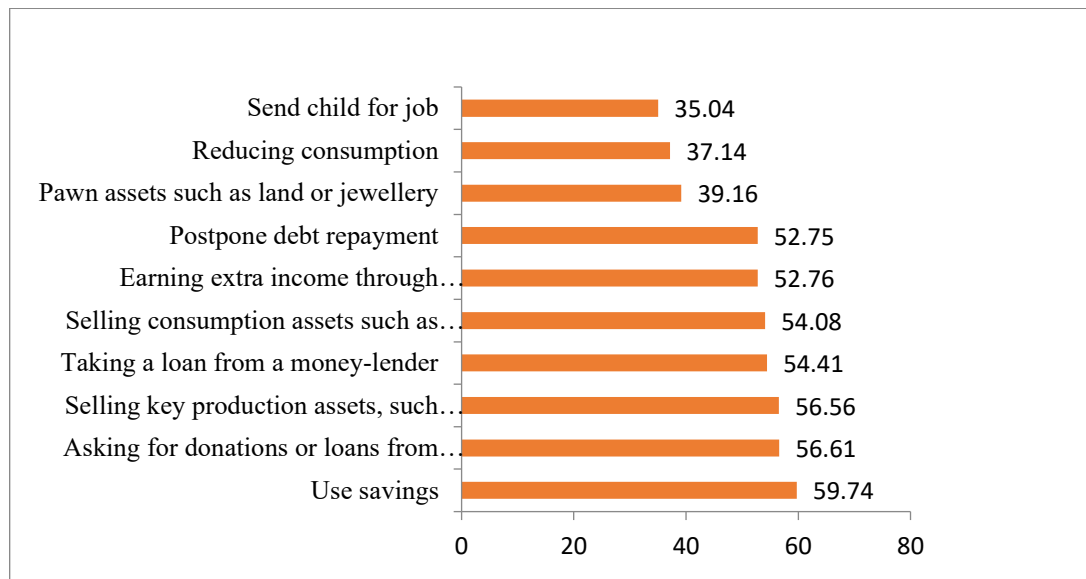
Sl No	Informal Strategies	Total Score	Mean Score	Ranks
1	Use savings	19417	59.74	1
2	Asking for donations or loans from family, friends, or neighbours	18397	56.61	2
3	Selling key production assets, such as livestock and land	18383	56.56	3
4	Taking a loan from a money-lender	17682	54.41	4
5	Selling consumption assets such as jewellery	17579	54.08	5
6	Earning extra income through additional jobs or casual labour	17147	52.76	6
7	Postpone debt repayment	17145	52.75	7
8	Pawn assets such as land or jewellery	12726	39.16	8
9	Reducing consumption	12069	37.14	9
10	Send a child to a job	11389	35.04	10

Source: Compiled by the researcher

The analysis has showcased various informal techniques used by policyholders other than insurance to minimize financial strain, which is presented in Table 5.36. It could be seen that ten informal techniques were identified by the respondents. Out of those ten techniques, "Use savings" ranked first with a total score of 19417 and a mean score of 59.74. With a total score of 18397 and a mean score of 56.61, "Asking for donations or loans from family, friends or neighbours" took hold of the second position with a total score of 17145 and a mean score of 52.75, "Postpone debt repayment" stood seventh. "Send child for the job" is the last strategy used by policyholders, ranking with a total score of 11389 and a mean score of 35.04.

Figure 5.8

Mean Score of Different Informal Strategies



Source Compiled by the researcher

5.9.1 Testing of Hypothesis on Informal Strategies

The ranked informal strategies were further analysed with the help of the Friedman test. For this, the following hypothesis is formulated;

H₀: There is no significant difference in the informal strategies adopted by microinsurance policyholders

H₁: There is a significant difference in the informal strategies adopted by microinsurance policyholders

Table 5.37

Friedman Test- Statistics on Informal Strategies

Informal Strategies	N	Chi-Square	df	P Value
	325	1372.754	9	<0.001

Source: Primary Data

From the test results, it is understood that informal strategies adopted by Microinsurance policyholders significantly differ. This is evident from the Friedman test statistic of 1372.754, its p-value is <0.001 which is less than the level

of significance alpha of 0.05. Since the p-value is less than alpha, the test accepts the research hypothesis that “there is a significant difference in the informal strategies adopted by microinsurance policyholders”.

5.9.2 Relationship between Informal Strategies and Microinsurance Investment

To understand the relationship between Informal Strategies and Microinsurance Investment, a test of correlation has been carried out. The following hypothesis was tested with the help of Spearman rank correlation and the test results presented in Table 5.38

H₀: There is no significant relationship between Informal Strategies and Microinsurance Investment.

Table 5.38

Correlation of Informal Strategies and Microinsurance Investment

	Spearman's Rho	Microinsurance Investment
	Correlation Coefficient	-0.509**
Informal Strategies	Sig. (2-Tailed)	.014
	N	325

Source: Primary Data

From the correlation result, it is observed that Informal Strategies had a strong negative correlation with Microinsurance Investment. Since the p-value is less than .05, the test rejects the null hypothesis that there is no significant relationship between Informal Strategies and Microinsurance Investment. Spearman's correlation coefficient (r_s) relationship between Informal Strategies and Microinsurance Investment is -0.509 found to be statistically significant at a 5 Percent level of significance. Hence study concludes that Informal Strategies and Microinsurance Investment have a strong negative correlation. Higher Rho coefficients denote a stronger magnitude of the relationship between variables.

5.10 Conclusion

This chapter attempted to evaluate financial capabilities, insurance awareness, and informal strategies used by policyholders other than microinsurance. The chapter begins with a description of the sample respondents' profile which includes demographic details of the policyholders. The second part of the chapter dealt with the financial capability analysis, which comprised of identification of policyholders' level of financial capability, testing if there is any variation in their financial capability when the demographic variables change, and the relationship of financial capability variables. The next section of this chapter assessed the insurance awareness level among policyholders which is classified into low, moderate, and high using quartiles, and found out association between the level of insurance awareness and sample profile variables. The last part of the chapter analysed various informal strategies used by microinsurance policyholders to reduce the financial burden using the garret ranking technique and its relationship with microinsurance investment.

Chapter 6

EFFECTIVENESS OF MICROINSURANCE

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6.1 Introduction

Previous chapter made an assessment on financial capability, insurance awareness and informal strategies followed by microinsurance policyholders. This chapter of the study elaborate the analysis of perceived value, perceived benefits, perceived risk, and attitude towards risk among policyholders concerning microinsurance in Kerala. These components stand as fundamental factors influencing individuals' decision-making processes when contemplating investment in microinsurance schemes. Understanding the nuanced perceptions of value, benefits, and risk, alongside attitudes towards risk, offers profound insights into the determinants impacting microinsurance uptake within the region.

Microinsurance has become a vital tool for helping low-income people and marginalised groups with financial security and stability in times of economic instabilities and vulnerabilities. It is crucial to look further into the complex dynamics that impact policyholders' experiences and decisions within this field as microinsurance programmes continue to grow and change. This chapter embarks on a comprehensive exploration of four pivotal aspects central to the microinsurance landscape: perceived value, perceived benefits, perceived risk, and attitude towards risk among policyholders.

6.2 Perceived Value Dimension Analysis

Perceived value is the customers' evaluation of the merits of a product or service, and its ability to meet their needs and expectations. In this study perceived value is measured by using three sub constructs namely Affordability, Appropriateness and Accessibility. Each dimension is separately measured with five-point Likert scale.

Aggregate score of three dimensions is then classified as level of perceived value with the help of quartile deviation, which is categorised as low, moderate and high. Total score for each dimension is used to evaluate whether any variation exist in the perceived value of policyholders and their socio-economic profile.

6.2.1 Perceived Value Level Classification

The quartile values of sub constructs used to classify perceived value levels are described in the Table 6.1.

Table 6.1

Benchmark used for Level classification of Perceived Value

Quartiles	Affordability	Appropriateness	Accessibility	Overall Perceived Value
Q1 (25 Percent)	26	27	20	63.5
Q2 (50 Percent)	28	30	23	69
Q3 (75 Percent)	30	36	26	77

Source: Primary Data

In case of the affordability dimension, the first quartile value is 26, the second quartile value is 28, which is the affordability dimension's median, and the third quartile value is 30. Score less than 26 imply a low level of affordability. A score between 26 and 30 indicates a moderate level of affordability, while a score greater than 30 indicates a high level of affordability.

For the appropriateness dimension, values of 27, 30, and 36 represents the first, second, and third quartiles. If the score is less than 27, the sample respondent may have a Low level of appropriateness. If the score is between 27 and 36, the sample respondent has a moderate level of appropriateness about microinsurance, and if the score is above 28, the sample respondent has high level of appropriateness about microinsurance.

Similarly, in terms of accessibility, the first quartile value is 20, the second quartile value is 23 (median), and the third quartile value is 26. Assuming that a score below

the first quartile (20) indicates a low level of accessibility. Whereas score between 20 and 26 indicate a moderate level of accessibility, score over 26 suggest a high level of accessibility to Microinsurance products.

To determine the overall perceived value level, the aggregate score of affordability, appropriateness, and accessibility were also classified as Low, Moderate, and High using quartiles. If the aggregate score is found to be less than 63.5, this indicates a Low level of perceived value. When the aggregate score lies between 63.5 and 77, it indicates a Moderate level of perceived value, and when it is above 77, it indicates a high level of perceived value.

Based on the Quartile values of each sub construct, sample respondents were classified into three levels (Low, Moderate, and High), and their frequency distribution, as well as the percentage of representation in the sample chosen for the study, is shown in Table 6.2.

Table 6.2
Frequency Distribution for the Extent of Perceived Value among Policyholders.

Extent of Perceived Value	Affordability	Appropriateness	Accessibility	Overall Perceived Value
Low Level	119 [36.6]	102 [31.4]	124 [38.2]	81 [24.9]
Moderate Level	117 [36]	137 [42.2]	111 [34.2]	153 [47.9]
High Level	89 [27.4]	86 [26.5]	90 [27.7]	91 [28]
Total	325	325	325	325

Note: Values in brackets are in Percentage

Source: Primary Data

Frequency Table 6.2 reveals that about 36.6 percent of the policyholders have low level of affordability and 36 percents have moderate level of affordability and 27.4 percent have high level of affordability. In microinsurance appropriateness, there are 31.4 percent policyholders are with low level of appropriateness, 42.2 percent of sample respondent have moderate level of appropriateness and the rest 26.5 percent have high level of appropriateness. In the case of microinsurance accessibility 38.2

percent and 42.2 percent policyholders have low level of accessibility, 34.2 percent sample policyholders have moderate level of accessibility. Regarding overall perceived value level, only 24.9 percent policyholders have low level of perceived value. Majority of policyholders have moderate level of perceived value (47.9 percent) and the rest of 28 percent have high level of perceived value.

6.2.2 Normality Assumption test- Perceived Value Dimensions

For the purpose of hypothesis testing, Normality assumption of test variable need to be ensured to select whether parametric or non-parametric test is to be followed. Normality assumptions were checked with the help of Kolmogorov-Smirnov test as well as Shapiro-Wilk test. Assumption test results of normality are given in Table 6.3

Table 6.3

Tests of Normality of Perceived Value Dimensions

Constructs	Kolmogorov-Smirnov			Shapiro-Wilk		
	Statistic	df	P Value	Statistic	df	P Value
Affordability	.088	325	<0.001	.971	325	<0.001
Appropriateness	.103	325	<0.001	.980	325	<0.001
Accessibility	.142	325	<0.001	.940	325	<0.001
Overall Perceived Value	.098	325	<0.001	.982	325	<0.001

Source: Primary Data

The result of normality assumption test depicted in Table 6.3 revealed that none of the dimensions of perceived value are normally distributed as the significance value of construct was found to be less than 0.05. Hence the null hypothesis for this assumption test “The test distribution is normal” is rejected. Further analysis, non-parametric test was applied as the variables were not normally distributed.

6.2.3 Perceived Value Dimensions and Demographic Profile Variables

Variation in perceived value scores and policyholders demographic profile variables are tested with appropriate non parametric test and the results are presented here.

6.2.3a Gender and Perceived value

The data were analysed based on gender to examine the difference if any, between male and female policyholders regarding perceived value dimensions. The variation in gender on perceived value variables is examined by using Mann-Whitney U test. Mean ranks and test results are presented in Table 6.4.

H₀: There is no significant difference between perceived value of the respondents with regard to their gender.

H₁: There is significant difference between perceived value of the respondents with regard to their gender.

Table 6.4

Mann-Whitney U Test for Perceived Value Dimensions and Gender of the Policyholders

Construct	Gender	N	Median	Mean Rank	Mann-Whitney U Test Statistic	P Value
Affordability	Male	143	27	157.02	12158	.347
	Female	181	28	166.83		
Appropriateness	Male	143	30	155.90	11998	.259
	Female	181	32	167.71		
Accessibility	Male	143	11	156.80	12126.	.325
	Female	181	11	167.01		

Source: Primary Data

Table 6.4 shows the mean ranks and test results regarding variations in perceived value dimensions with respect to the gender of policyholders. Mean ranks of female policyholders (Affordability = 166.83, Appropriateness = 167.71, Accessibility = 167.01) were better than male policyholders (Affordability=157.02, Appropriateness=155.90, Accessibility=1156.80). In order to check whether this mean difference is statistically significant or not, independent sample t test for non-parametric test (Mann-Whitney U Test) was carried out. From the test result it is clear that there is no significant difference among male and female policyholders in their perceived value dimensions. Test failed to reject the null hypothesis as none of the test statistic showed asymptotic significant value less than .05.

6.2.3b Age and Perceived Value

The data were analysed based on age to examine difference if any, between age group of policyholders regarding perceived value dimensions. The variation in policyholders' age on perceived value variables is examined using Kruskal-Wallis H test. Mean ranks and test result were presented in Table 6.5

H₀: There is no significant difference in perceived value among respondents with regard to their age.

H₁: There is significant difference in perceived value among respondents with regard to their age.

Table 6.5*Kruskal-Wallis H Test for Perceived Value and the Age of Policyholders*

Constructs	Age (In Years)	N	Median	Mean Rank	Kruskal-Wallis H test	P Value	Effect Size
Affordability	Between 18 to 25	6	26.5	110.08	13.313	.010	0.208
	Between 26 to 33	64	28	165.85			
	Between 34 to 41	62	29	186.62			
	Between 44 to 49	88	28	174.08			
	50 and Above	105	27	140.66			
Appropriateness	Between 18 to 25	6	28	117.92	8.701	.069	Insignificant
	Between 26 to 33	64	33	189.16			
	Between 34 to 41	62	30	164.36			
	Between 44 to 49	88	30	162.73			
	50 and Above	105	29	149.06			
Accessibility	Between 18 to 25	6	12	196.75	2.547	.636	Insignificant
	Between 26 to 33	64	11	169.03			
	Between 34 to 41	62	11	155.01			
	Between 44 to 49	88	11	169.91			
	50 and Above	105	11	156.32			

Source: Primary Data

From the Table 6.5 it is observed that the significance values of Kruskal-Wallis H test for perceived value variables except affordability are more than 0.05. This indicates that age of respondents does not have significant difference on their value perception regarding appropriateness of microinsurance and accessibility of microinsurance. But affordability of microinsurance (chi square value=13.313, P Value=.010) showed significant difference among age groups of policyholders. The

mean ranks for affordability are comparatively high for the age group of 34-41. However, the effect size is less than 0.3 indicating less effect on affordability among different age groups.

In order to find out variations in affordability perception among various age groups, post hoc test for multiple comparison have been performed. The result of multiple comparison is presented in the Table 6.6.

Table 6.6

Affordability Dimension Post-Hoc Test Pair-Wise Comparison on Age

Sample -1	Sample-2	Test Statistic	P Value
Between 18to 25	Between 26 to 33	-0.403	0.999
	Between 34 to 41	-2.030	0.605
	Between 42 to 49	-1.497	0.828
	Above 50	-1.123	0.033
Between 26 to 33	Between 34 to 41	-3.368	0.012
	Between 42 to 49	-2.332	0.466
	Above 50	-1.512	0.023
Between 34 to 41	Between 42 to 49	1.306	0.888
	Above 50	2.187	0.532
Between 42 to 49	Above 50	0.950	0.963

Source: Primary Data

From the multiple comparison Table 6.6, it is clear that age category of policyholders between 18 to 25 significantly differ from the age group of above 50 on affordability of microinsurance. Similarly, age category of policyholders between 26 to 33 significantly differ from the age group between 34 to 41 and above 50 in their perception regarding affordability of microinsurance.

6.2.3c Education and Perceived Value

The data were analysed to examine the difference if any, between different education qualifications of policyholders regarding perceived value dimensions. The variation in policyholders' education on perceived value variables is examined by using Kruskal-Wallis H test. Mean ranks and test result are presented in Table 6.7.

H₀: There is no significant difference in perceived value among respondents with regard to their educational qualification.

H₁: There is significant difference in perceived value among respondents with regard to their educational qualification.

Table 6.7

Kruskal-Wallis H Test for Perceived Value and the Educational Level of Policyholders

Construct	Educational level	N	Median	Mean Rank	Kruskal-Wallis H test	P Value	Effect Size
Affordability	Primary School	92	27	156.28	6.137	.189	
	High School	137	27	171.55			
	Higher Secondary	75	28	195.00			
	Degree and Above	16	29	208.28			
	No Formal Education	5	28	156.42			
Appropriateness	Primary School	92	29.5	154.38	10.412	.034	.032
	High School	137	29	177.57			
	Higher Secondary	75	32	199.20			
	Degree and Above	16	35.5	218.16			
	No Formal Education	5	33	153.05			
Accessibility	Primary School	92	11	160.36	2.411	.661	
	High School	137	11	166.31			
	Higher Secondary	75	11	174.64			
	Degree and Above	16	11	193.80			
	No Formal Education	5	12	156.89			

Source: Primary Data

From the Table 6.7 it is understood that the test rejects the null hypothesis regarding appropriateness of microinsurance, which is significant at 5 percent of level (Chi square value=10.412, P Value=.034). Hence there is a significant difference in microinsurance policyholders' appropriateness with respect to the changes in

educational level. Median values for all age groups are above grand median (28) of appropriateness. However, the test failed to reject null hypothesis in the other two dimensions that there is no significant difference in affordability and accessibility to microinsurance based on varying education of policyholders.

Further analysis was done to know which educational status significantly differ in their value perception about appropriateness of microinsurance. Test result is given in Table 6.8.

Table 6.8

Appropriateness Dimension Post-Hoc Test Pair-Wise Comparison on Education

Sample -1	Sample-2	Test Statistic	P Value
Primary	High school	-0.146	0.010
	Higher Secondary	2.260	0.039
	Degree and Above	3.505	0.006
	No Formal education	1.445	0.046
High school	Higher Secondary	4.593	0.354
	Degree and Above	3.676	0.031
	No Formal education	1.506	0.025
Higher Secondary	Degree and Above	2.323	0.040
	No Formal education	0.762	0.013
Degree and Above	No Formal education	-0.528	0.026

Source: Primary Data

Pair wise comparison of educational status reveals that policyholders who have high school level of education and higher secondary level of education don't significantly differ in the appropriateness perception of microinsurance. All other educational status significantly differs from each other in case of appropriateness of perceived value.

6.2.3d Occupation and Perceived Value

The occupational status of policyholders is analysed to detect whether there is any variation in the perceived value on microinsurance as the occupational status varies. The variation in perceived value variable is examined by using Kruskal-Wallis H test. Mean ranks and test result are presented in Table 6.9.

H₀: There is no significant difference in perceived value among respondents with regard to their occupation.

H₁: There is significant difference in perceived value among respondents with regard to their occupation.

Table 6.9

Kruskal-Wallis H Test for Perceived Value and the Nature of Occupation of Policyholders

Construct	Occupation	N	Median	Mean Rank	Kruskal-Wallis H test	P Value	Effect Size
Affordability	Agriculture & Allied	58	28	162.63	10.012	.040	0.120
	Self Employed	38	29.5	198.09			
	Daily Wage Worker	169	27	153.54			
	Permanent Employee	18	29	198.39			
	Temporary Employee	42	27	154.65			
Appropriateness	Agriculture & Allied	58	30	160.89	19.914	.001	0.204
	Self Employed	38	34	217.08			
	Daily Wage Worker	169	29	150.86			
	Permanent Employee	18	33	203.72			
	Temporary Employee	42	28	148.37			
Accessibility	Agriculture & Allied	58	11	147.28	4.699	.320	
	Self Employed	38	11.5	180.88			
	Daily Wage Worker	169	11	159.38			
	Permanent Employee	18	11.5	176.61			
	Temporary Employee	42	11.5	177.29			

Source: Primary Data

The result of Kruskal-Wallis H test shows significant variation in microinsurance affordability and appropriateness among respondents who are engaged in different occupations. For affordability dimension, test statistic chi square is 10.012, and the corresponding significant value is .040 which is less than the decision criteria (.05) and significant at 5 percent level. Similarly, appropriateness variable test statistic is 19.914 and its asymptotic significant value is .001 which is also significant at 5 percent level. Since the p value is less than .05 null hypotheses in both sub dimensions (affordability & appropriateness) of perceived value are rejected, that shows significant variation in microinsurance affordability and appropriateness among policyholders engaged in different occupations. Accessibility dimension test statistic and its significant value revealed that there is no significant difference as their occupation varies.

6.2.3e Income and Perceived Value

The variation in perceived value concerning income of the policyholders is examined by using Kruskal-Wallis H test. Mean ranks and test result are presented in Table 6.10.

H₀: There is no significant difference in perceived value among respondents with regard to their income level.

H₁: There is significant difference in perceived value among respondents with regard to their income level.

Table 6.10

Kruskal-Wallis H Test for Perceived Value and the Monthly Income of Policyholders

Constructs	Monthly Income (In Rupees)	N	Median	Mean Rank	Kruskal-Wallis H test	P Value	Effect Size
Affordability	Up to 5000	100	27	151.32	11.364	.023	0.035
	Between 5001 to 8000	104	27	151.64			
	Between 8001 to 11000	67	28	169.13			
	Between 11001 to 14000	30	29.5	199.33			
	14000 and Above	24	29	198.35			
	Up to 5000	100	29	149.55			
Appropriateness	Between 5001 to 8000	104	29	148.92	19.530	.001	.060
	Between 8001 to 11000	67	30	165.01			
	Between 11001 to 14000	30	34	214.47			
	14000 and Above	24	34	210.13			
	Up to 5000	100	11	152.65			
	Between 5001 to 8000	104	11	157.21			
Accessibility	Between 8001 to 11000	67	12	176.59	4.240	.374	
	Between 11001 to 14000	30	11	174.33			
	14000 and Above	24	11.5	179.10			
	Up to 5000	100	11	152.65			

Source: Primary Data

Table 6.10 describes that mean ranks of perceived value variables increases with increase in the income level among policyholders. Test results conclude that the p-value of perceived value towards affordability and appropriateness components are

less than 0.05 and the calculated t values are above 1.96. Therefore, the null hypothesis is rejected at 5 percent level of significance indicating a significant difference in perception towards affordability and appropriateness of microinsurance with varying income levels. But there is no significant difference in their perception towards accessibility to microinsurance with change in income levels. The significance effect size for affordability and appropriateness are 0.035, and 0.060 respectively. It indicates a very small significant effect. Multiple pair wise comparison results of variables presented in Table 6.11

Table 6.11

Affordability & Appropriateness Dimensions Post-Hoc Test Pair-Wise Comparison on Monthly Income

Sample -1	Sample-2	Affordability		Appropriateness	
		Test Statistic	P Value	Test Statistic	P Value
Up to 5000	Between 5001 to 8000	0.0490	1.000	-0.0437	1.000
	Between 8001 to 11000	1.7286	0.738	1.4530	0.843
	Between 11001 to 14000	3.4215	0.020	4.7180	0.008
	14000 and Above	3.1141	0.019	3.9609	0.041
Between 5001 to 8000	Between 8001 to 11000	1.7088	0.747	1.5204	0.820
	Between 11001 to 14000	3.4717	0.041	4.8640	0.005
	14000 and Above	3.1184	0.018	4.0573	0.034
Between 8001 to 11000	Between 11001 to 14000	2.1420	0.553	3.3199	0.130
	14000 and Above	1.8907	0.048	2.7891	0.280
Between 11001 to 14000	14000 and Above	-0.0991	1.000	0.0372	1.000

Source: Primary Data

Table 6.11 explains that there exists variation between different income groups regarding affordability and appropriateness dimension. For both dimensions, the income group of up to Rs. 5000 significantly different from the income groups

between Rs.11001 to 14000 and Rs.14000 and above. No other group make any significant difference. Similarly, policyholders whose income falls between Rs.5001 and Rs.8000 significantly differ from those policyholders whose income falls under Rs.11001 to 14000 and Rs.14000 and above categories. It can also be noted that policyholders whose income falls between Rs.8001 to 11000, significantly differ from the income group of Rs.14000 and above in case of affordability dimension only.

6.2.3f Marital Status and Perceived Value

The marital status of policyholders is analysed in relation to their perceived value dimensions to examine variation if any between married, unmarried, divorced and widowed policyholders. The variation in perceived value is examined by using Kruskal-Wallis H test. Mean ranks and test result are presented in Table 6.12

H₀: There is no significant difference in perceived value among respondents with regard to their marital status.

H₁: There is significant difference in perceived value among respondents with regard to their marital status.

Table 6.12

Kruskal-Wallis H Test for Perceived Value and the Marital Status of Policyholders

Constructs	Marital Status	N	Median	Mean Rank	Kruskal-Wallis H test	P Value	Effect Size
Affordability	Married	281	28	164.03	10.792	.013	.033
	Unmarried	24	26	116.06			
	Divorced	3	30	246.17			
	Widowed	17	29	197.53			
Appropriateness	Married	281	30	163.33	10.799	.013	.033
	Unmarried	24	28.5	120.02			
	Divorced	3	35	252.67			
	Widowed	17	33	202.47			
Accessibility	Married	281	11	165.72	6.195	.103	
	Unmarried	24	10	119.56			
	Divorced	3	12	202.50			
	Widowed	17	11	172.38			

Source: Primary Data

From the above test results, it can be inferred that significant difference is found in perceived value towards affordability and appropriateness. Test shows a chi square value of 10.792 for affordability component, and 10.799 for appropriateness component. This is significant at 5 percent level. Since the p value for both the components are less than .05, therefore the test rejects the null hypotheses formulated that “there is no significant variation in perceived affordability and perceived appropriateness among respondents with regard to their marital status”. The result of pair wise comparison is given in Table 6.13.

Table 6.13

Affordability & Appropriateness Dimensions Post-Hoc Test Pair-Wise Comparison on Marital Status

Sample -1	Sample-2	Affordability		Appropriateness	
		Test Statistic	P Value	Test Statistic	P Value
Married	Unmarried	-3.42	0.047	-3.06	0.034
	Divorced	2.15	0.425	2.31	0.360
	Widowed	2.03	0.477	2.36	0.342
Unmarried	Divorced	2.97	0.152	3.29	0.093
	Widowed	3.88	0.031	3.98	0.025
Divorced	Widowed	-1.28	0.802	-1.28	0.803

Source: Primary Data

Pair wise comparison of marital status showed that married policyholder's affordability perception significantly differs from unmarried policyholder's affordability perception. Also unmarried and widowed policyholder's perception significantly differs from all other pairs.

6.2.3g Type of Family and Perceived Value

Type of family of policyholders are analysed to check whether perceived value towards microinsurance varies between policyholders who belong to joint family or

nuclear family. The variation in perceived value variables is examined by using Man-Whitney U test. Mean ranks and test result are presented in Table 6.14.

H₀: There is no significant difference in perceived value among respondents with regard to their type of family.

H₁: There is significant difference in perceived value among respondents with regard to their type of family.

Table 6.14

Mann-Whitney U Test for Perceived Value Dimensions and Type of Family of the Policyholders.

Constructs	Type of Family	N	Median	Mean Rank	Mann-Whitney U Test Statistic	P Value	Effect Size
Affordability	Joint Family	108	29	180.44	9834.50	.018	0.161
	Nuclear Family	217	27	154.32			
Appropriateness	Joint Family	108	33	185.00	9342.50	.003	0.203
	Nuclear Family	217	29	152.05			
Accessibility	Joint Family	108	11	174.15	10513.50	.127	
	Nuclear Family	217	11	157.45			

Source: Primary Data

Table 6.15 makes it clear that the policyholder's perception regarding affordability and appropriateness shows statistical difference (for affordability $U = 9834.500$, $p = 0.018 < 0.05$, for appropriateness $U = 9324.500$, $p = 0.003 < 0.05$). The affordability and appropriateness perception's mean rank of the policyholders belonging to joint family and nuclear family were 180.44 and 154.32, 185.00 and 152.05 respectively. The mean ranks of the groups indicate that there is difference in the perception

regarding affordability as well as appropriateness dimension. The null hypothesis that perception regarding affordability and appropriateness do not differ among policyholders from joint family and nuclear family is rejected. Effect size of the test statistics for both dimension shows that a small difference exists. However, perception regarding accessibility dimension did not show any statistical difference. Test statistic was 10513.50 and corresponding p Value was 0.127 which is greater than the threshold value (0.05), so, the null hypothesis “no significant difference exists between policyholders from joint family and policyholders from nuclear family regarding accessibility perception” is supported

6.2.3h Place of Residence and Perceived Value

The place of residence of policyholders are analyzed to check whether perceived value towards Microinsurance vary between urban and rural policyholders. The variation in perceived value variables is examined by using Mann-Whitney U test. Mean ranks and test result are presented in Table 6.15.

H₀: There is no significant difference in perceived value among respondents with regard to their place of residence.

H₁: There is significant difference in perceived value among respondents with regard to their place of residence.

Table 6.15

Mann-Whitney U Test for Perceived Value Dimensions and Place of Residence of the Policyholders.

Constructs	Place of Residence	N	Median	Mean Rank	Mann-Whitney U Test Statistic	P Value	Effect Size
Affordability	Rural	235	27	156.39	9022.50	.055	Insignificant
	Urban	89	29	178.62			
Appropriateness	Rural	235	30	154.42	8558.50	.846	
	Urban	89	33	183.84			
Accessibility	Rural	235	11	163.12	10312.50	.011	.0978
	Urban	89	12.5	160.87			

Source: Primary Data

Table 6.15 reveals that the results of Mann Whitney U test, applied to compare the policyholder's perception regarding affordability and appropriateness did not show any statistical difference (for affordability $U= 90200.500$; $p = 0.055 > 0.05$, for appropriateness $U= 8558.500$; $p = 0.846 > 0.05$). The affordability and appropriateness perception mean rank of the rural policyholders and urban policyholders were 156.39 and 178.62, 154.42 and 183.84 respectively. The mean ranks of the groups indicate that there is no difference in the perception regarding affordability as well as appropriateness of microinsurance. The null hypothesis that perception regarding affordability and appropriateness do not differ in rural policyholders and urban policyholders fails to be rejected. However, perception regarding accessibility to microinsurance shows statistical difference. Effect size indicates that a small difference exists among rural policyholders and urban policyholders.

6.2.3i Number of Dependent and Perceived Value

Median score and mean ranks for the perceived value with respect to sample respondents' number of dependent in their family is presented in Table 6.16. Kruskal Wallis H test was carried out to evaluate if there is any difference in the perceived risk of policyholders selected for study based on their number of dependents. Hypothesis put forward for empirical testing are:

H_0 : There is no significant difference in perceived value among policyholders having different number of dependent.

H_1 : There is significant difference in perceived value among policyholders having different number of dependent.

Table 6.16

Kruskal-Wallis H Test for Perceived Value and the Number of Dependent of Policyholders

Constructs	Number of dependent	N	Mean Rank	Kruskal-Wallis H test	P Value	Effect Size
Affordability	Below Two	45	156.01	12.532	.047	.3121
	Three to Five	204	164.33			
	Six to Eight	63	156.29			
	Above Eight	13	198.85			
	Total	325				
Appropriateness	Below Two	45	158.64	11.197	.039	.0982
	Three to Five	204	164.11			
	Six to Eight	63	161.32			
	Above Eight	13	168.88			
	Total	325				
Accessibility	Below Two	45	145.79	8.674	.082	
	Three to Five	204	164.29			
	Six to Eight	63	173.76			
	Above Eight	13	150.15			
	Total	325				

Source: Primary Data

From the Table 6.16, it can be inferred that significant difference is found in perceived value towards affordability and appropriateness. Test shows a chi square value 12.532 for affordability component, 11.197 for appropriateness component. Concerning significant value at 5 percent level of significance for both the component that is less than the threshold decision criteria (.05). Since the p value for both the components are less than .05, test rejects the null hypotheses formulated that “there is no significant variation in perceived affordability and perceived appropriateness among respondents with regard to their number of dependents in family”. There is no significant difference found in case of accessibility dimension among different number of dependents.

6.3 Perceived Risk Analysis

In microinsurance, perceived risk emphasises around policyholders' concerns and uncertainty about the effectiveness, fairness, and dependability of their insurance coverage. It addresses issues such as premium affordability, claim settlement procedures, and policy terms and conditions. Exploring these perceived risks is critical for providers in order to identify and remove potential barriers that may prevent policyholders from accepting microinsurance as a risk management tool.

6.3.1 Extent of Perceived Risk

Perceived risk was measured subjectively with six items in the scale. In order to find out the perceived risk level, researcher classified the total score of perceived risk into low level of perceived risk, moderate level of perceived risk and high level of perceived risk with the help of quartile values. Quartiles are the values that divide a list of numerical data into three quarters. The middle part of the three quartile measures the central point of distribution and shows the data which are near to the central point. The lower part of the quartile indicates just half information set which comes under the median and the upper part shows the remaining half, which falls over the median. The distribution of quartiles is depicted in Table 6.17.

Table 6.17

Quartiles Values Used for Perceived Risk Levels of Categorization

Variable	Quartiles		
	Q1 (25 percent)	Q2 (50 percent)	Q3 (75 percent)
Perceived Risk	21	26	31

Source: Primary Data

Table 6.17 describes the quartile values of perceived risk construct used for different classifications. First quartile value is 21, second quartile value is 26, which is the median of perceived and third quartile value is 31. The values below 21 indicate low level of perceived risk. The value that lies between 21 and 31 indicate moderate

level of perceived risk and the values above 31 indicate that the policyholder perceives a high level of risk.

Based on the quartile values of each sub construct, sample respondents were categorised into different levels (Low, Moderate and High) and their frequency distribution along with the percentage of representation in the sample selected for study are presented in Table 6.18

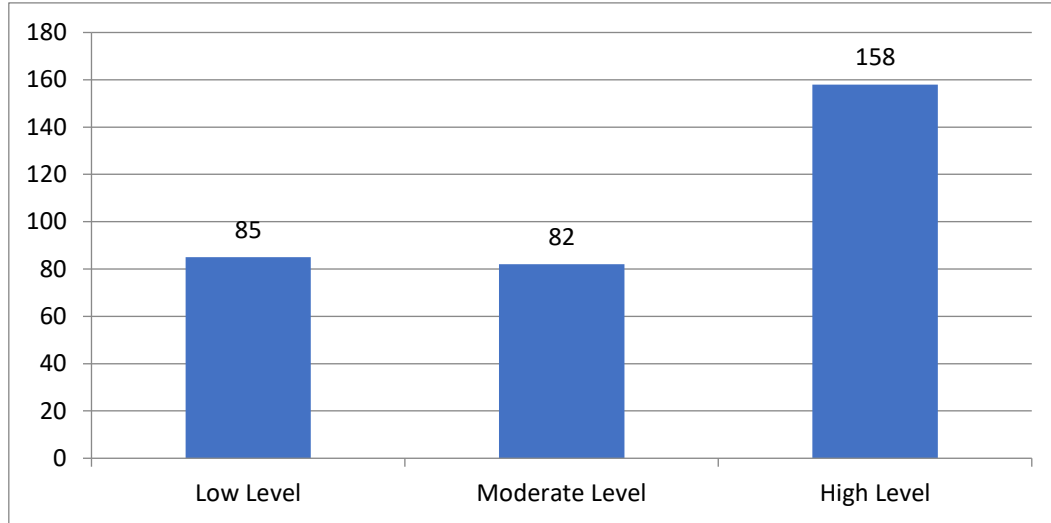
Table 6.18

Frequency Distribution of Perceived Risk Levels

Extent of Perceived Risk	Frequency	Percentage
Low Level	85	26.2
Moderate Level	82	25.2
High Level	158	48.6

Source: Primary Data

Frequency Table 6.18 reveals that 48.6 percent of the policyholders have high level risk perception. There are 25.2 percent of the total sample policyholders have moderate level of perceived risk and the rest 26.2percent have high level of perceived risk. Figure 6.2 depicts the frequency distribution of level of perceived risk among microinsurance policyholders.

Figure 6.2*Frequency Distribution of Level of Perceived Risk*

Source: Compiled by the researcher

After categorising the perceived risk score, researcher ensured that the sample of data came from the population with a specific distribution or not by adopting chi-square of goodness of fit. Test result presented in Table 6.2

Table 6.19*Chi-square test for goodness of fit of equality of Levels of perceived Risk of policyholders*

Extent of Perceived Risk	Frequency	Percentage	Chi-Square Statistic	P Value
Low Level	85	26.2	20.018	<0.001
Moderate Level	82	25.2		
High Level	158	48.6		

Source: Primary Data

From the Table 6.19 Chi-square test statistic was 20.018 and p value is significant at 1percent level. Since the P value is less than 0.001, the null hypothesis is rejected at 1 percent level of significance. Hence concluded that Level of perceived risk among

policyholder are not equally distributed. Based on percentage, majority of policyholders belongs to high level of perceived risk (48.6 percent) category.

6.3.2 Tests of Normality of Perceived Risk

In order to determine test statistic for hypothesis testing, Normality assumption of test variable need to be ensured to select whether parametric or non-parametric test will be followed. Normality assumptions are checked with the help of Kolmogorov-Smirnov test as well as Shapiro-Wilk test. Assumption test results of normality are given in Table 6.20

Table 6.20

Tests of Normality of Perceived Risk Variable

Construct	Kolmogorov-Smirnov ^a			Shapiro-Wilk		
	Statistic	df	P Value	Statistic	df	P Value
Perceived Risk	.099	325	<.001	.972	325	<.001

a. Lilliefors Significance Correction

Source: Primary Data

Table 6.20 revealed that the testing variable indicating perceived risk was not normally distributed as the significance value of construct was less than 0.05. Hence the null hypothesis for this assumption test “test distribution is normal” is rejected.

6.3.3 Perceived Risk and Demographic Profile Variables

For the purpose of testing hypotheses non parametric test was applied as the variables were not normally distributed. Variation in perceived risk score and policyholders demographic profile variables are tested with appropriate non parametric test and the results are presented here.

6.3.3a Gender and Perceived Risk

To ascertain the perceived risk variations among microinsurance policyholders based on their gender, Mann-Whitney U test was performed. The results are shown in Table 6.21. Hypothesis formulated for testing are as follows:

H₀: There is no significant variation in perceived risk of male and female policyholders

H₁: There is significant variation in perceived risk of male and female policyholders.

Table 6.21

Mann-Whitney U Test for Perceived Risk and Gender of the Policyholders.

Gender	N	Median	Mean Ranks	Mann-Whitney U Test Statistic	P Value
Male	143	26	163.97		
Female	182	26	162.24	12874.000	.868
Total	325				

Source: Primary Data

Perceived risk Median score of both male and female policyholders were 26, looking into the mean ranks of test variable, it can be found that only a small deviation exists. Test results also show that there is no statistically significant difference in perceived risk between male and female microinsurance policyholders ($P > 0.05$). Hence the null hypothesis formulated for testing is retained. Which indicate that there is no statistical difference between male and female policyholder's perceived risk perception.

6.3.3b Age and Perceived Risk

Kruskal Wallis H test was applied to determine the perceived risk differences of policyholders selected for study by age groups. The findings are presented in Table 6.22. Hypothesis put forward for empirical testing are:

H₀: There is no significant variation between perceived risk and different age group of policyholders.

H₁: There is significant variation between perceived risk and different age group of policyholders.

Table 6.22

Kruskal-Wallis H Test for Perceived Risk and Age Group of Policyholders

Age Groups (In Years)	N	Median	Mean Ranks	Kruskal- Wallis H Statistic	df	P Value
Between 18 to 25	6	23	124.08			
Between 26 to 33	64	25.5	156.29			
Between 34 to 41	62	27	176.45	4.898	4	.298
Between 42 to 49	88	27	173.14			
50 and Above	105	25	152.87			

Source: Primary Data

The mean ranks of perceived risk of 18 to 25 years age groups were 124.08, 26 to 33 years age group policyholders were 156.29, 34 to 41 years age group policyholders were 176.45, 42 to 49 years age group policyholders were 173.14, and 50 and above age group policyholders were 152.87. The median score was 23, 25.5, 27, 27, and 25 respectively. To check whether this variation is statistically significant, Kruskal Wallis H test was carried out. Test results shows that p value is greater than the alpha value, hence it can be concluded that policyholders perceived risk was not statistically significant with respect to their age group (*H Statistic* = 4.898, *p* = .298).

6.3.3c Education and Perceived Risk

Table 6.23 shows the median and mean ranks for the perceived risk with respect to educational qualification of sample respondents. Kruskal Wallis H test was applied to determine whether perceived risk differs between policyholders based on their educational qualification. Hypothesis put forward for empirical testing are:

H₀: There is no significant variation among perceived risk across education level of policyholders

H₁: There is significant variation among perceived risk across education level of policyholders

Table 6.23

Kruskal-Wallis H Test for Perceived Risk and Education of Policyholders

Education	N	Median	Mean Rank	Kruskal-Wallis H Statistic	df	P Value
Primary	92	26	162.16			
High School	137	26	162.54			
Higher Secondary	75	25	151.57	7.308	4	.120
Degree and Above	16	30.5	220.63			
No Formal Education	5	27	178.20			

Source: Primary Data

It can be noted from the Table 6.23 that the perceived risk was more in case of policyholders those who have degree and above education with a mean rank of 220.63 as compared to other groups. Median score and Mean rank of policyholders having different education qualification shows some differences. As seen in Table 6.23, the results of Kruskal Wallis H test show that there was insignificant difference in perceived risk.

6.3.3 Occupation and Perceived Risk

Median score and mean ranks for the perceived risk with respect to occupation of sample respondents are presented in the Table 6.24. Kruskal Wallis H test was carried out to evaluate if there is any difference in the perceived risk of policyholders selected for study based on their occupation. The findings are presented in Table 6.24. Hypothesis put forward for empirical testing are:

H₀: There is no significant variation among perceived risk across occupational status of policyholders

H₁: There is significant variation among perceived risk across occupational status of policyholders

Table 6.24

Kruskal-Wallis H Test for Perceived Risk and Occupation of Policyholders

Occupation	N	Median	Mean Rank	Kruskal-Wallis H Statistic	P Value
Agriculture & Allied	58	28	201.44	3.993	.407
Self Employed	38	25.5	162.78		
Daily Wage Worker	169	25	159.37		
Permanent Employee	18	27	168.99		
Temporary Employee	42	25	153.05		

Source: Primary Data

From the Table 6.24 the mean rank and median score of perceived risk is high in case of agriculture and allied related workers. Similarly, score was low among policyholders working in temporary jobs. These mean rank variations are further tested and the result reveals that there is no significant difference in perceived risk among policyholders engaged in different occupations. The significance values are above 0.05 and the null hypothesis formulated were failed to reject.

6.3.3d Income and Perceived Risk

The Table 6.25 shows the median and mean ranks for the perceived risk with respect to income of sample policyholders. Kruskal Wallis H test was applied to assess if there any perceived risk differences exist among policyholders with regards to their income level. The findings are presented in Table 6.25. Hypothesis put forward for empirical testing are

H₀: There is no significant variation among perceived risk across different income levels of policyholders.

H₁: There is significant variation among perceived risk across different income levels of policyholders.

Table 6.25*Kruskal-Wallis H Test for Perceived Risk and Monthly Income of Policyholders*

Monthly Income	N	Median	Mean Rank	Kruskal-Wallis H Statistic	P Value	Effect Size
Up to 5000	100	28	207.81	7.962	.039	.0382
Between 5001 to 8000	104	25	156.84			
Between 8001 to 11000	67	27	171.85			
Between 11001 to 14000	30	25	158.28			
14000 and Above	24	23.5	144.47			
Total	325					

Source: Primary Data

From the Table 6.25 it can be seen that Median score of perceived risk of policyholders have income level Up to 5000 was 28, for those between Rs.5001 to 8000 was 25, policyholders below the income group Rs.8001 to 11000 was 27, Rs.11001 to 14000 was 25 and income Rs.14000 and Above was 23.5 While analysing the mean ranks of test variable, variation can be noticed. In order to check whether the variation is statistically significant or not, Kruskal Wallis H test was performed and the test result shows that there is statistically significant difference in perceived risk among the policyholders belonging to different income group ($p < 0.05$). Hence the null hypothesis formulated for testing was rejected. This indicates that there is statistical difference in the risk perception among policyholders belonging to different income levels.

6.3.3e Marital Status and Perceived Risk

To ascertain the perceived risk variations among microinsurance policyholders based on their marital status, Kruskal Wallis H test was performed. The results are shown in Table 6.26. Hypothesis formulated for testing are as follows:

H_0 : There is no significant variation among perceived risk across different marital status of policyholders

H_1 : There is significant variation among perceived risk across different marital status of policyholders

Table 6.26*Kruskal-Wallis H Test for Perceived Risk and Marital Status of Policyholders*

Marital Status	N	Median	Mean Rank	Kruskal-Wallis H Statistic	df	P Value
Married	281	26	162.58			
Unmarried	24	22.5	131.13			
Divorced	3	28	240.67	7.664	3	.053
Widowed	17	28	201.18			
Total	325					

Source: Primary Data

From the Table 6.26 the mean ranks and median scores of perceived risks are found to be high among divorced policyholders. Median score was low among unmarried policyholders. Their mean rank variations are further tested and the result reveal that there is no significant difference in perceived risk among different marital status groups as the significance values are above 0.05. Hence the null hypothesis formulated failed to be rejected.

6.3.3f Area of Residence and Perceived Risk

Mann-Whitney U test was performed to ascertain the perceived risk variations among microinsurance policyholders by place of residence. The results are shown in Table 6.27. Hypothesis formulated for testing are as follows

H₀: There is no significant variation among perceived risk among rural and urban policyholders.

H₁: There is significant variation in perceived risk among rural and urban policyholders.

Table 6.27

Mann-Whitney U Test for Perceived Risk and Area of Residence of the Policyholders.

Place of Residence	N	Median	Mean Rank	Mann-Whitney U Test Statistic	P Value	Effect Size
Rural	235	28.5	172.89	10548.000	.027	.0109
Urban	90	25	163.30			
Total	325					

Source: Primary Data

Median score of perceived risk of both rural and urban policyholders were 28.5 and 25 respectively. The mean ranks of test variable, shows a slight variation. The test results also show that there is statistically significant difference in perceived risk between rural and urban microinsurance policyholders ($p < 0.05$). Hence the null hypothesis formulated for testing was rejected and the alternate hypothesis is accepted. This indicates that there is statistical difference between rural and urban policyholder's perceived risk perception. Perceived risk perception is high among rural policyholders.

6.3.3g Type of Family and Perceived Risk

Table 6.28 shows the median and mean ranks for the perceived risk with respect to the policy holders family type. Mann-Whitney U test was applied to assess if any perceived risk differences exist among policyholders based on their family type. The findings are presented in Table 6.28. Hypothesis put forward for empirical testing are:

H₀: There is no significant difference between perceived risk and policyholders' family type

H₁: There is significant difference between perceived risk and policyholders' family type

Table 6.28

Mann-Whitney U Test for Perceived Risk and Type of Family of the Policyholders.

Type of Family	N	Median	Mean Rank	Mann-Whitney U Test statistic	P Value
Joint Family	108	26	164.05		
Nuclear Family	217	25	159.99	11064.500	.412
Total	325				

Source: Primary Data

Median score of perceived risk for policyholders from joint family and policyholders from nuclear family were 26 and 25 respectively. Mann-Whitney U test result also shows that there is no statistically significant variation in perceived risk between policyholders from joint family and policyholders from nuclear family, since the p value=0.412, which is greater than the level of significance (0.05). Hence the null hypothesis formulated for testing was retained. Which indicate that there is no statistical difference in the perceived risk between policyholders from joint family and policyholders from nuclear family.

6.3.3h Number of Dependent and Perceived Risk

Median score and mean ranks for the perceived risk with respect to sample respondents' number of dependent in their family is presented in Table 6.29. Kruskal Wallis H test was carried out to evaluate if there is any difference in the perceived risk of policyholders selected for study based on their number of dependents. Hypothesis put forward for empirical testing are:

H₀: There is no significant difference in perceived risk among policyholders having different number of dependents.

H₁: There is significant difference in perceived risk among policyholders having different number of dependents.

Table 6.29

Kruskal-Wallis H Test for Perceived Risk and Number of dependents of Policyholders

Number of dependent	N	Median	Mean Rank	Kruskal-Wallis H Statistic	df	P Value	Effect Size
Up to 2	45	26	163.30	1.388	3	.008	.0218
3 to 5	204	26	160.33				
6 to 8	63	26	165.62				
Above 8	13	28	191.15				

Source: Primary Data

Median score of perceived risk of policyholders with number of dependents up to 2, 3 to 5 and 6 to 8 were 26, for those with number of dependents above 8 was 28. While analysing the mean ranks of test variable, more variation can be noticed in the case of policyholders with number of dependents above 8 as compared to other groups. In order to check whether the variation is statistically significant, Kruskal Wallis H test was performed and the test result shows that there is statistically significant difference in perceived risk among the policyholders having different number of dependent in their family ($p < 0.05$). Hence the null hypothesis formulated for testing was rejected. This indicates that there is statistical difference between perceived risk and number of dependents a policyholder has.

6.4 Perceived Benefits Analysis

Microinsurance perceived benefits include the advantages and favourable results that policyholders anticipates or experiences as a result of their insurance coverage. These advantages go beyond monetary compensation and can include peace of mind, reduced stress, improved well-being, and the capacity to make long-term goals without fear of the unexpected. A deep understanding of these perceived benefits enables microinsurance providers to develop their product offers, align them with the needs of policyholders, and foster trust in the communities they serve.

6.4.1 Exploratory Factor Analysis of Perceived Benefits

Based on the variables identified, researcher performed factor analysis to identify the underlying factors with the help of principal component analysis. In order to carry out factor analysis, sample adequacy need to be ensured with the help of KMO. Kaiser-Meyer-Olkin Measure of Sampling Adequacy is an index for measuring suitability of factor analysis. It ranges from 0 to 1 and value above .5 indicates the suitability of factor analysis. The result indicates KMO value for variables measuring perceived benefits is .701 that is greater than the threshold limit which justifies the appropriateness of factor analysis. For measuring the presence of correlation among variables Bartlett's test of Sphericity is computed. Test statistic shows a chi- square value of 736.090 significant at 1% level of significance which allows the researcher to proceed with factor analysis. The result of KMO and Bartlett's Test of Sphericity is presented in Table 6.31.

Table 6.30

KMO and Bartlett's Test Result of Perceived Benefits

Kaiser-Meyer-Olkin Measure of Sampling Adequacy.		.701
	Approx. Chi-Square	736.090
Bartlett's Test of Sphericity	df	55
	Sig.	< .001

Source: Primary data

Initial and extracted communalities derived after extraction of factors which are displayed in the Table 6.30. Variables which show Communalities below 0.5 are need to remove from the construct for further analysis. Here none of the communalities were below 0.5, therefore the researcher proceeds further analysis with these constructs.

Table 6.31*Communalities of Perceived Benefits*

Items	Initial	Extraction
Microinsurance reduces or eliminates losses hidden in life's uncertainty	1.000	.580
Insurance provides stability for wealth planning	1.000	.819
With the microinsurance policy, I obtain a sense of security	1.000	.762
The insurance policy assists me to plan my personal financial management	1.000	.526
The assets of the poor are protected from financial loss	1.000	.610
Microinsurance increase the productivity of people	1.000	.574
People are able to save on out-of-pocket expenditure	1.000	.652
With microinsurance, one does not need to rely on other sources when disaster strikes	1.000	.674
Microinsurance can improve ability to cope with loss.	1.000	.583
Microinsurance Improve morale among communities	1.000	.632
Insurance serves as capital or wealth accumulation	1.000	.671

Extraction Method: Principal Component Analysis.

Source: Primary Data

For extracting factors from the variables, an analysis of Eigen value is required. The scale constructed and the components extracted should be able to explain maximum variance in the data. Eigen value represents the total amount of variance that can be explained by a principal component. Table 6.32 explain the total variance explained by the variables under study.

Table 6.32*Total Variance Explained of Perceived Benefits*

Sl.No	Initial Eigen Values			Extraction Sums of Squared Loadings			Rotation Sums of Squared Loadings		
	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative Percentage
1	5.052	45.926	45.926	5.052	45.926	45.926	3.767	34.249	34.249
2	1.633	14.841	60.767	1.633	14.841	60.767	2.917	26.518	60.767
3	1.206	10.966	71.733						
4	1.108	10.076	81.809						
5	.591	5.377	87.186						
6	.484	4.403	91.589						
7	.306	2.781	94.370						
8	.215	1.952	96.322						
9	.181	1.648	97.969						
10	.135	1.223	99.192						
11	.089	.808	100.000						

Extraction Method: Principal Component Analysis.

Source: Primary Data

Eigen value depicts explanatory power of each factor. Only factor with Eigen value greater than one are considered significant. From Table 6.32, two factors were extracted having Eigen value more than one which explained 60.767 % of total variance after rotation. The principal component analysis is used to extract the factors with ‘Varimax’ rotation.

Table 6.33

Rotated Component Matrix of Perceived Benefits

Items	Factor	Component	
		1	2
Microinsurance reduces or eliminates losses hidden in life’s uncertainty		.780	
With microinsurance, one does not need to rely on other sources when disaster strikes		.757	
The insurance policy assists me to plan my personal financial management		.722	
The assets of the poor are protected from financial loss	Monetary Benefits	.707	
Insurance provides stability for wealth planning		.687	
People are able to save on out-of-pocket expenditure		.672	
Insurance serves as capital or wealth accumulation		.529	
With the microinsurance policy, I obtain a sense of security			.885
Microinsurance can improve ability to cope with loss.	Non-monetary Benefits		.872
Microinsurance Improve morale among communities			.647
Microinsurance increase the productivity of people			.598

Extraction Method: Principal Component Analysis.
 Rotation Method: Varimax with Kaiser Normalization.
 Rotation converged in 3 iterations.

Source: Primary Data

The exploratory factor analysis of the construct perceived benefits initially had eleven observed variables. After rotation, two factors are extracted as monetary benefits and non-monetary benefits. First factor (Monetary benefits) constitutes seven observed variables with a factor loading above 0.5 and second factor (non-monetary benefits) constitute four observed variables having factor loading greater than 0.5. The rotated factor matrix presented above describes the extracted factor and the corresponding items with respective factor loadings.

6.4.2 Normality Assumption Test of Perceived Benefits Dimensions

For the purpose of hypothesis testing, Normality assumption of test variable need to be ensured to select whether parametric or non-parametric test is to be followed. Normality assumptions were checked with the help of Kolmogorov-Smirnov test as well as Shapiro-Wilk test. Assumption test results of normality are given in Table 6.34.

Table 6.34

Perceived Benefits Dimension Normality Test Results

Construct	Kolmogorov-Smirnov			Shapiro-Wilk		
	Statistic	df	P Value	Statistic	df	P Value
Perceived Monetary Benefits	.078	325	<0.001	.961	325	<0.001
Perceived Non-monetary Benefits	.113	325	<0.001	.952	325	<0.001

Source: Primary Data

The result of normality assumption test revealed that none of the testing variable's perceived benefits dimensions are normally distributed as the significance value of construct was found to be less than 0.05. Hence the null hypothesis for this assumption test "test distribution is normal" is rejected. For the purpose of testing hypotheses, non- parametric test was applied as the variables were not normally distributed.

6.4.3 Perceived Benefits and Demographic Profile Variables

After identifying the underlying factors of perceived benefits, an attempt made to evaluate is any variations exist in the perceived benefits according to the demographic variables of microinsurance policyholders. Test results are presented in detail here.

6.4.3a Gender and Perceived Benefits

The data were evaluated by gender to see if there is any difference in perceived benefits aspects between male and female policyholders. The Mann-Whitney U test is used to investigate gender differences in perceived benefit variables. The Table 6.35 shows the mean ranks and test results.

H₀: There is no significant difference in perceived benefits among respondents with regard to their gender.

H₁: There is significant difference in perceived benefits among respondents with regard to their gender.

Table 6.35

Mann-Whitney U Test for Perceived Benefits and Gender of the Policyholders.

Constructs	Gender	N	Mean Rank	Mann-Whitney U Test statistic	P Value
Perceived Monetary Benefits	Male	143	163.33	12966.50	0.956
	Female	182	162.74		
	Total	325			
Perceived Non-Monetary Benefits	Male	143	161.36	12779.00	0.778
	Female	182	164.29		
	Total	325			

Source: Primary Data

Table 6.35 shows the mean ranks and test results regarding variations in perceived benefit dimensions with respect to the gender of policyholders. Mean ranks of male policyholders was 163.33 and female policyholders was 162.74 with regards to

perceived monetary benefits. Similarly mean ranks of male policyholders was 161.36 and female policyholders was 164.29 with regards to perceived non-monetary benefits. In order to check whether this mean difference is statistically significant or not, independent sample t test for non-parametric test is carried out. From the test result it is clear that there is no significant variation among male and female policyholders in their perceived benefit dimensions. The test is failed to reject the null hypothesis as none of the test statistic showed asymptotic significant value less than .05.

6.4.3b Age and Perceived Benefits

The data were evaluated by age to see if there were any differences in perceived benefits aspects between different age groups of policyholders. The Kruskal-Wallis H test is used to assess the variance in policyholders' ages on perceived benefit variables. The mean ranks and test results were displayed in Table 6.36.

H₀: There is no significant difference in perceived benefits among respondents with regard to their Age Group

H₁: There is significant difference in perceived benefits among respondents with regard to their Age Group

Table 6.36

Kruskal-Wallis H Test for Perceived Benefits and Age Group of Policyholders

Construct	Age groups (In years)	N	Mean Rank	Kruskal Wallis H Statistic	df	P Value
Perceived Monetary Benefits	Between 18 to 25	6	155.13	9.70	4	.914
	Between 26 to 33	64	162.14			
	Between 34 to 41	62	169.52			
	Between 42 to 49	88	179.83			
	50 and Above	105	164.01			
	Total	325				
Perceived Non-Monetary Benefits	Between 18 to 25	6	155.50	7.87	4	.940
	Between 26 to 33	64	161.80			
	Between 34 to 41	62	167.60			
	Between 42 to 49	88	177.92			
	50 and Above	105	165.01			
	Total	325				

Source: Primary Data

From the Table 6.36, it can be seen that significance values of KWH test for perceived value variables are more than 0.05. This indicates that age of respondents does not have significant difference on their perceived monetary benefits as well as perceived non-monetary benefits (chi square value=9.70, P Value=.914 for perceived monetary benefits and chi square value=7.87, P Value=.940 for perceived non-monetary benefits). By comparing the mean rank obtained for perceived monetary benefits as well as perceived non-monetary benefits, the age category between 42 to 49 years has high score followed by the age category between 34 to 41 years, 50 and above group, between 26 to 33 years, and between 18 to 25 years.

6.4.3c Education and Perceived Benefits

The data were assessed to see if there was any difference in perceived benefits dimensions between policyholders with different education levels. The Kruskal-Wallis H test is used to assess the variation in policyholder education on perceived benefit variables. The Table 6.37 displays the mean ranks and test results.

H₀: There is no significant difference in perceived benefits among respondents with regard to their education.

H₁: There is significant difference in perceived benefits among respondents with regard to their education

Table 6.37

Kruskal-Wallis H Test for Perceived Benefits and Education Qualification of Policyholders.

Constructs	Education	N	Mean Rank	Kruskal Wallis H Statistic	df	P Value
Perceived Monetary Benefits	Primary	92	156.59	7.203	4	.699
	High School	137	163.07			
	Higher Secondary	75	163.35			
	Degree and Above	16	194.06			
	No Formal Education	5	151.40			
	Total	325				
Perceived Non-Monetary Benefits	Primary	92	161.50	6.852	4	.931
	High School	137	162.98			
	Higher Secondary	75	163.28			
	Degree and Above	16	177.34			
	No Formal Education	5	135.10			
	Total	325				

Source: Primary Data

From the Table 6.37, it is understood that the test failed to reject the null hypothesis regarding perceived benefits dimensions (Chi square value=7.203, P Value=.699 for perceived monetary benefits and Chi square value=6.852, P Value=.931 for perceived non-monetary benefits). Hence there is no significant difference in perceived benefits among Microinsurance policyholders with education level changes. Perceived benefits better for microinsurance policyholders those who have high level of education.

6.4.3d Income and Perceived Benefits

A test has been conducted to see whether the policyholder's perception of the benefits of microinsurance varies with their income level. The Kruskal-Wallis H test is used to look at how benefit was perceived differently. The Table 6.38 displays the test results and mean ranks.

H₀: There is no significant difference in perceived benefits among respondents with regard to their income level.

H₁: There is significant difference in perceived benefits among respondents with regard to their income level.

Table 6.38

Kruskal-Wallis H Test for Perceived Benefits and Monthly Income of Policyholders.

Constructs	Monthly Income	N	Mean Rank	Kruskal Wallis H Statistic	df	P Value
Perceived Monetary Benefits	Up to 5000	100	150.93	7.688	4	.611
	Between 5001 to 8000	104	157.68			
	Between 8001 to 11000	67	163.65			
	Between 11001 to 14000	30	166.69			
	14000 and Above	24	188.15			
	Total	325				

Constructs	Monthly Income	N	Mean Rank	Kruskal Wallis H Statistic	df	P Value
	Up to 5000	100	155.97			
	Between 5001 to 8000	104	162.25			
Perceived Non-Monetary Benefits	Between 8001 to 11000	67	164.72	8.586	4	.811
	Between 11001 to 14000	30	166.05			
	14000 and Above	24	180.69			
	Total	325				

Source: Primary Data

Table 6.38 describes that mean ranks of perceived benefit variables increases with increase in the income level of policyholders. Test results conclude that the p-value of perceived benefits dimensions is greater than 0.05 and the calculated t values are above 1.96. Therefore, the Null hypothesis is failed to reject at 5% level of significance indicating no significant difference in perception about monetary benefits as well as no-monetary benefits with varying income levels. Mean ranks of perceived benefits showed that those who earn higher income perceived the benefits better as compared with those who earn low level income.

6.4.3e Nature of Occupation and Perceived Benefits

To determine whether the benefits of microinsurance are viewed differently depending on the policyholders' occupational status, the occupational status of each policyholder is evaluated. The Kruskal-Wallis H test is used to investigate the variation if any in the perceived benefits variable among the respondent's occupational status. The Table 6.39 presents the test results and mean ranks.

H₀: There is no significant difference in perceived benefits among respondents with regard to their occupation.

H₁: There is significant difference in perceived benefits among respondents with regard to their occupation

Table 6.39

Kruskal-Wallis H Test for Perceived Benefits and Nature of Occupation of Policyholders.

Constructs	Occupation	N	Mean Rank	Kruskal Wallis H Statistic	df	P Value
Perceived Monetary Benefits	Agriculture & Allied	58	162.93	7.68	4	.943
	Self Employed	38	155.00			
	Daily Wage Worker	169	162.14			
	Permanent Employee	18	176.78			
	Temporary Employee	42	166.53			
	Total	325				
Perceived Non-Monetary Benefits	Agriculture & Allied	58	159.78	3.30	4	.988
	Self Employed	38	161.24			
	Daily Wage Worker	169	154.56			
	Permanent Employee	18	166.04			
	Temporary Employee	42	164.65			
	Total	325				

Source: Primary Data

Table 6.39 reveals the mean ranks for perceived monetary benefits. It is high among government employees and low among self-employed policyholders. Similarly mean ranks of perceived non-monetary benefits is high among government employed policyholders whereas low among those who worked on daily wage basis. Mean rank difference tested with the help of Kruskal-Wallis H test, result shows insignificant difference in perceived monetary benefit and perceived non-monetary benefits among respondents engaged in different occupations. Test retains the formulated null hypothesis.

6.4.3f Marital Status and Perceived Benefits

The marital status of policyholders is evaluated in relation to their perceived value dimensions. The Kruskal-Wallis H test is used to investigate the variation in perceived value. The Table 6.40 shows the mean rank scores and test results.

H₀: There is no significant difference in perceived benefits among respondents with regard to their marital status.

H₁: There is significant difference in perceived benefits among respondents with regard to their marital status.

Table 6.40

Kruskal-Wallis H Test for Perceived Benefits and Marital Status of Policyholders.

Constructs	Marital Status	N	Mean Rank	Kruskal Wallis H Statistic	df	P Value
Perceived Monetary Benefits	Married	281	162.82	8.548	3	.036
	Unmarried	24	151.48			
	Divorced	3	175.50			
	Widowed	17	180.00			
	Total	325				
Perceived Non-Monetary Benefits	Married	281	163.19	7.026	3	.071
	Unmarried	24	161.02			
	Divorced	3	188.17			
	Widowed	17	178.26			
	Total	325				

Source: Primary Data

From the test results depicted in Table 6.40, it can be inferred that insignificant difference is found in perceived monetary benefits and perceived non-monetary benefits with regards to policyholder's marital status. Test shows a chi square value of 8.548 for perceived monetary benefits component, and 7.026 for perceived non-monetary benefits component. Corresponding significant value at 5 percent level is .036 and .071 respectively. Since the p value for perceived monetary benefits is less than the level of significance value, test reject the null hypothesis that there is no variation in perceived monetary benefits according to marital status of policyholders. In case of perceived non-monetary benefits p value is greater than the threshold decision criteria (.05). Since the p value for the components is greater than .05, test failed to rejects the null hypotheses formulated that "there is no significant variation in perceived non-monetary benefits among respondents with regard to their marital status".

6.4.3g Place of Residence and Perceived Benefits

In order to find whether perceived benefits of microinsurance differ between policyholders in urban and rural areas, the place of residences of policyholders is examined in relation to perceived benefits with the help of Mann-Whitney U test. The Table 6.41 presents the test results and mean ranks.

H₀: There is no significant difference in perceived benefits among respondents with regard to their place of residence.

H₁: There is significant difference in perceived benefits among respondents with regard to their place of residence.

Table 6.41

Mann-Whitney U Test for Perceived Benefits and Place of Residence of the Policyholders.

Constructs	Place of Residence	N	Mean Rank	Mann-Whitney U Test Statistic	P Value
Perceived Monetary Benefits	Rural	235	163.20	10829	.036
	Urban	90	172.49		
	Total	325			
Perceived Non-Monetary Benefits	Rural	235	163.24	10518	.939
	Urban	90	162.37		
	Total	325			

Source: Primary Data

Table 6.41 reveals that the results of Mann Whitney U test, applied to compare the policyholder's perception regarding monetary benefits. It shows statistical difference between rural and urban policyholders (for monetary benefits $U = 10829$, $p = 0.036 > 0.05$) The perceived monetary benefits mean rank of the rural policyholders and urban policyholders were 163.20 and 172.49 respectively, urban policyholders had increased perceived monetary benefits than rural policyholders. The perception

regarding non-monetary benefits did not show any statistical difference between the two groups. The perceived non-monetary benefits mean rank of the rural policyholders and urban policyholders were 163.24 and 162.37 respectively. The mean ranks of the groups indicate that there is not much difference in the perception on non-monetary benefits of microinsurance.

6.4.3h Type of Family and Perceived Benefits

The type of family of policyholders is investigated in connection to the perceived benefits of microinsurance. In order to determine if policyholders from joint families and nuclear families viewed monetary and non-monetary benefits similarly. The Mann-Whitney U test was used for this purpose. The Table 6.42 shows the mean ranks and test results.

H₀: There is no significant difference in perceived benefits among respondents with regard to their type of family.

H₁: There is significant difference in perceived benefits among respondents with regard to their type of family.

Table 6.42

Mann-Whitney U Test for Perceived Benefits and Type of Family of the Policyholders.

Construct	Type of Family	N	Mean Rank	Mann-Whitney U Test Statistic	P Value
Perceived Monetary Benefits	Joint Family	108	166.18	11375.000	.042
	Nuclear Family	217	181.42		
	Total	325			
Perceived Non-Monetary Benefits	Joint Family	108	162.73	11660.000	.038
	Nuclear Family	217	183.54		
	Total	325			

Source: Primary Data

From the Table 6.42, it is understood that the mean ranks among policyholders from nuclear family (181.42) and joint family (166.18) with regards to perceived monetary benefits have some differences. Similarly mean ranks among policyholders from nuclear family (183.54) and joint family (162.73) with regards to perceived non-monetary benefits has very small differences. To explore whether this difference is statistically significant or not, Man-Whitney U test was performed. Result of the test indicates that the mean rank deviations were statistically significant for both the dimension of perceived benefits.

6.4.3i Number of Dependent and Perceived Benefits

The number of dependent of policyholders is analysed in connection to the perceived benefits of microinsurance. In order to know whether the policyholders' perceived benefits of microinsurance is similar or different, were number of dependent in their family varies. The Kruskal Wallis H test was used for this purpose. The Table 6.43 shows the mean ranks and test results.

H₀: There is no significant difference in perceived benefits among respondents with regard to number of dependents.

H₁: There is significant difference in perceived benefits among respondents with regard to number of dependents.

Table 6.43

Kruskal-Wallis H Test for Perceived Benefits and Number of Dependent of Policyholders.

Construct	Number of Dependents	N	Mean Rank	Kruskal Wallis H Statistic	df	P Value
Perceived Monetary Benefits	Up to 2	45	162.49	.536	3	.911
	3 to 5	204	160.73			
	6 to 8	63	168.24			
	Above 8	13	175.04			
	Total	325				

Construct	Number of Dependents	N	Mean Rank	Kruskal Wallis H Statistic	df	P Value
Perceived Non-Monetary Benefits	Up to 2	45	162.37	1.121	3	.772
	3 to 5	204	160.29			
	6 to 8	63	173.83			
	Above 8	13	155.19			
	Total	325				

Source: Primary Data

From the Table 6.43 describe that mean ranks of perceived benefit variables increases when increase in the number of dependent of policyholders they have. Test results conclude that the p-value of perceived benefits dimensions is greater than 0.05 and therefore, the null hypothesis is failed to reject at 5 percent level of significance indicating no significant difference in perception about monetary benefits as well as non-monetary benefits according to number of dependents have in their family. Mean ranks of perceived benefits showed that those who earn higher income perceived the benefits better as compared with those who earn low level income.

6.5 Attitude towards Risk Analysis

The acceptance and utilisation of microinsurance products are directly impacted by policyholders' attitudes towards risk. Policyholders are more likely to invest in microinsurance if they perceive greater risks in their life and have a lower tolerance for such risks. On the other hand, people who overestimate risks or think they can manage them in other ways could be less likely to get a microinsurance policy. Microinsurance policyholders' attitudes towards risk are influenced by a variety of complicated economic, cultural, social, and personal factors. Microinsurance programme execution requires awareness of and comprehension of these aspects. Here researcher made an analysis on does attitude towards risk among policyholders has any significant variations across their profile variables or not.

6.5.1 Attitude towards Risk Level Classification

The quartile values used to classify attitude towards risk into three levels are described in the Table 6.44.

Table 6.44

Levels of Classification of Attitude towards Risk among Policyholders

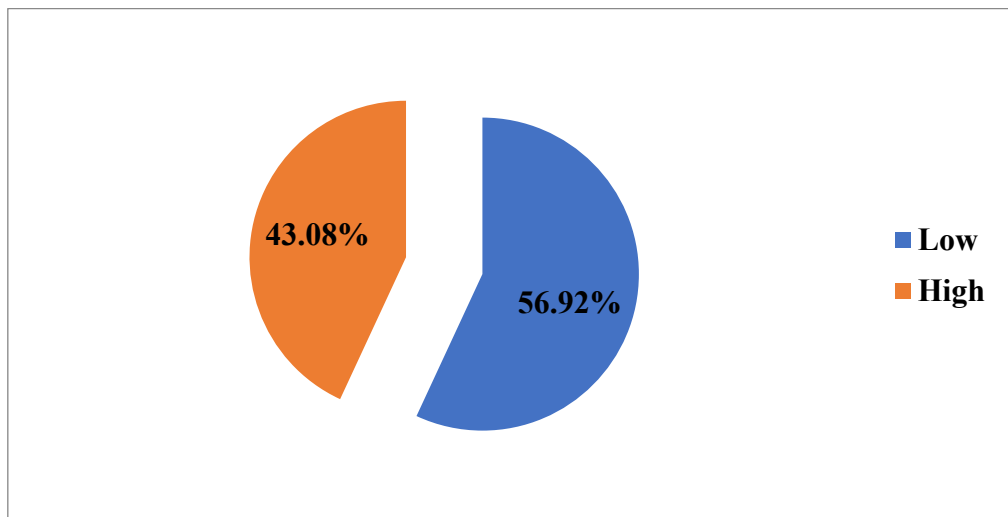
Levels	Frequency	Percentage
Low	185	56.92
High	140	43.08
Total	325	100

Source: Primary Data

Frequency Table 6.44 reveals that 56.92 percent policyholders have low level of positive attitude towards risk, 43.08 percent of sample policyholders have high level of positive attitude towards risk Figure 6.3 depicts the frequency distribution of level of attitude towards risk among microinsurance policyholders.

Figure 6.3

Levels of Attitude towards Risk



Source: Compiled by the researcher

6.5.2 Normality Assumption Test for Attitude towards Risk

In order to determine test statistic for hypothesis testing, normality assumption for the test variable need to be ensured to select whether parametric or non-parametric test will be followed. Normality assumptions are checked with the help of Kolmogorov-Smirnov Test as well as Shapiro-Wilk Test. Assumption test results of normality are given in Table 6.45.

Table 6.45

Tests Results of Normality of Attitude towards Risk

	Kolmogorov-Smirnov ^a			Shapiro-Wilk		
	Statistic	df	P Value	Statistic	df	P Value
Attitude towards Risk	.089	325	<.001	.872	325	<.001

Source: Primary Data

Table 6.45 revealed that the testing variable indicating attitude towards risk was not normally distributed as the significance value of construct was less than 0.05. Hence the null hypothesis for this assumption test “test distribution is normal” is rejected. For the purpose of testing hypotheses, non-parametric test was applied as the variables were not normally distributed.

6.5.3 Attitude towards Risk and Policyholders’ Demographic Variables

Variation in attitude towards risk score and policyholders demographic profile variables are tested with appropriate non parametric test and the results are presented below.

6.5.3a Gender and Attitude towards Risk

Mann-Whitney U test was performed to ascertain the attitude towards risk variations among microinsurance policyholders based on their gender, The results are shown in Table 6.46. Hypothesis formulated for testing are as follows:

H₀- There is no significant variation in attitude towards risk of male and female policyholders

H₁- There is significant variation in attitude towards risk of male and female policyholders

Table 6.46

Comparison of Attitude towards Risk by Gender

Gender	N	Median	Mean Ranks	Mann-Whitney U Test Statistic	P Value
Male	143	25	164.93		
Female	182	26	167.21	12678.000	.768
Total	325				

Source: Primary Data

From the Table 6.46, it can be seen that the Attitude towards risk median score of male and female policyholders were 25, 26, respectively. When look into the mean ranks of test variable, it can be found that only a small deviation exists. Test results also show that there is no statistically significant difference in attitude towards risk between male and female microinsurance policyholders ($p > 0.05$). Hence the null hypothesis formulated for testing is retained. Which indicate that there is no statistical difference between male and female policyholder's attitude towards risk mean rank was high in case of female policyholders than the male policyholders

6.5.3b Age and Attitude towards Risk

Kruskal Wallis H test was applied to determine the attitude towards risk differences of policyholders selected for study with regards to age groups. The findings are presented in Table 6.47. Hypothesis put forward for empirical testing are:

H₀- There is no significant difference between attitude towards risk and age group of policyholders

H₁- There is significant difference between attitude towards risk and age group policyholders

Table 6.47

Comparison of Attitude towards Risk by Age Group

Age Groups (In years)	N	Median	Mean Rank	Kruskal Wallis H Statistic	df	P Value
Between 18 to 25	6	23	125.06			
Between 26 to 33	64	25.5	157.24			
Between 34 to 41	62	27	178.45	9.898	4	.028
Between 42 to 49	88	26.5	174.12			
50 and Above	105	25	153.78			

Source: Primary Data

The mean ranks of perceived risk of between the age group of 18 to 25 years were 125.06, 26 to 33 years age group policyholders were 157.24, 34 to 41 years age group policyholders' were 178.45, 42 to 49 years age group policyholders were 174.12, and 50 and Above age group were 153.78. To check whether this variation is statistically significant or not, Kruskal Wallis H test was carried out. Test results shows that p value is less than the alpha value of .05, hence it can be concluded that policyholder's attitude towards risk was statistically significant with respect to their age group (*H Statistic = 9.898, p = .028*). Multiple pair wise comparison shows that 18 to 25 years group significantly differ with 34 to 41 years group and 42 to 49 years age group.

6.5.3c Education and Attitude towards Risk

Table 6.49 shows the median and mean ranks for the attitude towards risk with respect to education qualification of sample respondents. Kruskal Wallis H test was applied to determine whether attitude towards risk differs between policyholders based on their education qualification. The findings are presented in Table 6.48. Hypothesis put forward for empirical testing are:

H₀: There is no significant variation in attitude towards risk among education level of policyholders

H₁: There is significant variation in attitude towards risk among education level of policyholders

Table 6.48

Comparison of Attitude towards Risk by Education of Respondents

Education	N	Median	Mean Rank	Kruskal Wallis H Statistic	df	P Value
Primary	92	26	162.51	9.308	4	.032
High School	137	26	162.87			
Higher Secondary	75	25	178.36			
Degree and Above	16	30.5	222.52			
No Formal Education	5	27	151.53			

Source: Primary Data

It can be noted from the Table 6.48, attitude towards risk was more in case of policyholders those who have degree and above education with a mean rank of 222.52 as compared to other groups. Median score and mean rank of policyholders having different education qualification shows some differences. As seen in Table 6.48, the result of Kruskal Wallis H test shows that there was a significant difference in attitude towards risk with respect to the education qualification they have. Multiple pair wise comparison shows that policyholders having the qualification of degree and above significantly varies from other three groups, they are no formal education, primary education and high school education.

6.5.3d Occupation and Attitude towards Risk

The attitude towards risk with respect to occupation of sample respondents are analysed by using Kruskal Wallis H test to evaluate if there are any differences in the attitude towards risk of policyholders selected for study based on their occupation. The findings are presented in Table 6.49. Hypothesis put forward for empirical testing are:

H₀: There is no significant variation in attitude towards risk among occupational status of the policyholders.

H₁: There is significant variation in attitude towards risk among occupational status of the policyholders.

Table 6.49

Comparison of Attitude towards Risk by Occupation of Respondents

Occupation	N	Median	Mean Rank	Kruskal Wallis H Statistic	P Value
Agriculture & Allied	58	27	168.25	9.993	.007
Self Employed	38	25.5	162.46		
Daily Wage Worker	169	25	160.37		
Permanent Employee	18	28	201.64		
Temporary Employee	42	25	161.09		

Source: Primary Data

From the Table 6.50, the mean rank and median score of perceived risk is high in case of policyholders those who have permanent job, similarly score was low among policyholders working based on daily wage basis. These mean rank variations are further tested and the result reveals that there is significant difference in attitude towards risk among policyholders engaged in different occupations. The null hypothesis formulated rejected by the test due to the significance value less than 0.05. Policyholder those who have permanent job significantly differ from all other occupation category of policyholders, similarly policyholders working in private sector significantly differ from those working in agriculture and allied jobs.

6.5.3e Income and Attitude towards Risk

The Table 6.50 shows the descriptive for the attitude towards risk with respect to income of sample policyholders. Kruskal Wallis H test was applied to assess if there any attitude towards risk differences exists among policyholders with regards to their income level. Hypothesis put forward for empirical testing are

H₀: There is no significant variation in attitude towards risk among different income levels of the policyholders

H₁: There is significant variation in attitude towards risk among different income levels of the policyholders

Table 6.50*Comparison of Attitude towards Risk by Income*

Monthly Income (In Rupees)	N	Median	Mean Rank	Kruskal Wallis H Statistic	P Value	Effect Size
Up to 5000	100	23.5	143.45			
Between 5001 to 8000	104	25	155.82			
Between 8001 to 11000	67	25	158.28			
Between 11001 to 14000	30	27	170.83	9.926	.047	.133
14000 and Above	24	28	205.81			
Total	325					

Source: Primary Data

Median score of attitudes towards risk of policyholders have income level up to Rs.5000 was 23.5, for those between Rs.5001 to 8000 was 25, policyholders below the income group of Rs.8001 to 11000 was 25, Rs.11001 to 14000 was 27, and income Rs.14000 and above was 28. While analysing the mean ranks of attitude towards risk, variation can be noticed. In order to check whether the variation is statistically significant or not Kruskal Wallis H test was performed and the test result shows that there is statistically significant difference in attitude towards risk among the policyholders belonging to different income group since the test statistic alpha value was less than 0.05. Hence the null hypothesis formulated for testing was rejected. Multiple pair wise comparisons shows that the income up to Rs.5000 significantly differs from those earn income between Rs.11000 to 14000 and income Rs.14000 and above.

6.5.3f Marital Status and Attitude towards Risk

Kruskal Wallis H test was performed to ascertain the attitude towards risk variations among microinsurance policyholders based on their marital status. The results are shown in Table 6.52. Hypothesis formulated for testing are as follows:

H₀: There is no significant variation in attitude towards risk across different marital status of policyholders

H₁: There is significant variation in attitude towards risk across different marital status of policyholders

Table 6.51

Comparison of Attitude towards Risk by Marital Status

Marital Status	N	Median	Mean Rank	Kruskal Wallis H Statistic	df	P Value
Married	281	26	161.48			
Unmarried	24	22.5	132.13			
Divorced	3	28	240.56	9.664	3	.043
Widowed	17	27	201.19			
Total	325					

Source: Primary Data

From the Table 6.51, the mean ranks and median score are found to be high among divorced policyholders. Median score was low among unmarried policyholders. Their mean rank variations are further tested and the result reveal that there is significant difference in attitude towards risk among different marital status groups as the significance value less than the level of significance 0.05. Hence the null hypothesis formulated rejected by test. Multiple pair wise comparison reveals that divorced policyholders significantly differ from married and unmarried policyholders. Similarly, widowed policyholders also significantly differ from married and unmarried policyholders.

6.5.3g Area of Residence and Attitude towards Risk

Mann-Whitney U test was performed to ascertain the attitude towards risk variations among microinsurance policyholders by place of residence. The results are shown in Table 6.52. Hypothesis formulated for testing are as follows

H₀: There is no significant variation in attitude towards risk among Rural and Urban policyholders.

H₁: There is significant variation in attitude towards risk among Rural and Urban policyholders.

Table 6.52

Comparison of Attitude towards Risk by Area of Residence

Place of Residence	N	Median	Mean Rank	Mann-Whitney U Test Statistic	P Value	Effect Size
Rural	235	25	164.30			
Urban	90	28.5	181.89	10485.000	.032	.0482
Total	325					

Source: Primary Data

Median score of attitudes towards risk of rural and urban policyholders were 25 and 28.5 respectively. The mean ranks of test variables show some differences. Test result also shows that there is statistically significant difference in attitude towards risk between rural and urban microinsurance policyholders ($p < 0.05$). Hence the null hypothesis formulated for testing was rejected and the alternate hypothesis is accepted. This indicates that there is statistical difference between rural and urban policyholder's attitude towards risk. Attitude towards risk is high among urban policyholders.

6.5.3h Type of Family and Attitude towards Risk

Table 6.53 shows the median and mean ranks for the attitude towards risk with respect to type of family of sample policyholders. Mann-Whitney U test was applied to assess if any attitude towards risk differences exists among policyholders based on their family type. Hypothesis put forward for empirical testing are:

H₀: There is no significant variation in attitude towards risk among policyholders those belong to joint family and those belong to nuclear family.

H₁: There is significant variation in attitude towards risk among policyholders those belong to joint family and those belong to nuclear family.

Table 6.53*Comparison of Attitude towards Risk by Type of Family*

Type of Family	N	Median	Mean Rank	Mann-Whitney U Test statistic	P Value
Joint Family	108	26	164.05		
Nuclear Family	217	25	160.75	11059.500	.312
Total	325				

Source: Primary Data

Attitude towards risk Median score of policyholders from joint family and policyholders from nuclear family were 26 and 25 respectively, Mann-Whitney U test result also shows that there is no statistically significant variation in attitude towards risk between policyholders from joint family and policyholders from nuclear family. Since the p value is 0.312, which is greater than the level of significance alpha value of 0.05. Hence the null hypothesis formulated for testing was retained. Which indicate that there is no statistical difference in the attitude towards risk between policyholders from joint family and policyholders from nuclear family.

6.5.3i Number of Dependent and Attitude towards Risk

Median score and mean ranks for the attitude towards risk with respect to sample respondents' number of dependent in their family is presented in Table 6.54. Kruskal Wallis H test was carried out to evaluate if there is any difference in the attitude towards risk of policyholders selected for study based on their number of dependents. Hypothesis put forward for empirical testing are:

H₀: There is no significant variation in attitude towards risk among policyholders having different number of dependent.

H₁: There is significant variation in attitude towards risk among policyholders having different number of dependent.

Table 6.54*Comparison of Attitude towards Risk by Number of Dependent*

Number of dependent	N	Median	Mean Rank	Kruskal Wallis H Statistic	df	P Value	Effect Size
Up to 2	45	26	163.30				
3 to 5	204	26	160.33				
6 to 8	63	26	165.62	11.388	3	.028	.022
Above 8	13	28	191.15				
Total	325						

Source: Primary Data

From the Table 6.54, it is observed that median score of attitudes towards risk of policyholders with number of dependents up to 2, 3 to 5 and 6 to 8 were 26. For those with number of dependents above 8 were 28. While analysing the mean ranks of test variable, more variation can be noticed in the case of policyholders with number of dependents above 8 as compared to other groups. In order to check whether the variation is statistically significant, Kruskal Wallis H test was performed and the test result shows that there is statistically significant difference in attitude towards risk among the policyholders having different number of dependent in their family ($p < 0.05$). Hence the null hypothesis formulated for testing was rejected. This indicates that there is statistical difference between attitude towards risk and number of dependents a policyholder has.

6.6 Changes in Socio-Economic Status

In this section researcher try to examine the extent of changes that have taken place among microinsurance policyholders after their enrolment as a policyholder. Certain elements like Peace of mind, Financial security, confidence to cover emergency expenditures, social security and equality, empowerment of weaker sections of the society, equal status, participation and power of decision making in community, financial literacy and numeracy, opportunity to develop social contact with people and officials, empowerment of the individual decision making of household, vulnerability, standard of living were considered to ascertain the measurements of the study. The changes in these elements among the respondents were examined on

the basis of their own evaluation of their status with regard to selected indicators both before and after taking the policy. The responses were collected on a five-point interval scale ranging from 'Very poor' to 'Excellent'. Wilcoxon matched pair test is used to test the significance of difference between 'Before' and 'After' mean rank scores.

H₀: There is no significant difference in the mean rank values of the stated elements among microinsurance policyholders before and after taking microinsurance policy.

H₁: There is a significant difference in the mean rank values of the stated elements among microinsurance policyholders before and after taking microinsurance policy.

The elements are examined Table 6.55 in detail:

Table 6.55

Before - After Comparison of the Mean Rank of Respondents.

Variables	Before Mean Rank	After Mean Rank	Test statistic	P Value
Peace of mind	147.62	168.93	3.022	0.043
Financial security	131.53	150.47	5.551	<0.001
Confidence to cover emergency expenditures	156.69	174.57	8.30	<0.001
Social security & equality	152.31	178.28	3.667	0.007
Empowerment of weaker sections of the society	143.56	178.23	8.731	<0.001
Equal status, participation & power of decision making in community	173.36	175.74	1.546	0.059
Financial literacy and numeracy	168.54	173.24	1.864	0.067
Opportunity to develop social contact with people & officials	158.26	161.01	1.792	0.086
Empowerment of the Individual decision making in household	161.01	163.15	2.013	0.120
Vulnerability	151.42	175.49	5.236	0.006
Standard of living	162.31	169.73	2.865	0.198

Source: Primary Data

Table 6.55 indicates that the policyholders' "Peace of mind" improved after they took microinsurance policy. The mean ranks before taking the policy is 147.62 and mean rank after taking microinsurance policy is 168.93. Wilcoxon matched pair test result reveals that there is a significant difference in the mean ranks of peace of mind before and after taking microinsurance policy. This is evident because p value for the test statistic is less than 0.001, which is less than the level of significance $\alpha=0.05$.

Similarly, policyholders were of the opinion that their financial security after taking microinsurance policy improved considerably (mean rank before taking policy= 131.53, mean rank after taking policy= 150.47). Statistical test result also indicates that significant difference exists in "Financial security" before and after taking microinsurance policy. Wilcoxon matched pair test statistic is 5.551 with corresponding p value is less than 0.001, which is less than the level of significance of $\alpha=0.05$. Hence, the null hypothesis is rejected and alternative hypothesis "there is significant difference in the mean ranks of financial security concern before and after taking microinsurance policy" is accepted.

Analysing the mean ranks of opinion regarding "Confidence to cover emergency expenditures", it can be seen that some difference exists as well. The test result proved that there is a significant variation in the mean ranks of "Confidence to cover emergency expenditures" before and after taking microinsurance policy. This is evident because p value for the test statistic is <0.001 , which is less than the level of significance $\alpha=0.05$. Since the p value is less than the threshold value, test rejects the null hypothesis.

There has been slight variation regarding "Social security and equality" experiences policyholders had before and after taking microinsurance policy. The deviation recorded from their response was found to be statistically significant with the help of Wilcoxon matched pair test result. Test statistic shows a value of 3.667 and asymptotic significance value <0.001 , which is less than the level of significance $\alpha=0.05$. Hence, test accepted the alternative hypothesis that "there is a significant

difference in the mean ranks of social security and equality before and after taking microinsurance policy”.

Furthermore, the result indicates that the policyholder’s opinion about “Empowerment of weaker sections of the society” is better after taking microinsurance policy. The mean ranks before having microinsurance in this regard is 174.62 and mean rank after taking microinsurance policy is 168.93. Wilcoxon matched pair test result reveals that there is a significant difference in the mean ranks regarding “Empowerment of weaker sections of the society” before and after taking microinsurance policy. This is evident because p value for the test statistic is <0.001 , which is less than the level of significance $\alpha= 0.05$.

Analysing the mean ranks of opinion regarding “Equal status, participation and power of decision making in community”, it can be seen that some difference in the mean rank is observed. The test result also proved that there is a significant variation in the mean ranks. This is evident because p value for the test statistic is 0.059, which greater than the level of significance $\alpha= 0.05$. Since the p value is more than the threshold, test value retains the null hypothesis.

Respondents were also of the opinion that they felt a small difference in “Financial literacy and numeracy” before and after taking microinsurance policy. Mean ranks corresponding to before and after taking microinsurance policy also indicated slight deviations. However, statistical tests were conducted to ascertain whether this deviation is significant or not. Researcher made use of Wilcoxon matched pair test result. Test statistic showed a value of 1.864 and asymptotic significance value is 0.067, which is greater than the level of significance $\alpha= 0.05$. Hence test retains the null hypothesis, indicating that “there is no significant difference in the mean ranks of “Financial literacy and numeracy” before and after taking microinsurance policy.

Respondents felt that “Opportunity to develop social contact with people & officials” has improved after taking microinsurance policy (mean rank=161.01). Test result indicates that statistically significant difference doesn’t exist among policyholders on “Opportunity to develop social contact with people & officials” before and after taking microinsurance policy. Wilcoxon matched pair test statistic is

1.792 and corresponding p value is 0.086, which is greater than the level of significance $\alpha= 0.05$. Hence, the null hypothesis is retained, which indicate that “there is no significant difference in the mean ranks of Opportunity to develop social contact with people & officials before and after taking microinsurance policy”.

The result indicates that the policyholder’s opinion about “Empowerment of the individual decision making in household” is better after taking microinsurance policy. The mean rank prior taking microinsurance policy is 161.01, and after taking microinsurance policy is 163.15. Wilcoxon matched pairs test result reveals that there is no significant difference in the mean ranks of “Empowerment of the Individual decision making in household” before and after taking microinsurance policy”. This is evident as the p value for the test statistic is 0.120, which is more than the level of significance $\alpha= 0.05$.

Regarding the responses collected from sample policyholders about vulnerability, mean ranks show deviation in experience before and after taking microinsurance policy. This deviation that exists before and after taking microinsurance was found to be statistically significant. This can be understood from the Wilcoxon matched pair test result. Test statistic shows a value of 5.236 and asymptotic significance value is 0.006, which is less than the level of significance $\alpha= 0.05$. Hence test rejects the null and accepts the alternative hypothesis that “there is a significant difference in the mean ranks of vulnerability before and after taking microinsurance policy”.

Comparing experience before and after taking microinsurance policy is the “Standard of living”. The test revealed that there is no statistically significant difference regarding respondent’s opinion on “Standard of living” before and after taking microinsurance policy. The test statistic is 2.865 and corresponding significance value is 0.198, which is above the threshold alpha of 0.05. This means that there is no much improvement in the standard of living among policyholders after being insured.

6.7 Influence of Various Determinants on Microinsurance Investment

The successful adoption of microinsurance investments relies on a combination of factors influence the decision-making process of individuals when considering microinsurance investments, including financial capability, perceived benefits, perceived value, perceived risk, and attitude towards risk. By addressing these influences, insurers and policymakers can promote greater inclusion and empower underserved communities to manage risks and achieve financial security through microinsurance. Understanding these influences helps insurers design more inclusive and effective microinsurance products that cater to the specific needs and preferences of the underserved population, ultimately encouraging greater participation and fostering financial resilience within communities.

The financial capability of individuals significantly impacts their ability to invest in microinsurance. People with limited resources may view microinsurance as a crucial tool for protecting against unexpected events that could otherwise cause financial distress. However, if the cost of microinsurance premiums exceeds their financial capacity, they may hesitate to invest, even if they recognize its importance. Individuals assess the perceived benefits of microinsurance, such as coverage against specific risks and the financial support provided in times of need. The clearer and more comprehensive the coverage, the more likely individuals are to perceive it as beneficial and worthy of investment. The interplay of these factors varies among individuals based on their socio-economic status, cultural beliefs, past experiences, and level of awareness etc.

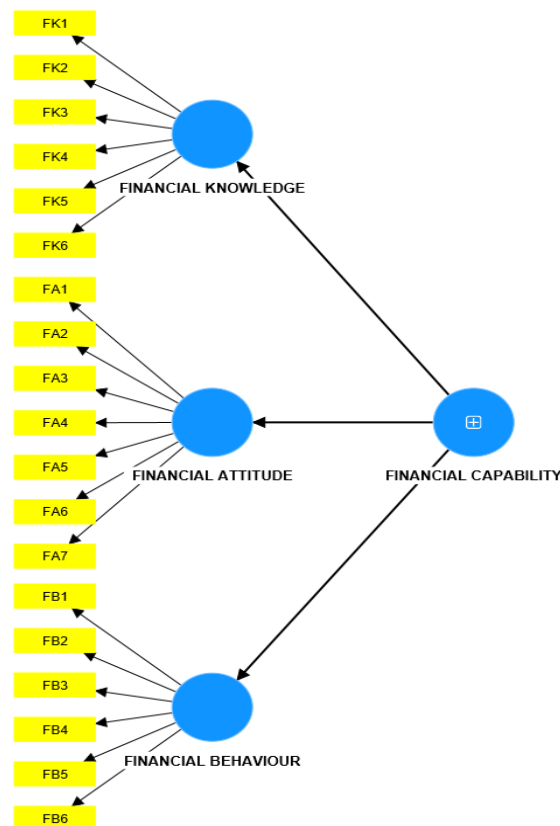
For the purpose of examining the influence of various determinants (financial capability, perceived benefits, perceived value, perceived risk, and attitude towards risk) in microinsurance investment, Structural Equation Modeling was used. Before performing SEM model, validation of each construct is necessary. In order to ensure validity of measurement model firstly performed Confirmatory Factor Analysis with the help of Smart PLS4

6.7.1 Confirmatory Factor Analysis of Financial Capability

Financial capability was one of the independent variables considered in this study. In order to measure the latent variable i.e. financial capability, researcher identified three sub dimensions which will leads to financial capability such as financial knowledge, financial attitude and financial behaviour. Confirmatory Factor Analysis is carried out for checking the robustness of the sub constructs in the initial measurement model of financial capability with the help of Smart PLS 4.0 software. By evaluating the indicators' convergence to their factors through convergent validity testing, it can be determined whether these variables actually measure the financial capability among the sample respondents, and by evaluating the discriminant validity of the indicators, it can be determined whether they are only measuring these sub construct. As a result, the measurement model that connects measured latent variables to their indicators was ensured.

Figure 6.4

Initial Measurement Model; Financial Capability



Source: Smart PLS4 Output

To examine the structural model, it is imperative to determine the reliability and validity of the latent variables. Here, a reflective measurement model is used, which is depicted in Figure 6.4. In reflective measurement model reflective latent variables demonstrate a common latent factor structure along with reflective indicators, demonstrating how changes in the underlying latent construct are reflected by changes in the indicators. Additionally, the reflective model's indicators are subject to measurement errors. Indicators influenced by latent variables are referred to as 'effects' indicators. Reflective models are the measurement models that validate these indicators and their latent variables.

While using structural equation analysis, there are certain constructs like first order and second order constructs. Observed variables serve as indicators for a first order construct. Unobserved constructs serve as the indicators for the second order. In this study financial capability was a second order construct. Its first order constructs were the sub dimensions which are used to measure the main construct Financial Capability. Partial Least Square algorithm (PLS algorithm) was run on the model to assess the reliability and validity of the measures. For finding reliability of the measures, indicator reliability and internal consistency reliability is computed. The results of reliability and validity are reported in Table 6.56

Table 6.56
Validity Indices: LOCs of Financial Capability

Constructs	Indicators	Loadings	Cronbach Alpha	Composite Reliability	Average Variance Extracted
Financial Knowledge	FK1	0.723	0.863	0.867	0.594
	FK2	0.819			
	FK3	0.780			
	FK4	0.738			
	FK5	0.797			
	FK6	0.764			

Constructs	Indicators	Loadings	Cronbach Alpha	Composite Reliability	Average Variance Extracted
Financial Attitude	FA1	0.815	0.902	0.904	0.630
	FA2	0.744			
	FA3	0.772			
	FA4	0.856			
	FA5	0.793			
	FA6	0.816			
	FA7	0.757			
Financial Behaviour	FB1	0.822	0.927	0.929	0.734
	FB2	0.860			
	FB3	0.832			
	FB4	0.853			
	FB5	0.885			
	FB6	0.888			

Source: Primary Data

In order to assess the Reflective Measurement Model, one must first look at the indicator loadings. It is advised to aim for loadings above 0.5, because they show that the construct provides acceptable item reliability by explaining more than 50 percent of the indicator's variance. Indicator loadings are depicted in the Table 6.56. Here all the constructs indicator loadings are above 0.5, therefore the first criteria of the measures are satisfied. Secondly, internal consistency reliability is evaluated from the composite reliability of the construct. All the CRs were higher than the recommended value of 0.7 (Wasko and Faraj, 2005). Cronbach alpha of each construct exceed the 0.700 threshold. Convergent validity was acceptable because the average variance extracted (AVE) of all the three constructs was above 0.50.

The Fornell-Larcker criteria will indicate discriminant validity between latent variables only when they have the largest value in their respective row and column. From the Table 6.57, it can be observed that, financial attitude (0.794), financial

behaviour (0.857) and financial knowledge (0.771), all the values were highest against the respective row and column and the test suggest that three construct were discriminant. The discriminant validity of the final measurement model is confirmed and the statistics are reported in Table 6.57

Table 6.57

Fornell-Larcker Criteria of Financial Capability

Constructs	Financial Attitude	Financial Behaviour	Financial Knowledge
Financial Attitude	<i>0.794</i>		
Financial Behaviour	0.679	<i>0.857</i>	
Financial Knowledge	0.606	0.525	<i>0.771</i>

Note: Values in italics shows square root of AVE
Source: Primary Data

The cross loadings of each construct also checked to ensure whether the financial capability measures establish discriminant validity or not. It can be observed from the cross-loading metrics, each items got higher loadings in their respective column to be discriminant from the other factor's item. Constructs indicators loading values clearly indicate discriminant validity of the model. The cross-loading metrics were presented in Table 6.58.

Table 6.58

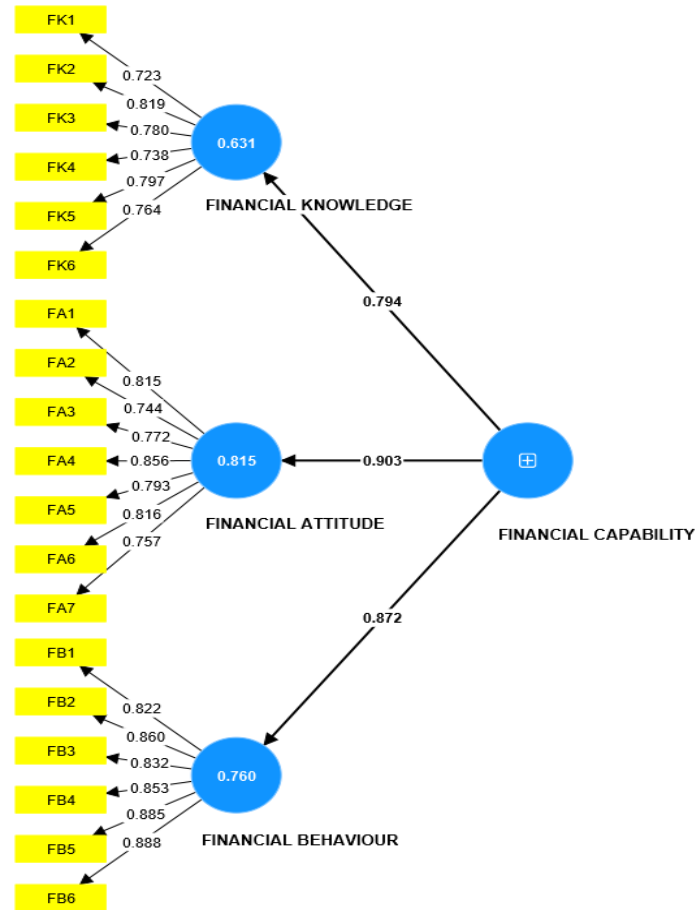
Indicator Item Cross Loadings of Financial Capability

Constructs	Indicators	Financial Knowledge	Financial Attitude	Financial Behaviour
Financial Knowledge	FK1	<i>0.723</i>	0.344	0.342
	FK2	<i>0.819</i>	0.439	0.392
	FK3	<i>0.780</i>	0.446	0.429
	FK4	<i>0.738</i>	0.410	0.358
	FK5	<i>0.797</i>	0.542	0.435
	FK6	<i>0.764</i>	0.585	0.454

Constructs	Indicators	Financial Knowledge	Financial Attitude	Financial Behaviour
Financial Attitude	FA1	0.590	0.815	0.514
	FA2	0.530	0.744	0.470
	FA3	0.395	0.772	0.478
	FA3	0.395	0.772	0.478
	FA4	0.480	0.856	0.624
	FA5	0.419	0.793	0.574
	FA6	0.443	0.816	0.583
	FA7	0.508	0.757	0.517
Financial Behaviour	FB1	0.394	0.528	0.822
	FB2	0.481	0.653	0.860
	FB3	0.411	0.534	0.832
	FB4	0.504	0.584	0.853
	FB5	0.446	0.584	0.885
	FB6	0.457	0.598	0.888

Source: Primary Data

All the variables validity criteria were satisfied, thus the model validated through confirmatory factor analysis came up with a three-factor model for representing the concept of financial capability and the final outer measurement model is portrayed in Figure 6.5

Figure 6.5*Outer Measurement Model; Financial Capability*

Source: Smart PLS4 Output

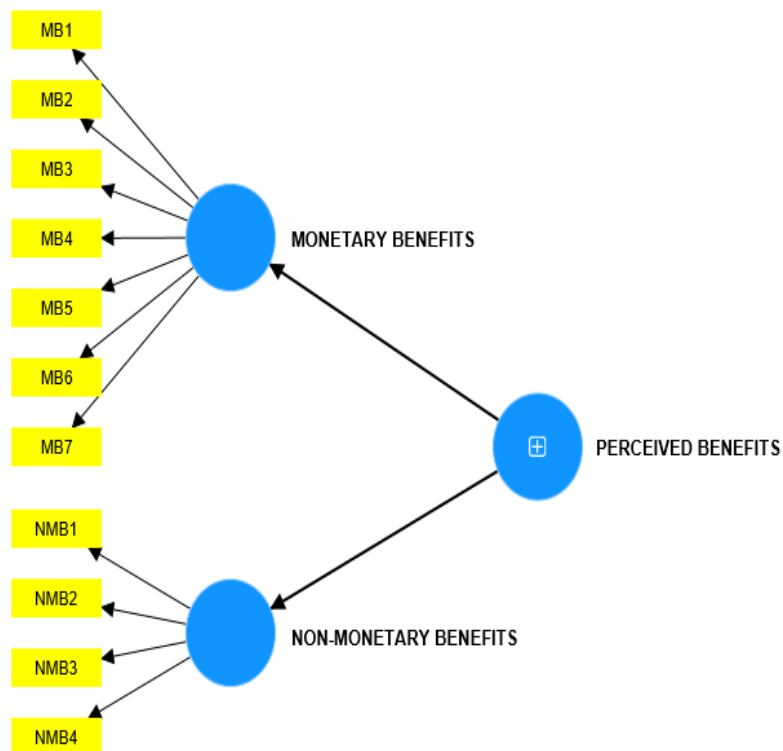
6.7.2 Confirmatory Factor Analysis Perceived Benefits

Perceived benefits are a critical aspect of human decision-making and behaviour. They shape our choices, attitudes, and actions by influencing our perception of the positive outcomes or advantages associated with those choices or actions. Over time, individuals may re-evaluate their perceived benefits based on their actual experiences. If the perceived benefits do not align with reality, behaviour or decision-making may change accordingly. In this study, perceived benefits of microinsurance were identified from the literature. For the precise understanding exploratory factor analysis were performed, and identified eleven indicators of perceived benefits. The result of exploratory factor analysis identified two major components.

The reliability and validity of the instrument used to evaluate perceived benefits were tested in order to determine whether the instrument was truly assessing the construct. Structural equation modeling was preceded by validation tests like convergent and discriminant validity. As a result of exploratory factor analyses regarding the perceived benefits two different factors were explored in the study. Each factor was conceptualised as a first order reflective measure, and main construct perceived benefit conceptualised as a second order reflective measure. Figure 6.6 shows the initial measurement model of perceived benefits construct.

Figure 6.6

Initial Measurement Model; Perceived Benefits



Source: Smart PLS4 Output

Partial Least Square algorithm (PLS algorithm) was run on the model to assess the reliability and validity of the measures. For finding reliability of the measures, indicator reliability and internal consistency reliability is computed. The results of reliability and validity are reported in Table 6.59

Table 6.59*Validity Indices: LOCs of Perceived Benefits*

Constructs	Indicators	Loadings	Cronbach Alpha	Composite Reliability	Average Variance Extracted
Monetary Benefits	MB1	.690	.882	.908	.588
	MB2	.648			
	MB3	.783			
	MB4	.796			
	MB5	.797			
	MB6	.800			
	MB7	.836			
Non-Monetary Benefits	NMB1	.557	.767	.804	.521
	NMB2	.916			
	NMB3	.820			
	NMB4	.512			

Source: Primary Data

For a measurement model's convergent validity to be deemed acceptable, the following criteria are suggested: P values associated with the loadings should be less than 0.05, and loadings for indicators of all relevant latent variables must be 0.5 or above (Hair et al., 2009). It can be seen from the Table 6.59, outer loadings of each item in the factor monetary benefits and non-monetary benefits had proper loadings. Which is above the threshold, therefore the first condition for validity check will be satisfied. Composite reliability of both the dimension of perceived benefits was 0.908 and 0.804 respectively. Composite Reliability value of the factors also lie above the standard, second criteria also proved in this regard. Therefore, factor used to measure perceived benefits indicators or items were converged to its observed construct.

Table 6.60*Fornell and Larcker Criteria of Perceived Benefits*

Constructs	Monetary Benefits	Non-Monetary Benefits
Monetary Benefits	0.767	
Non-Monetary Benefits	0.249	0.722

Source: Primary Data

In order to ensure discriminant validity Fornell and Larcker criteria used, The Fornell-Larcker criteria will indicate discriminant validity between latent variables only when they have the largest value in their respective row and column. From the Table 6.60 it can be observed that, Monetary Benefits (0.767), and Non-Monetary Benefits (0.722) values were highest against the respective row and column and the test suggest that three constructs were discriminant. The discriminant validity of the final measurement model is confirmed. The cross loadings of each construct also checked to ensure whether the measures establish discriminant validity or not. The cross-loading metrics presented in Table 6.61

Table 6.61*Indicator Item Cross Loadings of Perceived Benefits*

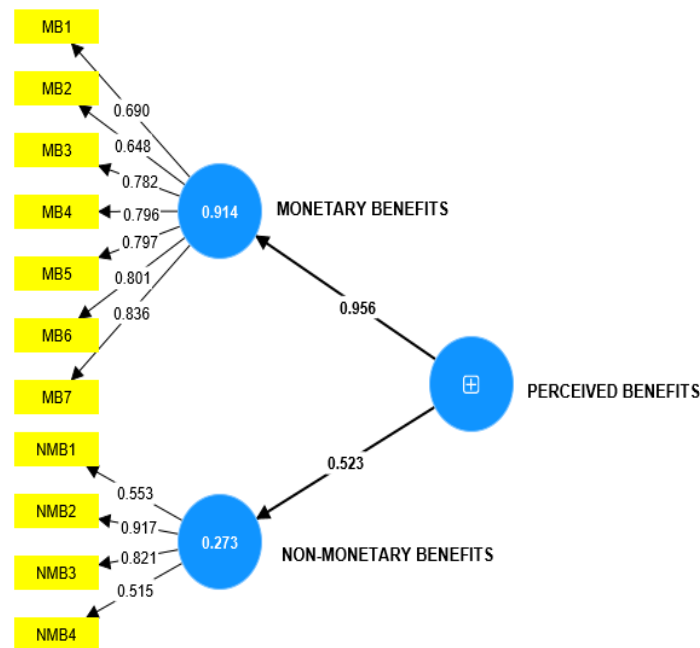
Higher Order Construct	Lower Order Construct	Indicators	Monetary Benefits	Non-Monetary Benefits
Perceived Benefits	Monetary Benefits	MB1	0.690	0.153
		MB2	0.648	0.181
		MB3	0.782	0.224
		MB4	0.796	0.272
		MB5	0.797	0.068
		MB6	0.801	0.251
		MB7	0.836	0.176
	Non-Monetary Benefits	NMB1	0.292	0.553
		NMB2	0.186	0.917
		NMB3	0.091	0.821
		NMB4	0.096	0.515

Source: Primary Data

To discriminant from the other factor's item, the cross loadings must be assessed in such a way that each item receives greater loadings in its respective column. In the first column ' Monetary Benefits,' the seven items MB1, MB2, MB3, MB4, MB5, MB6 AND MB7 have greater values (i.e. $0.690 > 0.153$, $0.648 > 0.181$, $0.782 > 0.224$, $0.796 > 0.272$, $0.797 > 0.068$, $0.801 > 0.251$ and $0.836 > 0.176$). Similarly in the second column 'Non-Monetary Benefits' the four item NMB1, NMB2, NMB3 AND NMB4 have greater loadings than the first column (i.e. $0.553 > .292$, $0.917 > 0.186$, $0.821 > 0.091$ and $0.515 > 0.096$). There is no cross loading occurs among the items used to measure the identified factors of perceived benefits. Outer measurement model of perceived benefits depicted in Figure 6.7

Figure 6.7

Outer Measurement Mode: Perceived Benefits



Source: Smart PLS4 Output

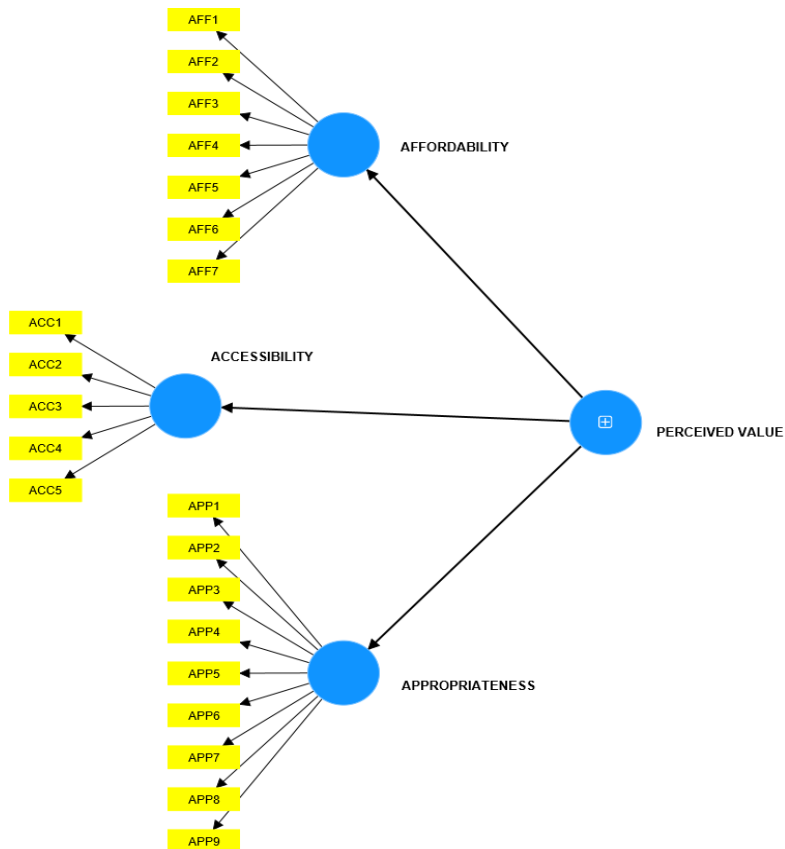
6.7.3 Confirmatory Factor Analysis Perceived Value

The validity of the three-component selected to measure the main variable perceived value in the model is examined using confirmatory factor analysis. The CFA is

performed using Smart PLS 4.0 software. The measurement model for the variables and their factor categorization is displayed in Figure 6.8

Figure 6.8

Initial Measurement Model; Perceived Value



Source: Smart PLS4 Output

Perceived value being a reflective construct in the model (Figure 6.8), its First Order Components (FOC) i.e. affordability, appropriateness and accessibility, are reflective factors and the second Order Component (SOC) - 'Perceived value' is also reflective factor. Therefore, its validity will be assessed by separate quality criteria Based on the guidelines by Hair et al. (2019), The content, discriminant, and convergent validity indices were used to assess the validity of the instrument, and composite reliability was utilised to assess its reliability. The diagnostic tests results are shown in Table 6.62

Table 6.62*Validity Indices: LOCs of Perceived Value*

Construct	Indicators	Loadings	Cronbach Alpha	Composite Reliability	Average Variance Extracted
Affordability	AFF1	.825	<i>.943</i>	<i>.949</i>	<i>.795</i>
	AFF2	.861			
	AFF3	.754			
	AFF4	.804			
	AFF5	.849			
	AFF6	.730			
	AFF7	.738			
Appropriateness	APP1	.629	<i>.903</i>	<i>.906</i>	<i>.634</i>
	APP2	.555			
	APP3	.764			
	APP4	.765			
	APP5	.811			
	APP6	.823			
	APP7	.797			
	APP8	.815			
	APP9	.831			
Accessibility	ACC1	.863	<i>.906</i>	<i>.910</i>	<i>.578</i>
	ACC2	.870			
	ACC3	.856			
	ACC4	.896			
	ACC5	.921			

Source: Primary Data

The diagnostic test result Table 6.62 shows that the content validity index for each of the variables (affordability, appropriateness, accessibility) were higher than the required level of 0.700. All of the variables had composite reliabilities that were over the 0.7 cut-off and below the 0.95 ceiling. Additionally, Table 6.62

demonstrate that all of the variables' average extracted variance is higher than the 0.5 cut-off.

Table 6.63

Fornell and Larcker Criteria of Perceived Value

Constructs	Accessibility	Affordability	Appropriateness
Accessibility	0.892		
Affordability	0.077	0.796	
Appropriateness	-0.003	0.587	0.760

Source: Primary Data

When latent variables have the highest value in their corresponding row and column, the Fornell-Larcker criterion will only show that they are discriminant valid or not. Accessibility (0.892), Affordability (0.796), and Appropriateness (0.760) have the greatest values when compared to their corresponding rows and columns, and the test results suggested that these three constructs were discriminant. The results were provided in the Table 6.63, and the discriminant validity of the final measurement model is proved.

For better understanding of discriminant validity, cross loadings of each construct in the model were assessed. The cross-loading metrics of measurements shown in Table 6.64

Table 6.64

Indicator Item Cross Loadings of Perceived Value

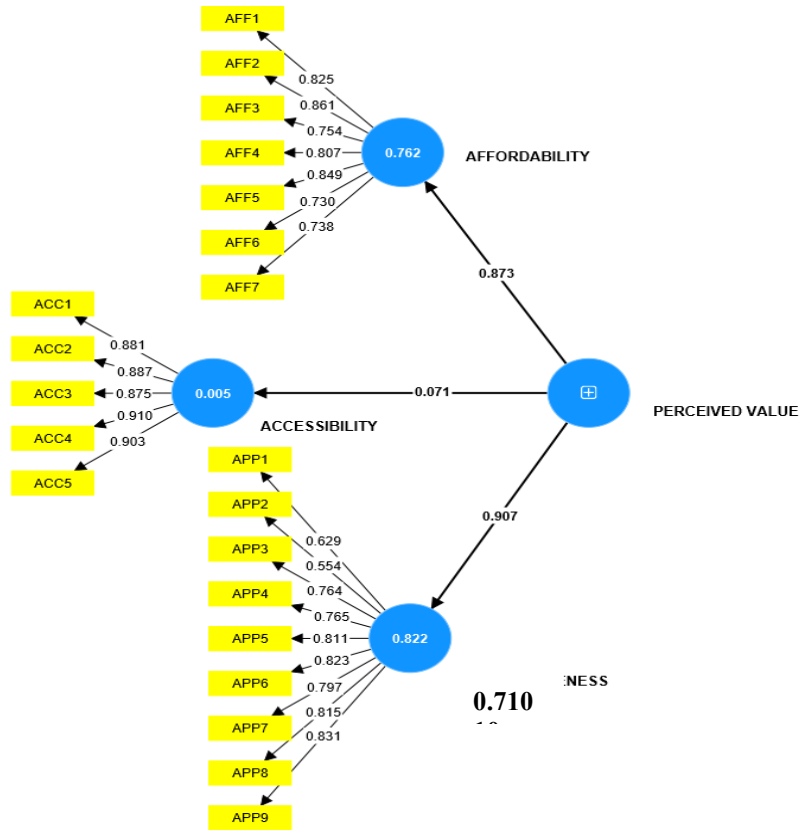
Indicators	Accessibility	Affordability	Appropriateness
ACC1	0.881	0.033	-0.020
ACC2	0.887	0.047	-0.056
ACC3	0.875	0.046	-0.060
ACC4	0.910	0.070	-0.034
ACC5	0.903	0.090	0.038
AFF1	0.032	0.825	0.486
AFF2	0.095	0.861	0.486

Indicators	Accessibility	Affordability	Appropriateness
AFF3	0.015	0.754	0.394
AFF4	0.080	0.807	0.473
AFF5	0.060	0.849	0.486
AFF6	0.119	0.730	0.467
AFF7	0.028	0.738	0.476
APP1	0.007	0.489	0.629
APP2	-0.055	0.510	0.554
APP3	-0.020	0.403	0.764
APP4	0.021	0.380	0.765
APP5	0.014	0.430	0.811
APP6	0.048	0.480	0.823
APP7	-0.009	0.395	0.797
APP8	0.008	0.454	0.815
APP9	-0.024	0.481	0.831

Source: Primary Data

To confirm whether the perceived value measures establish discriminant validity or not, the cross loadings of each construct were also examined. The cross-loading matrices show that each item had greater loadings in its appropriate column which is to be distinguished from the item of the other component. Constructs indicators loading values clearly show discriminant validity of the model.

The model was validated by confirmatory factor analysis and developed into a model consisting of three components for describing the concept of perceived value. Since all the validity requirements had been met. The final measurement model is shown in Figure 6.9

Figure 6.9*Outer Measurement Model; Perceived Value*

Source: Smart PLS4 Output

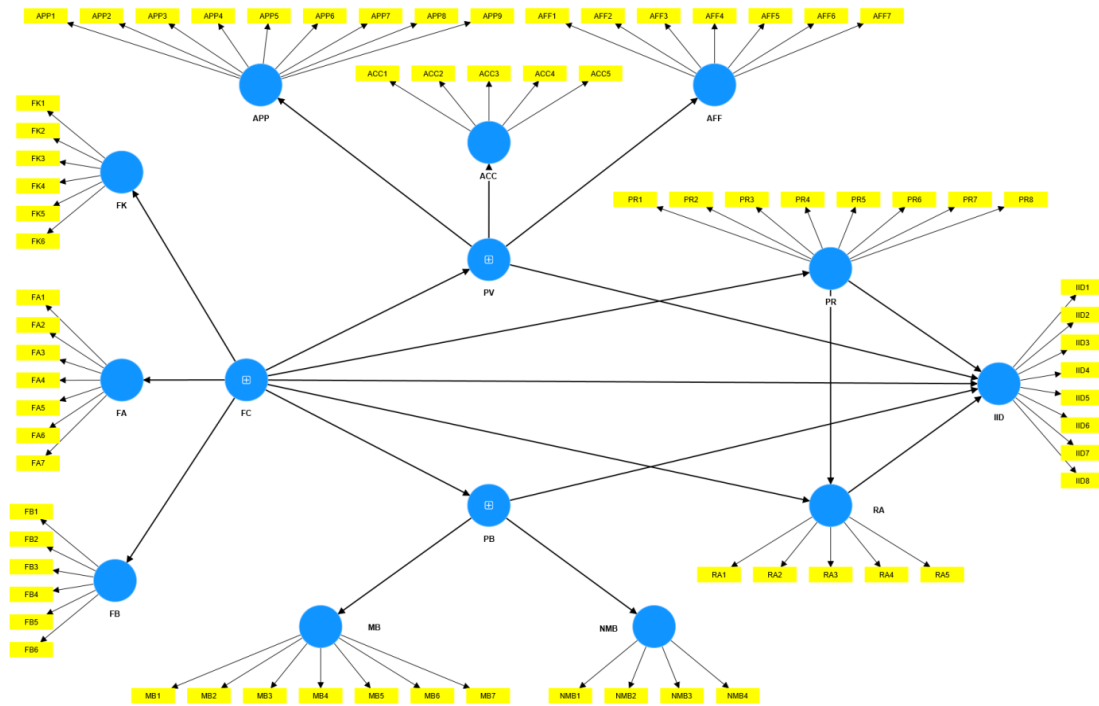
6.7.4 Integrated Model Validation

The integrated model in SEM allows for the simultaneous evaluation of measurement models (reflective) and structural models, thereby offering a holistic understanding of the relationships between observed and latent variables. It addresses the intricacies of a research problem by incorporating both observed and unobserved variables, allowing for a deeper exploration of the underlying mechanisms driving observed phenomena. It facilitates the validation of theoretical frameworks, testing of hypotheses, and exploration of complex relationships among multiple variables in a single comprehensive analysis. The flexibility and robustness of this approach make it an invaluable asset in empirical research. Here, the researcher developed an integrated model incorporating all the determinants of

microinsurance investment to evaluate the relationship and influence on it. Figure 6.10, and Figure 6.11 shows the proposed integrated model.

Figure 6.10

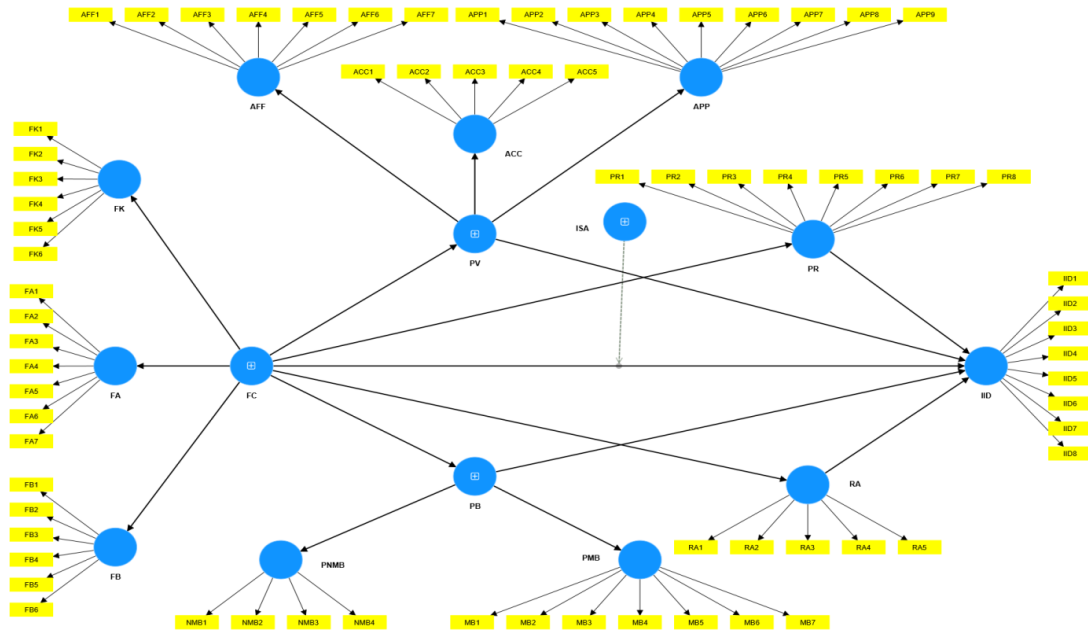
Initial Structural Model without Moderating Variable



Source: Smart PLS4 Output

Figure 6.11

Initial Structural Model with Moderating Variable



Source: Smart PLS4 Output

Integrated model shows the inter relationship of entire constructs used in the study. With the integrated research model impact of financial capability, perceived value, perceived benefits, perceived risk and attitude towards risk in microinsurance was assessed. Before performing inner model path estimates validity criterions of each construct also ensured. The result of confirmatory factor analysis will provide in the following Table 6.65

The indicator loadings are examined as the first stage in the measurement model. Loadings greater than 0.5 are advised to provide adequate indicator reliability. The second phase is to evaluate the reliability of internal consistency. A reliability range of 0.7 to 0.95 is considered acceptable. However, values more than 0.95 are not acceptable (Diamantopoulos et al., 2012). Cronbach alpha and Composite Reliability, which measure internal consistency, that have values greater than 0.7, and less than 0.95 (Nunnally & Bernstein, 1994). Table 6.65 shows the outcomes of the measuring model.

Table 6.65*Validity Indices of Integrated Model other than Higher Order Constructs*

Constructs	Indicators	Loadings	Cronbach Alpha	Composite Reliability	Average Variance Extracted
Perceived Risk	PR1	0.851	.792	.866	0.617
	PR2	0.777			
	PR3	0.771			
	PR4	0.893			
	PR5	0.786			
	PR6	.0.892			
	PR7	0.829			
	PR8	0.796			
Attitude towards risk	ATR1	0.874	.802	.805	0.626
	ATR2	0.905			
	ATR3	0.852			
	ATR4	0.825			
	ATR5	0.743			
Microinsurance Investment	IID1	0.822	.864	.868	0.608
	IID2	0.749			
	IID3	0.804			
	IID4	0.857			
	IID5	0.851			
	IID6	0.762			
	IID7	0.873			
	IID8	0.803			

Source: Primary Data

Similarly, Rho has values greater than 0.7 (Dijkstra & Henseler, 2015), indicating internal consistency. The convergent validity of each construct measure is addressed in the third step of the reflective measurement model. The average variance extracted (AVE) for all constructs is the metric used to assess convergent validity. The AVE was more than 0.5 (Bagozzi & Yi, 1998). Here, the factor loadings for

perceived risk, attitude towards risk and insurance investment decisions were above 0.5, Cronbach alpha was above the threshold limit of 0.7. Composite reliability was also above the quality criteria. Convergent validity was acceptable because the average variance extracted (AVE) of all the three constructs was over 0.50. The fourth step is to evaluate discriminant validity. It is the degree to which a construct is empirically distinct from other constructs in the structural model. The discriminant validity was validated using Heterotrait-Monotrait Ratio of Correlation (HTMT) values (Fornell & Larcker, 1981). Table 6.67 shows the findings of the Fornell and Larcker criteria, Table 6.68 shows the findings of the Heterotrait-Monotrait Ratio. Cross loadings of each construct in the model were also analysed to have a better understanding of the discriminant validity. Table 6.66 displays the cross-loading metrics of measurements.

Table 6.66

Cross Loading Metrics of Lower Order Measurements.

Indicators	Perceived Risk	Attitude towards Risk	Microinsurance Investment
PR1	0.851	0.033	-0.020
PR2	0.777	0.047	-0.056
PR3	0.771	0.046	-0.060
PR4	0.893	0.070	-0.034
PR5	0.786	0.090	0.038
PR6	0.892	0.032	0.486
PR7	0.829	0.095	0.486
PR8	0.796	0.015	0.394
ATR1	0.080	0.874	0.473
ATR2	0.060	0.905	0.486
ATR3	0.119	0.852	0.467
ATR4	0.028	0.825	0.476
ATR5	0.007	0.743	0.489
IID1	-0.055	0.510	0.510
IID2	-0.020	0.403	0.749

Indicators	Perceived Risk	Attitude towards Risk	Microinsurance Investment
IID3	0.021	0.380	0.804
IID4	0.014	0.430	0.857
IID5	0.048	0.480	0.851
IID6	-0.009	0.395	0.762
IID7	0.008	0.454	0.873
IID8	-0.024	0.481	0.803

Source: Primary Data

Table 6.67*Fornell and Larcker Criteria of Integrated Model*

	AT	PR	IID	PB	ISA	PV	FC
AT	0.962						
PR	0.547	0.886					
IID	0.541	0.899	0.75				
PB	0.494	0.814	0.919	0.849			
ISA	0.627	0.575	0.600	0.559	0.925		
PV	0.44	0.689	0.873	0.727	0.515	0.877	
FC	0.477	0.747	0.858	0.79	0.509	0.672	0.877

Source: Primary Data

Table 6.68*Heterotrait-Monotrait Ratio of Correlation (HTMT) Values of Integrated Model*

	AT	PR	IID	PB	ISA	PV	FC
AT							
PR	0.581						
IID	0.662	0.629					
PB	0.470	0.760	0.567				
ISA	0.521	0.846	0.573	0.765			
PV	0.728	0.701	0.895	0.570	0.659		
FC	0.412	0.698	0.493	0.797	0.652	0.849	

Source: Primary Data

6.7.5 Structural Model Evaluation

After validation of integrated model, the relationship between the primary constructs has been assessed, as shown in Figure 6.12. For analysing the relation between the constructs, Structural Equation Modeling (SEM) is carried out and the following null hypotheses were tested:

Hypothesis-1 (H_0) Financial capability has no significant influences on perceived value.

Hypothesis-2 (H_0) Financial capability has no significant influences on perceived benefits.

Hypothesis-3 (H_0) Financial capability has no significant influences on perceived risk.

Hypothesis-4 (H_0) Financial capability has no significant influences on attitude towards risk.

Hypothesis-5 (H_0) Perceived risk has no significant influence on attitude towards risk.

Hypothesis-6 (H_0) Financial capability has no significant influences on microinsurance investment.

Hypothesis-7 (H_0) Perceived value has no significant influence on microinsurance investment.

Hypothesis-8 (H_0) Perceived benefits has no significant influence microinsurance investment.

Hypothesis-9 (H_0) Perceived risk has no significant influence microinsurance investment.

Hypothesis-10 (H_0) Attitude towards risk has no significant influence on microinsurance investment.

Hypothetical model represented in Figure 6.12, which shows the inter relationship of different constructs in the measurement model. Final structural model depicted in Figure 6.13 which showed the path coefficient of variables.

Figure 6.12

Hypothetical Model

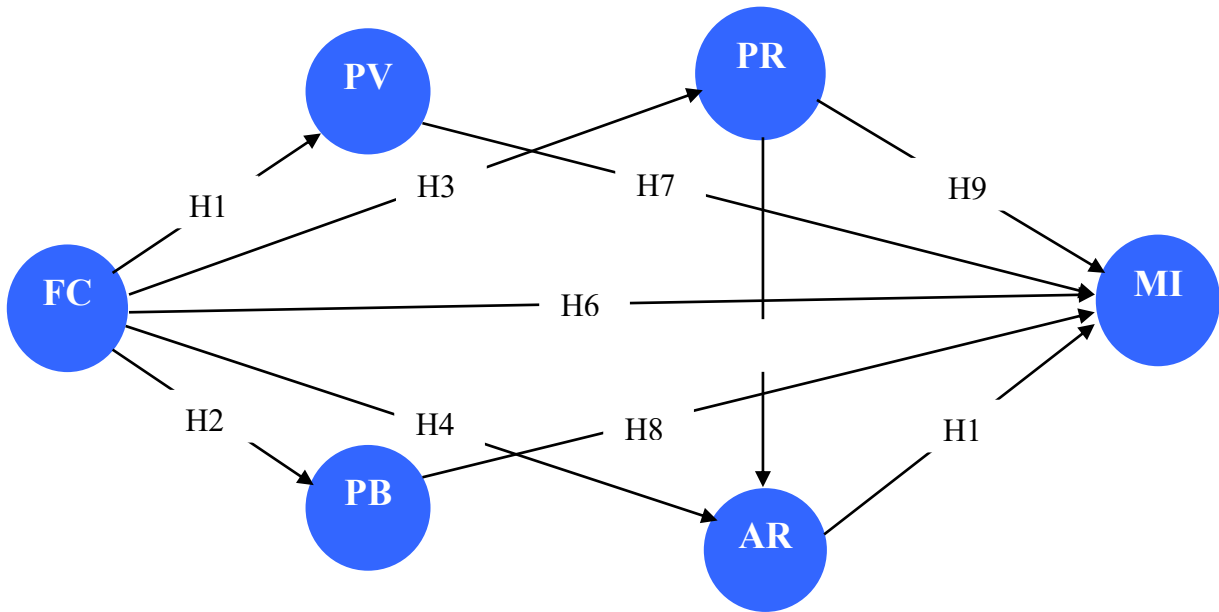
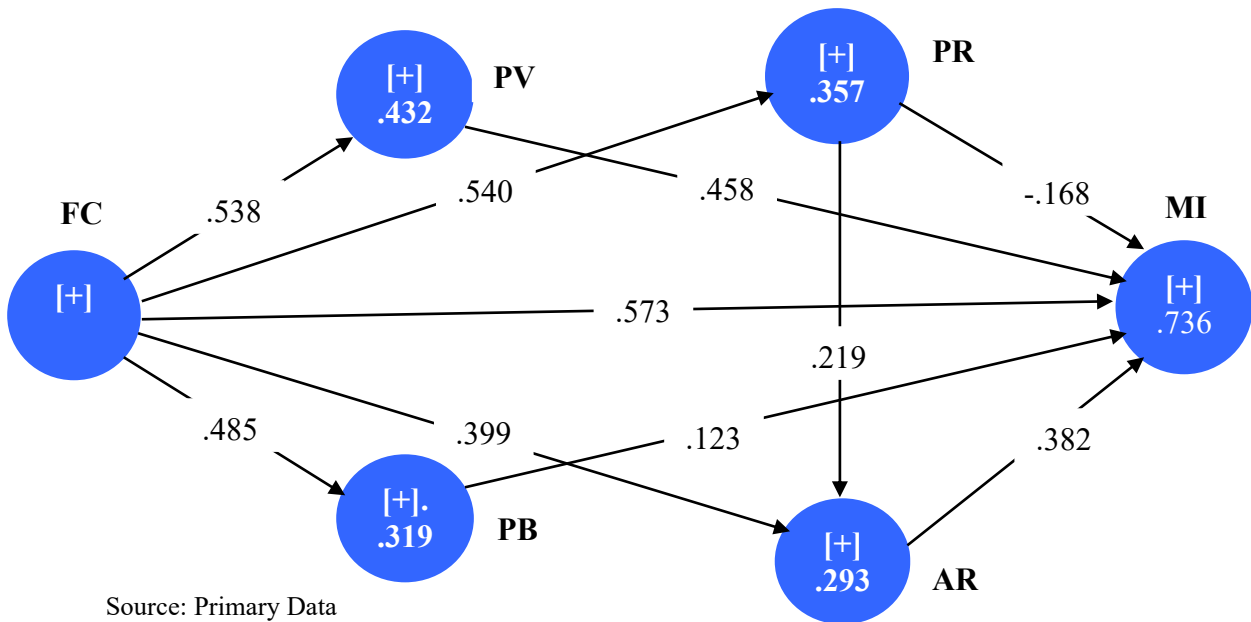


Figure 6.13

Final Structural Model



Source: Primary Data

Table 6.69 provides the quality standards to be evaluated for the overall model fit.

Table 6.69

Structural Model Fit Indices:

Criteria	Value	Threshold Limit
SRMR	0.062	≤0.08
NFI	0.918	≥0.90

Source: Primary data compiled with the fit indices specified by Hair et.al (2010) and Hu and Bentler (1999).

It can be seen from Table 6.69 both of the quality requirements have been met, making it obvious that the structural model is substantially fit to empirically represent the theoretical facts.

Table 6.70

Structural Model Results

Hypotheses	Path Relationship	Std Beta	Sample Mean (M)	Standard Deviation	T Statistics	P Values
H1	FC -> PV	0.539	0.08	0.048	11.229	0.102
H2	FC-> PB	0.485	0.485	0.056	8.660	0.000
H3	FC ->PR	0.541	0.542	0.045	12.022	0.000
H4	FC-> AR	0.399	0.899	0.014	28.500	0.000
H5	PR -> AR	0.219	0.92	0.013	16.846	0.000
H6	FC ->IID	0.573	0.873	0.021	41.594	0.000
H7	PV -> IID	0.458	0.858	0.021	39.365	0.000
H8	PB-> IID	0.399	0.399	0.055	7.202	0.000
H9	PR ->IID	-0.168	0.796	0.031	24.879	0.000
H10	AR-> IID	0.382	0.782	0.039	18.906	0.000

Note. *Significant at 5% significance level

Source: Primary data

The hypotheses, were tested using partial least square method. It focused on the ability of the model to predict and evaluate the variation in the exogenous and endogenous variables. VIF values of all the observed variables', which ranged from 2.554 to 4.751 and were all less than 5, indicated that the structural model did not

exhibit multicollinearity. Furthermore, suggested an R square value of at least 0.10 to guarantee a good model fit. With an R square value of 0.736 for the endogenous variable microinsurance investment, the study model well captured the data. Additionally, the Stone-Geisser Q2 evaluation resulted in a value (0.537) greater than zero, indicating the model's appropriate predictive capacity. In order to test the path coefficient and t-value of the direct relationships, Smart PLS4 employed a bootstrapping strategy. Ten direct hypotheses are tested in the current analysis.

The influence of financial capability on perceived value, perceived benefits, perceived risk and attitude towards risk relationship were analysed in the structural model. The result indicates that financial capability significantly effects perceived value ($\beta = 0.539$, $t\text{-value} = 2.635$, $p < 0.001$). Similarly financial capability significantly impacts ($\beta = 0.485$, $t\text{-value} = 2.635$, $p < 0.001$) on perceived benefits of microinsurance policyholders. The impact of financial capability on perceived risk also found significant ($\beta = 0.541$, $t\text{-value} = 12.022$, $p < 0.001$) and financial capability effect significantly effects on attitude towards risk ($\beta = 0.573$, $t\text{-value} = 28.500$, $p < 0.001$).

In each and every instance, the beta values, also known as the path coefficients, are significant at the 5 percent level. When a relationship is significant, a positive value indicates that the explanatory variable has a positive effect on the dependent variable. In this situation, each relationship under consideration has a favourable impact on the endogenous variables which form up the relationship. By increasing the independent variable's standard deviation by one unit, the dependent variable's standard deviation will be changed accordingly. As expressed by the beta value. That is, one unit increase in the standard deviation of financial capability will cause 0.539unit increase in the standard deviation of 'perceived value' and 0.485 unit increase in the standard deviation of perceived benefits. Similarly, there is increase in the standard deviation of perceived risk and attitude due to the increase in the standard deviation of financial capability (see Table 6.70).

The smart PLS output showed that financial capability had a positive and significant impact on microinsurance investment ($\beta = 0.573$, $t\text{-value} = 0.569$, $p < 0.001$),

supporting hypothesis six, as shown in Figure 6.12 and Table 6.71. Similarly, perceived value was found to have a positive and significant impact ($\beta = 0.458$, t -value = 39.365, $p < 0.01$) on microinsurance investment, and hypothesis H7 was supported. The Smart PLS findings showed a positive and significant impact of perceived benefits on microinsurance investment ($\beta = 0.399$, t -value = 7.202, $p < 0.001$), which supports hypothesis H8. On the other hand, perceived risk was found to have a significant negative impact on microinsurance investment ($\beta = -0.168$, t -value = 24.879, $p < 0.001$), which support hypothesis H9. Attitude towards risk was found to be positive and have a significant impact on microinsurance investment ($\beta = 0.382$, t -value = 18.906, $p < 0.001$).

The beta value also expresses the change in the dependent variables', standard deviation in accordance to the increase in the standard deviation of independent variable by one unit. The one unit increase in the standard deviation of financial capability causes increase in the standard deviation of 'microinsurance investment' by 0.573 units; when standard deviation of perceived value increases by one unit, which will lead to 0.458 increases in the 'microinsurance investment'. Then, one unit increase in the standard deviation of perceived benefits increases 0.399 units standard deviation of 'microinsurance investment', and one unit increase in the standard deviation of 'perceived risk' cause 0.168 units decrease in standard deviation of 'microinsurance investment'; whereas standard deviation of attitude towards risk increases by one unit, which will lead to 0.382 increases in the 'microinsurance investment'.

In this study, researcher proposed "insurance awareness" as a moderator to test the moderating effect. "microinsurance investment" will moderate the hypothesized relationship so that the impact of financial capability would be greater in the presence of insurance awareness. To illustrate the different approaches for generating the interaction data, drawn a simple moderation model. It considers the insurance awareness as a moderator variable that impacts the relationship between financial capability and microinsurance investment. The results of the moderation analysis are given in Figure 6.14

Figure 6.14

Structural Model- Moderation

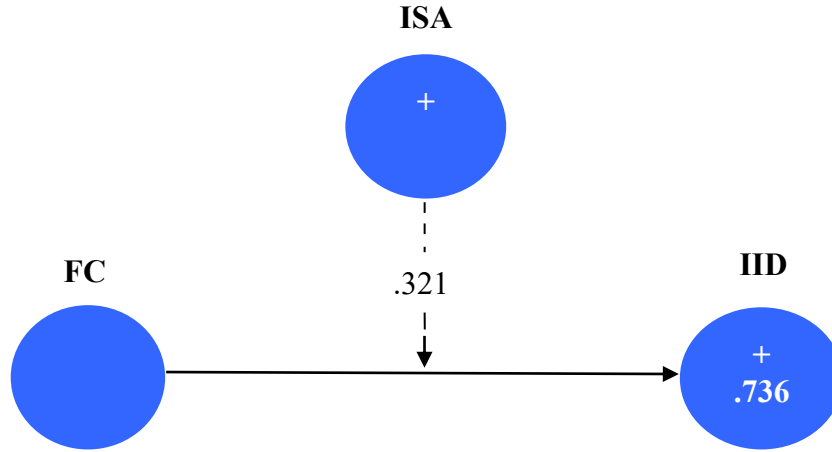


Table 6.71 provides the outcomes of the moderation analysis of the relationship between financial capability and microinsurance investment which moderates through insurance awareness.

Table 6.71

Moderation Impact of Insurance Awareness on the Effect of Financial Capability on Microinsurance Investment

Path Relationship	Std Beta	Sample Mean (M)	Standard Deviation	T Statistics	P Values
ISA×FC ->IID	0.321	0.873	0.021	15.28	0.000

Source: Primary data

This model₀₀ considered microinsurance investment as the dependent variable, financial capability as the independent variable, and the Insurance awareness as the moderating variable. From the analysis of the results, a significant difference between the groups is inferred from the p values, less than 0.01. The findings also provided data about the moderating effects, where policyholders’ insurance awareness strengthened the impact of financial capability and microinsurance investment ($\beta = 0.321$, t-value = 15.28, $p < 0.01$).

6.8 Conclusion

This chapter contains data analysis pertaining to perceived value, perceived benefits, perceived risk, and attitudes towards risk among microinsurance policyholders. It provided valuable insights into the dynamics of this crucial sector. Through a comprehensive examination of survey data and statistical analysis, several key findings have emerged. Firstly, the study has underscored the significance of perceived value and perceived benefits as critical determinants in the decision-making process of microinsurance policyholders. The perception of receiving tangible advantages and value for money plays a pivotal role in shaping individuals' attitudes and behaviours towards microinsurance. Secondly, the analysis has shed light on the multifaceted nature of perceived risk in the microinsurance context. While individuals recognize the inherent risks associated with insurance. Furthermore, this chapter has highlighted the complexity of attitudes towards risk among microinsurance policyholders. Another section of this chapter analysed the changes happened on certain variables after they become insured. Lastly researcher examined the influence of various determinants on microinsurance investment with the help of structural equation modeling using Smart PLS4. Outcomes of SEM model evaluation was tabulated and depicted as figures for easy understanding.

Chapter 7

SUMMARY, FINDINGS, AND CONCLUSION

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7.1 Introduction

This chapter deals with a brief summary of the research followed by important findings which are drawn from the data analysis. A summary of observations made out of the study is presented as a conclusion. Chapter begins with summarizing the work carried out, later discussed the findings derived from analysis of data and finally presented a comprehensive conclusion that addresses the research objectives and hypotheses.

7.2 Summary

Microinsurance can help increase economic growth by insuring people from lifecycle- and livelihood-related risks. Low-income people can use microinsurance, where it is available, as one of several tools (specifically designed for this market in terms of premiums, terms, coverage, and delivery) to manage their risks. This has the associated effect of contributing to poverty and vulnerability reduction. As such, microinsurance can be intended both as a financial service for the poor but especially as a contributory social insurance tool capable of pursuing/fulfilling important policy purposes. Microinsurance holds significant relevance due to its multifaceted impact on individuals, communities, and economies, especially among low-income populations and those underserved by traditional insurance schemes. It bridges the gap between the uninsured and the formal insurance sector, providing access to insurance products for individuals who would otherwise remain financially vulnerable to risks. By providing a safety net, microinsurance empowers individuals and communities, instilling a sense of security and enabling them to take anticipated risks for personal and economic development. It prevents individuals from falling

deeper into poverty due to unforeseen events, enabling them to maintain financial stability and avoid falling into long-term economic hardships.

7.2.1 Significance of the Study

Insurance was once considered unaffordable for the Bottom of the Economic Pyramid (BOP), but recent developments in India and other countries show that the poor can make small periodic contributions and face independent or idiosyncratic risks. Microinsurance is believed to be a powerful risk management tool for low-income and vulnerable groups, preventing them from falling into the poverty trap. However, the effectiveness of microinsurance across regions and groups is not well understood. The government plays a proactive role in providing insurance cover to the poor, the size and potential of microinsurance market is enormous due a sizeable portion of poor and low-income population who live without any formal insurance. However, it is also found that many people's image of insurance is based on incomplete information or even on institution. What may think about microinsurance may be the result of different factors, such as perception, attitude, or familiarity and may in turn influence people's decision for or against Microinsurance investment. Hence, this study has been carried out.

7.2.2 Statement of the Problem

Microinsurance is a low-cost insurance option for people with limited income, particularly those living in unfavourable environments. It is crucial for social and economic development, especially for low-income and marginalized individuals who are more vulnerable to risks. In India, 66 percent of people have daily incomes ranging from USD 1.9 to USD 5.5, with 40 percent of rural and 45 percent of urban households earning between Rs 5000 and Rs 12000/pm. Microinsurance is a viable risk management strategy for providing financial security against various risks. However, in Kerala, a region with unique socio-economic dynamics, the use of microinsurance products is limited. This study aims to investigate the awareness of target segments about microinsurance products, factors influencing their adoption, and the determinants creating demand for microinsurance. The study aims to address the under penetration of microinsurance from policyholders' perspectives. The low

penetration of microinsurance, the decrease in new business, and the policyholders' perception and attitude towards microinsurance were some of the main concerns raised by this study. The study was conducted in the light of the following research questions,

- What is the current state of microinsurance penetration in India and Kerala? How microinsurance evolved over time?
- Whether microinsurance beneficiaries capable of managing their financial resources for their future security, how does the financial capability of individuals in Kerala influence to engage in microinsurance investment?
- Are there any other measures used to protect against risk and shocks they face?
- Whether microinsurance can be made affordable accessible and appropriate for people whose income is low, unpredictable and uncertain?
- How closely does the product meet the real need of the target customers?
- Is microinsurance perceived as an efficient tool for managing risk?

Based on the previously mentioned research questions, the following study objectives have been determined.

1. To evaluate the growth and progress of microinsurance in India and Kerala.
2. To analyse the dimensions that measures the level of financial capability among policyholders.
3. To measure the perceived value of microinsurance among policyholders
4. To examine various risk management strategies adopted by policyholders other than insurance and its effect on microinsurance investment
5. To assess the effectiveness of microinsurance products available in the current market.

6. To measure the effect of financial capability and perceived value, perceived benefits, perceived risk and attitude towards risk on microinsurance investment.

7.2.3 Scope of the study

This study identified various determinants of microinsurance investment and analysed its interrelationship, influence on microinsurance investment with the help of data collected from LIC policyholders in five divisions of LIC working in the state of Kerala.

7.2.4 Research Methodology

Research methodology framed with the help of research onion proposed by Saunders et al., (2016). The study employed a descriptive research design. A sample of 325 microinsurance life category policyholders is selected using purposive sampling technique. A structured interview is used for collecting data from the respondents; that contain closed ended questions. The Likert scale is used to gather data regarding the main constructs of the study, where the respondent's agreement to the given statements are asked on a five point scale ranging from 5 'strongly agree' to 1 'strongly disagree' with a neutral point 3 'neither agree nor disagree'. Before devising data collection tool to a large sample appropriate steps are taken to ensure its fitness.

IBM SPSS Statistics 22, Jamovi and Smart PLS4 software are used for analysing the data. Since the study tests the empirical data, the data analysis began with descriptive statistics like frequencies and percentage for making the personal profile of respondents; and the data cleaning done with graphical method (Box plot). The analytical tools selected for attaining the research objectives are finalised after ensuring the underlying assumptions. Due to violation of normality assumption, non-parametric test was applied. The analytical tools include- Quartiles, Mann-Whitney U test, Kruskal Wallis H test, Wilcoxon matched pair test, chi-square test, spearman Rank correlation. Further, factor analysis and Structural Equation Modeling are also used for empirical testing.

7.2.5 Summary of Chapters

The research work is documented in eight chapters. The first three chapters offer the introduction, literature review and theoretical background of the study; the remaining chapters report the results and interpretations of data analysis, summary, findings and conclusion of the study while the final chapter put forth the suggestions, implications and scope for further research. The summary of each chapter is given in the following paragraphs.

The first chapter provides a brief background, design, conceptual framework, and methodology for the study. The study design includes the study's significance, the research problem to be addressed, the scope of the research, the objectives, the hypothesis to be tested, and the variables used in the study. The conceptual framework provides a specific direction for the research. The methodology section discusses the research design, population, sample design, data collection instrument, data analysis tools, and study limitations. The current study is limited to Kerala, specifically microinsurance policyholders of LIC in Kerala. This descriptive study uses both primary and secondary data. The primary data for the study were gathered from microinsurance policyholders in Kerala using a structured interview schedule. Secondary data were gathered from several published and unpublished sources. The sample size was set at 325, and the purposive sampling technique was used to select the respondents. This chapter also provides a conceptual framework for the study. This section examines the relationships between the variables that have been identified, explains the theories that underpin these relationships, and describes the nature and direction of the relationships.

Second chapter deals with a detailed review of the existing literature related to microinsurance and financial capability. This chapter is aimed to identify the research gap which explains the relevance of carrying out this research work. From the review of literature, it was revealed that a number of studies have conducted on various aspects of microinsurance. There remains an important need for research in microinsurance investment determinants from the perspective of policyholders for better understanding on the growth of microinsurance.

Third chapter gives an overview of Indian microinsurance sector. It discusses the concept of microinsurance, development of microfinance in India, Microinsurance environment structure, microinsurance delivery models. The chapter also provides a brief profile of LIC microinsurance products available in the current market, concept of risk, risk management process, concept of perceived benefits, value, attitude towards risk and financial capability, various financial capability models were explained.

Fourth chapter is devoted to present the analysis of growth of microinsurance in Indian context as well as state context. Fifteen year data collected from IRDA annual report based on growth measuring variables such as Number of policies sold in Individual category, Amount of Premium Collected under Individual category, Number of policies claimed under individual category, Number of claims settled under individual category, Number of claims rejected under individual category, Total amount of claims under individual category, Total amount of claims settled under individual category, Total amount of claims rejected under individual category were analysed and graphical representation also presented accordingly. The next section shows the analysis of Kerala state statistics collected from divisional offices for a thirteen-year period; its compound annual growth rate and percentage of contribution to Indian microinsurance industry.

Fifth chapter deals with analysis of primary data with regard to level of financial capability. The analysis was made by using various statistical tools to draw inferences. First section of this chapter describes the profile of respondents. The second part deals with the analysis of level of financial capability among microinsurance policyholders in Kerala. In this part, total score of financial capability classified in to levels based on a benchmark using quartiles. This chapter also examined the variations in financial capability according to profile variables of policyholders. This is followed by the presentation of analysis on insurance awareness. Final section shows the analysis of informal strategies adopted by policyholders using garret ranking technique and its relation to microinsurance investment.

Sixth chapter deals with analysis of perceived value, perceived benefits, perceived risk and attitude towards risk. First part of this chapter analysed any significant difference in various microinsurance determinants based on demographic variables of policyholders in Kerala. Exploratory factor analysis performed to classify Perceived benefits as perceived monetary benefits and perceived non-monetary benefits. Next part of this chapter examined the validation of the various scales used in the study. The next section deals with integrated effect of financial capability, perceived value, perceived risk and attitude towards risk on microinsurance investment. This is followed by the examination of moderation effect of insurance awareness on the relationship between financial capability and microinsurance investment. In order to accomplish this, path analysis was conducted by using Smart PLS4.

7.3 Major Findings of the Study

Key insights from the data analysis are combined in this chapter's findings to provide a thorough understanding of the factors influencing individuals' uptake of Microinsurance in Kerala. The results clarify how socioeconomic factors interact with perceptions, shedding light on how these factors affect policyholders' decisions to invest in microinsurance. Major findings of this study were discussed under the following heads;

- Growth of Microinsurance in India
- Growth of Microinsurance in Kerala
- Findings of Financial Capability
- Findings of Perceived Value
- Findings of Perceived Benefits
- Findings of Perceived Risk
- Findings of Attitude towards Risk
- Findings of Informal Strategies
- Findings of Insurance Awareness Level

7.3.1 Growth of Microinsurance in India

- ❖ The number of policies sold under the individual category in India's microinsurance market fluctuated over time. While there was increase from 2007 to 2013, there were also times of decrease, especially in the years 2013–2014 and 2014–2015. The sector thereafter had a steady rise in the number of policies sold, however the rate of growth slowed down with time. The fact that both LIC and the industry as a whole show negative compounded annual growth rate (CAGR) across the 14-year study period suggests that, on average, the overall growth rate remained moderate.
- ❖ The trend in premium collection under Microinsurance Individual category of LIC reveals a mixed performance over the study period. While LIC's CAGR of 21.89% shows overall positive growth, it is slightly lower than the industry's CAGR of 22.06%. The standout achievement for LIC was during 2019-20, where it collected the highest premium amount of Rs. 22,208.97 crore, experiencing an extraordinary growth rate of 961.90%. However, the period between 2010 and 2014 was challenging for LIC, with negative annual growth rates in premium collection. After 2016-17, LIC's premium collection showed an increasing trend, but the growth rate was inconsistent, with the last reported amount being Rs. 25,792.36 crore, accompanied by a negative growth rate of 26.92%.
- ❖ The Number of policies claimed under the Microinsurance individual category reveals inconsistent trends. From the base year 2007-08 to 2013, there was a consistent and positive increase in the number of claimed policies. However, from 2014 to 2020, there was a declining trend, with the number of claimed policies decreasing each year, resulting in negative annual growth rates. The financial year 2013-14 stood out as the year with the highest number of claimed policies, indicating a possible peak in claims during that period. The most significant annual change occurred during 2008-09, suggesting a notable increase in claims in that specific year.

- ❖ On an industry level, the trends were similar, with an increasing trend from 2007 to 2013, followed by a declining trend until 2020-21. However, there was a noteworthy upturn in the number of claimed policies with a 31.51% increase from 2020-21 to 2021-22. This indicates a potential recovery or shift in claim patterns in recent years. Comparing LIC's performance to the industry average, LIC's CAGR for the Number of policies claimed was significantly higher at 27.86%, compared to the industry's CAGR of 24.62%. This implies that LIC's Microinsurance individual category experienced higher growth in policy claims
- ❖ The Number of claims paid by LIC in the Individual category reveals distinct patterns and fluctuations over the study period. The initial six years showed an increasing trend, but the growth rate declined, indicating a slowdown in claims paid despite the rising number of claims. The most significant growth rate occurred during 2008-09. However, from 2014 to 2020, the trend shifted to a negative growth pattern, with the number of claims paid decreasing each year. The last two years under study, 2020-21 and 2021-22, experienced positive growth in the Number of claims paid, indicating a potential recovery or positive shifts in the claims pattern.
- ❖ By comparing LIC's performance to the Microinsurance industry as a whole, both entities showed similar trends in claims paid, with fluctuations and a negative growth phase from 2014 to 2020. However, the industry exhibited positive growth in 2015-16, and LIC showed positive growth in the last two years studied. LIC's CAGR of 28.01% for the Number of claims paid indicates steady growth in claim settlements over the study period, which is slightly higher CAGR of 25.68% for the Microinsurance industry.
- ❖ The Number of claims rejected in the Individual category highlights notable differences between LIC and the Microinsurance industry in terms of claim rejection trends. LIC reported a significant CAGR of 25.85% for claim rejections over the study period, indicating a rising trend in the number of claims rejected by LIC. In contrast, the Microinsurance industry as a whole experienced

a negative CAGR of -0.48% for claim rejections, suggesting a decreasing trend in claim rejection rates across the industry.

- ❖ The financial year 2016-17 stand out as the year with the highest number of claims rejected, with both LIC and the industry reporting a substantial number of rejections (406 and 454 claims, respectively). The trend of positive growth in claim rejections during certain years (2008-09, 2009-10, 2012-13, 2013-14, 2014-15, 2016-17, 2020-21, and 2021-22) suggests that LIC and the industry faced unique circumstances in those years, leading to an increase in the number of claims rejected. Conversely, all other periods showed a negative growth rate in claim rejections, indicating efforts by both LIC and the industry to reduce claim rejection rates.
- ❖ Total amount of claims under the Microinsurance individual category demonstrates dynamic trends over the study period. The initial six years showed increasing growth in total claims, albeit at a slower rate each year. However, during 2014-15, there was a shift to negative growth, and the total amount of claims declined until 2019-20. The fiscal year 2020-21 marked a significant improvement, and the subsequent year, 2021-22, witnessed a drastic increase of more than 50 percent in the total amount of claims under Microinsurance.
- ❖ On analysing company-specific performance, LIC reported a CAGR of 37.43% for the Total amount of claims, indicating robust growth in claims paid over the study period. At the same time, the Microinsurance industry as a whole reported a CAGR of 33.71%, signifying healthy growth in total claims industry-wide. LIC's performance indicates strong growth in claims paid, outpacing the industry's overall growth.
- ❖ LIC's and the industry's Total amount of claims paid reveal periods of significant growth, slowdowns, and recoveries over the years. While LIC demonstrated strong performance in claims paid, the industry as a whole also showed relatively robust performance during the study period. However, LIC's growth rate was slightly higher than the industry average, indicating the company's competitive position within the market.

- ❖ The Compound Annual Growth Rate (CAGR) of LIC's Total amount of claims paid over the entire study period was 37.54%, highlighting the average annual growth rate. This indicates a robust performance for LIC in terms of claims paid. On an industry level, similar trends were observed as in LIC's performance. The CAGR of the industry's Total amount of claims paid over the entire study period was 34.71%, suggesting a relatively robust performance for the industry during these years. It is worth noting that LIC's growth outpaced the overall industry's growth during this period, as indicated by the slightly higher CAGR of LIC (37.54%) compared to the industry (34.71%).
- ❖ LIC's journey in handling claim rejections over the years showed the company started with modest figures, it rapidly improved in 2008-09, displaying remarkable growth. LIC sustained strong performance in claim rejection during 2009-10 and 2010-11. However, challenges emerged from 2011-12 to 2015-16, with varying growth rates, including negative growth in some years. Despite facing obstacles, LIC showcased resilience, achieving notable recovery in 2014-15 and experiencing a significant turnaround in 2020-21. These positive trends continued into 2021-22, further indicating the company's ability to adapt and improve. The CAGR of 50.37% signifies LIC's consistent and strong growth in managing claim rejections over the entire study period. In conclusion, LIC demonstrated an overall robust performance, effectively handling claim rejections, and sustaining growth despite experiencing fluctuations in certain years.
- ❖ At the company level, only five variables' growth changes are shown to be significant. These are the number of policies sold, the number of policies claimed, the number of claims settled, the total amount of claims, and the total amount of claims settled.

7.3.2 Growth of Microinsurance in Kerala

- In the state of Kerala, the microinsurance industry's thirteen-year compounded annual growth rate revealed a negative growth rate of 9.15 %.

- Kerala's contribution to India's microinsurance market has been declining over time. Kerala still contributed heavily to the sector in the early years, but its proportional contribution has significantly decreased. Kerala contributed 36.23% of the entire Indian microinsurance market in the fiscal year 2006–07. This suggests a large market share at the time. The percentage of Kerala's contribution, though, began to fall over time. It dropped to 11.92% by 2009–2010. In the years that followed, Kerala's contribution further narrowed to in at just 0.97% in 2019–20.
- In the state of Kerala, there were 29,056 microinsurance policies or insured people in the fiscal year 2006–07. Over the following few years, there was a considerable growth in the number of microinsurance policies, which peaked at 144,191 in 2007-2008 and then grew to 219,190 in 2008-2009. In the year 2009–2010 had the most microinsurance policies sold with 236,602 total. The number of microinsurance policies decreased after 2009–2010, reaching 181,677 policies in 2010–2011. In the state as a whole there was more variation in the number of microinsurance policies, with some years showing rises and others showing decreases which indicate an inconsistent growth in Microinsurance sector.
- The division of Thiruvananthapuram has typically seen an increase in the number of microinsurance policies sold over time. From 6,018 policies in 2006–07 to 34,933 policies in 2019–20, it grew gradually. Particularly between 2007-2008 and 2011-2012, when there is a significant increase from 60,517 to 93,741 policies, there are discernible increases in the number of policies sold. A continued interest in microinsurance in the division is shown by the relatively consistent growth in the number of policies sold during the most recent years (2015–16 to 2019–20).
- A fluctuating trend over the years can be seen in the number of microinsurance policies sold in the Kottayam division. It began with 8,717 policies in 2006–07, and in 2012–13, it peaked at 59,892 policies. But after that peak, there was a substantial drop in the number of insurance policies sold. The period from 2006–2007 to 2012–2013 had the most notable rise, with a large increase in the

number of policies. But beginning in 2013–14, there was a drastic decrease in the number of policies sold, which touched a low of 511 in 2015–16. The number of microinsurance policies sold in Kottayam has gradually increased over the past few years (2017–18 to 2019–20), which may indicate a potential recovery in interest in microinsurance in this division.

- Periods of rise and decline may be seen in the Ernakulam Division of Kerala State's microinsurance coverage over time. There were 6,238 microinsurance policies or insured people in the Ernakulam Division in the fiscal year 2006–07. In the following years, there were much more microinsurance policies, reaching 15,988 in 2007–2008 and then rising to 31,490 in 2008–2009. The number of microinsurance policies began to reduce after reaching a peak in 2008–2009, with 16,168 policies in 2009–10 and a steady decline in the years that followed. Prior to reaching its lowest point of 676 policies in 2014–15, the number of microinsurance policies kept declining. The number of microinsurance policies gradually increased, from 1,150 in 2016–17 to 1,208 in 2017–18 to 1,284 in 2018–19 to 1,403 in 2019–20.
- The microinsurance coverage growth performance for the Thrissur division is also inconsistent. In the year 2006–07 Thrissur Division sold 4,822 microinsurance policies. Over the following years, more microinsurance policies were issued, reaching 6,987 in 2007–2008 and 13,475 in 2008–2009. Microinsurance coverage significantly increased in 2009–2010, when 22,010 policies were issued, which was a record-high level. Following 2009–10, there were oscillations in the number of microinsurance policies, with some years seeing drops and others seeing rises. In 2014–15, there were 630 microinsurance policies; however, this number rapidly rose in the following years, reaching 935 policies in 2019–20.
- Significant changes observed in microinsurance coverage over time in the Calicut Division. 3,261 microinsurance policies were issued in the Calicut Division in the fiscal year 2006–07. Over the following few years, there was a large rise in the number of microinsurance policies, which reached 24,366 in

2007-2008 and sharply increased to 71,870 in 2008-09. The subsequent year, 2009–10, witnessed a striking growth with 91,280 microinsurance policies, the greatest number in the policies issued. After reaching its high in 2009–2010, microinsurance coverage significantly decreased, reaching just 47,439 policies in 2010–2011. The number of microinsurance policies then fluctuated for a while, with some years showing gains and others showing decreases.

7.3.3 Findings of Financial Capability

- With regard to financial capabilities, half of the policyholders have a moderate level, and 25.2 percent of the sample policyholders have both low and high levels.
- Of the sample respondents, 40.9 percent have poor financial knowledge, 30.2 percent have moderate financial knowledge, and the remaining 28.9 percent have high financial knowledge.
- A moderate level of financial attitude is exhibited by 43.7 percent. Just 26.5 percent of sample policyholders have a high-level financial attitude, compared to 29.8 percent who have a low level.
- Taking into account their level of financial behaviour, 42.2 percent are moderate. 30 percent of people exhibit both high and low levels of financial behaviour.
- It is found that policyholders' levels of financial knowledge, attitude, behaviour, and capability were not distributed uniformly.
- Based on the mean rankings, there exists moderate significant variation in the financial knowledge of male and female policyholders. Female policyholders are more financial knowledge than male policyholders.
- The financial attitude of male and female policyholders is different. On average, female policyholders (Mean Rank =172.63) had a more positive financial attitude compared to male policyholders (Mean Rank= 150.74)

- Financial behaviour of male and female policyholders differs statistically. By comparing the mean ranks of financial behaviour among male (137.33) and female (183.17) policyholders, female policyholders have better financial behaviour than male policyholders.
- The overall financial capability of policyholders who are male and female varies statistically, in comparison to male policyholders', female policyholders have greater financial capability.
- Despite the policyholder's age group, the mean ranks for financial knowledge, attitude, behaviour, and overall financial capacity suggest that their total financial capability scores differ.
- Regarding the policyholder's age group, there was a minor but substantial variation in the overall financial capability and its sub dimensions, with the exception of financial attitude.
- Considering financial knowledge, the age groups between 26 to 33, 34 to 41, 42 to 49, and 50 and above were differed significantly. However, there was no statistical difference in financial knowledge across the age groups between 18 to 25 and 26 to 33.
- In the case of financial behaviour across the age categories, policyholders of 26 to 33 age groups differed significantly from those in the between 34 to 41 age groups only.
- The age group between 26 to 33 showed a substantial difference in overall financial capability when compared to the 34 to 41, and 50 and above age groups.
- The financial knowledge, respondents with Agriculture and allied is significantly different with all other nature of occupation. financial knowledge of Self-Employed respondents is significantly different with all other three nature of occupation (daily wage worker, permanent employee and temporary employee).

- Financial attitude and behaviour, those in Agriculture and allied occupations differ only from respondents working on a daily wage basis. financial behaviour and attitude, self-employed respondents differ only from daily wage workers. Permanent employees show significant differences in attitude compared to temporary employees
- The policyholders' financial knowledge, financial attitude, financial behaviour, and overall financial competence are not affected by their marital status.
- Financial knowledge, financial attitude, and overall financial capabilities of policyholders from nuclear and combined families did not differ significantly. But there is statistical variation in the financial behaviour of policyholders from nuclear and joint families. Nuclear family policyholders exhibit better financial behaviour, based on a comparison of the mean ranks.
- The number of dependents in the household affects the policyholder's financial knowledge, financial behaviour, and overall financial capability. The study does not provide evidence of a change in financial attitude when the number of dependents varies.
- In terms of financial knowledge, policyholders with 3 to 5 dependents and 6 to 8 dependents in the family significantly differ from those with more than 8 dependents, while those with up to 2 dependents, 3 to 5 dependents, and 6 to 8 dependents significantly differ from those with more than 8 dependents in terms of financial behaviour. In terms of overall financial competence, policyholders with more than 8 dependents significantly differ from those with up to 2 dependent and 6 to 8 dependents.
- Depending on the policyholder's level of education, distinct financial knowledge, financial attitudes, financial behaviours, and financial capabilities exist.
- The financial literacy of policyholders living in rural and urban locations varies significantly. Both rural and urban policyholders exhibit a slight difference in

their financial literacy, as per the test's effect size. According to the mean rank, urban policyholders have more financial knowledge.

- There were differences between the various income categories in terms of financial knowledge, financial behaviours, and overall financial capabilities. However, the policyholders' financial attitudes were unaffected by their income levels.
- Financial Knowledge of income levels up to Rs.5000 is distinct from the income groups between Rs.8001 to 11000 and Rs.11001 to 14000. Policyholders with an income between Rs.5001 to 8000 differ significantly from those with an income of Rs.8001 to 11000. Furthermore, policyholders with income Rs.14000 and above statistically vary from those with incomes between Rs.8001 and 11000 in terms of financial knowledge.
- Considerable difference found in financial behaviour and overall financial capabilities between those earnings up to Rs.5000 and those earnings between Rs.8001 to 11000 and Rs.11000 to 14000. Only the income groups between Rs.5001 to 8000 differ significantly from the income groups of Rs.8001 to 11000.
- Policyholders who participate in social groups are more financially capable than those who do not. Policyholders those have membership in any social group had greater financial knowledge, financial attitudes, and financial behaviours.
- Financial capability of policyholders had a positive influence on perceived value, perceived benefits, perceived risk and attitude towards risk relationship.
- Financial capability had a positive and significant impact on microinsurance investment ($\beta = 0.573$, t value = 41.594, $p < 0.001$), regression result revealed that one unit increase in the financial capability causes increase in the microinsurance investment' by 0.573 units.

7.3.4 Findings of Perceived Value

- In terms of overall perceived value, 24.9 percent of policyholders had low levels of Perceived value. The majority of policyholders (47.9 percent) view value as being on the moderate level, while 28 percent perceive value as being on the high level.
- A low level of affordability affects 36.6 percent of policyholders, a moderate level affects 36.6 percent of sample policyholders, and a high level affects 27.4 percent of policyholders.
- Regarding the appropriateness of microinsurance, 31.4 percent of policyholders have low level appropriateness, 42.2 percent of sample respondents have moderate levels, and the remaining 26.5 percent have high levels.
- In terms of microinsurance accessibility, 38.2 percent of policyholders have a low level, 34.2 percent have a moderate level, and the remaining 27.7 percent have a high level microinsurance Accessibility.
- In terms of overall perceived value and its sub dimensions (affordability, appropriateness, and accessibility), between male and female policyholders viewed almost as similar.
- Value perceptions on the appropriateness of microinsurance and its accessibility do not differ by age group. However, the affordability of microinsurance varied depending on the policyholders' age groups. For the age group of 34 to 41, the average affordability rank was fairly high.
- Policyholders between the age group of 18 to 25 considerably differ from those over 50 in terms of the affordability of microinsurance. Similar to this, policyholders between the age category of 26 to 33 perceive microinsurance as more affordable than those between the age group of 34 to 41 and 50 and above groups.

- Microinsurance policyholders' appropriateness varies as their education level changes. In contrast, the affordability and accessibility of microinsurance are unaffected by the level of policyholder education.
- The perception of the appropriateness of microinsurance among policyholders with high school and higher secondary education is not significantly different. In terms of perceived value's appropriateness, every other educational status differs substantially from each other.
- There is a considerable variance in microinsurance affordability and accessibility among policyholders working in various occupations. However, no difference in accessibility dimension was discovered when their occupations differed.
- With varying income levels, there is a significant difference in perceptions of the affordability and appropriateness of microinsurance. However, there is no difference in their perception of microinsurance accessibility as income levels change.
- For both dimensions, the income groups of between Rs.11001 to 14000 and above 14001 vary significantly from the income group up to Rs.5000. There is no other group that makes a major difference. Similarly, policyholders with incomes between Rs.5001 to 8000 differ significantly from those with incomes between Rs.11001 to 14000 and Rs. 14000 and above. It should also be highlighted that the policyholders with an income between Rs.8001 to 11000 differ considerably from those with an income of Rs. above 14000 only in terms of affordability.
- In terms of affordability and appropriateness, there are considerable differences in perceived value. Whereas microinsurance accessibility does not vary when their marital status changes. By comparing the mean ranks of perceived value dimensions, widowed and divorced policyholders had higher perceived value than married and unmarried policyholders.

- The affordability and appropriateness perceptions of married policyholders differ significantly from those of unmarried policyholders. The view of unmarried and widowed policyholders differs significantly from that of all other groups.
- There is a modest variation in perception of affordability and appropriateness between policyholders from joint families and policyholders from nuclear families, but there is no statistical difference in perception of accessibility dimension. Perceived value of nuclear family policyholders was higher than joint family policyholders.
- The perceptions of affordability and appropriateness of microinsurance were not different across urban and rural policyholders; however, perceptions of accessibility differed between rural and urban policyholders. Urban policyholders mean ranks were more in all the three sub dimensions of perceived value than rural policyholders.
- Perceived value was found to have a positive and significant impact ($\beta = 0.458$, t value = 39.365, $p < 0.01$) on microinsurance investment, when perceived value increases by one unit, which will lead to 0.458 increases in the microinsurance investment.

7.3.5 Findings of Perceived Benefits

- The exploratory factor analysis of the construct perceived benefits identified two factors: monetary benefits and non-monetary benefits. The monetary perceived benefits comprise of seven observed variables with a factor loading greater than 0.5, while the second factor non-monetary perceived benefits constitute for four observed variables with a factor loading more than 0.5.
- Regarding perceived monetary benefits, the mean ranks of male and female policyholders were 163.33 and 162.74, respectively. Men who owned policies perceived monetary benefits more favourably than women and mean ranks statistically insignificant.

- In terms of perceived non-monetary benefits, the mean ranks of male and female policyholders were 161.36 and 164.29, respectively. Female policyholders viewed non-monetary benefits better than male policyholders, although there was not a significant distinction between these two groups.
- The respondents' perceived monetary benefits as well as perceived non-monetary benefits are not significantly different depending on their age group. When age grows, perceived monetary benefits and perceived non-monetary benefits translate into higher ranks.
- Among microinsurance policyholders with changes in education level, there is no statistical difference in perceived monetary benefits and perceived non-monetary benefits. Microinsurance policyholders with high levels of education perceived the benefits better.
- The study found that statistical insignificance in perception of monetary and non-monetary benefits among microinsurance policyholders with varied income levels. The mean ranks of perceived benefits revealed that those with higher incomes witnessed the benefits better than those with lower incomes.
- Among microinsurance policyholders working in various occupations, there was insignificant variation in perceived monetary benefit and perceived non-monetary benefits. Perceived monetary benefits are highest among permanent employers and lowest among self-employed policyholders. Similarly, the mean rank of perceived non-monetary benefits was high among permanent employers. Additionally, it is low among those who worked on a daily wage basis.
- According on policyholders' marital status, there is statistical difference in the Perceived monetary benefits. Married and unmarried policyholders did not significantly differ in rank despite having higher Perceived monetary benefits among widowed and divorced policyholders.
- No statistically significant difference was found in respondents' perceptions of non-monetary benefits based on their marital status. Compared to married and

unmarried policyholders, widowed and divorced policyholders perceive their non-monetary benefits as being higher.

- Urban policyholders had higher perceived monetary benefits than rural policyholders, with the perceived monetary benefits mean rank of rural and urban policyholders being 163.20 and 172.49, respectively. There are statistical differences between rural and urban policyholders' perceptions of monetary benefits of microinsurance.
- The mean rank of rural policyholders and urban policyholders in terms of perceived non-monetary benefits was 163.24 and 162.37, respectively. Perceived non-monetary benefits imply that the mean ranks of the groups do not statistically differ.
- The mean rank deviations of perceived monetary and non-monetary benefits were statistically significant for both dimensions of perceived benefits. Policyholders who belong to nuclear families have a strong perception of monetary and non-monetary benefits.
- There is positive and significant impact of perceived benefits on microinsurance investment ($\beta = 0.399$, $t\text{-value} = 7.202$, $p < 0.001$), one unit increase in the standard deviation of perceived benefits increases 0.399 units standard deviation of microinsurance investment.

7.3.6 Findings of Perceived Risk

- Levels of perceived risk among policyholder are not equally distributed. Of the sample's policyholders, 48.6 percent perceive risk at a high level, 25.2 percent perceive risk at a moderate level, and the remaining 26.2 percent perceive risk at a low level.
- The perceived risk perception of policyholders is the same for both male and female. Risk perception both Male and female policyholders had equal median scores.

- Policyholders' perceptions of risk did not statistically differ based on their age group. By examining the mean ranks of policyholders, between the age group of 34 to 41 category, and between 42 to 49 age categories had higher perceived risk than other age groups.
- The perceived risk was greater for policyholders with a degree or higher education and lower for those without a formal education.
- Based on their level of education, policyholders' perceived risk does not differ considerably.
- The perceived risk of policyholders who work in different occupations varies significantly. Workers in agriculture and allied sector have a high median risk perception score, and policyholders, those who have temporary employment had a low score.
- The perception of risk varied among policyholders from various income groups. Those with monthly incomes up to Rs. 5,000 had higher perceived risks.
- The mean rank of perceived risk among divorced policyholders was found to be high, while it was low among unmarried policyholders. However, the test results show that there is no substantial variation in perceived risk based on marital status.
- The perceived risk of rural and urban policyholders differed. Rural policyholders have a higher perception of risk than urban policyholders.
- The difference in perceived risk between joint family policyholders and nuclear family policyholders was not found to be significant.
- Perceived risk was shown to be higher in policyholders with fewer than two dependents and lower in those with more than eight family members. Perceived risk among policyholders varies depending on the number of members in their family.

- Perceived risk has a significant negative impact on microinsurance investment ($\beta = -0.168$, $t\text{-value} = 24.879$, $p < 0.001$), one unit increase in the perceived risk cause 0.168 units decrease in microinsurance investment.

7.3.7 Findings of Attitude towards Risk

- Study found that 43.08 percent of the sample's policyholders have a high degree of positive attitude towards risk, and the rest 56.92 percent of policyholders who have a low level of positive attitude towards risk.
- The attitude towards risk of male and female policyholders did not statistically differ. In comparison to male policyholders, female policyholders had a higher average rank.
- In relation to their age group, microinsurance policyholders' attitude towards risk was statistically significant. Multiple pair wise comparisons reveal a substantial difference between the 18 to 25 age group with the 34 to 41 and 42 to 49 age groups.
- There is a considerable statistical difference in their attitude towards risk based on their educational background. Multiple pair wise comparisons demonstrate that policyholders with a bachelor's degree or above significantly vary from the other three groups, which are those with no formal education, primary education, and high school education. Attitude towards risk are more among people with a primary education and less prevalent among those with a bachelor's degree or higher.
- A study shows that policyholders in various occupations have significantly varied attitudes towards risk. In the same way as policyholders with permanent employment differ greatly from those with all other occupation categories, those with temporary employment also differ significantly from those with agricultural and related jobs.
- The study found that policyholders from various income levels have statistically varied attitudes towards risk. Numerous pair wise comparisons reveal a

substantial difference between individuals with incomes below Rs. 5000, between Rs. 11001 and Rs. 14,001, and beyond Rs. 14,001. When income increases attitude towards risk also improved.

- The attitude towards risk among microinsurance policyholders changes statistically depending on their marital status. According to the findings, divorced policyholders' attitude towards risk differs significantly from married and unmarried policyholders; similarly, widowed policyholders differ significantly from married and unmarried policyholders.
- Rural and urban policyholders' attitudes towards risk differ statistically. When compared to rural policyholders, urban policyholders have a better positive attitude towards risk.
- The attitudes towards risk of policyholders from nuclear families and those from joint families are statistically insignificant. Average rank of joint family policyholders is somewhat higher than that of policyholders from nuclear families.
- There is a statistical relationship between a policyholder's attitude towards risk and the number of dependents they have. Where there are more dependents in the family, attitude towards risk was positive.
- Attitude towards risk was found to be positive significant impact on microinsurance investment ($\beta = 0.382$, $t\text{-value} = 18.906$, $p < 0.001$), attitude towards risk increases by one unit, which will lead to 0.382 increases in the microinsurance investment.

7.3.8 Findings of Informal Strategies

- Microinsurance policyholders use a variety of informal strategies. The preference of different techniques among the sample respondents significantly different, which is purely based on the policyholder's convenience, this is confirmed by the Friedman test.

- The five most important informal risk-mitigation strategies were "using savings," "asking for donations or loans from family, friends, or neighbours," "selling key production assets, such as livestock and land," "taking a loan from a moneylender," and "selling consumption assets, such as jewellery."
- The least important five informal risk-reduction strategies preferred by policyholders were "Send child to work," "Reduce consumption," "Pawn assets such as land or jewellery," "Postpone debt repayment," and "Earn extra income through additional jobs or casual labour."
- Informal strategies followed by policyholders negatively influence the microinsurance investment.

7.3.9 Findings of Insurance Awareness Level

- Level of insurance awareness is not similar across policyholders. The majority of (39.1 percent) policyholders belong to the moderate level of insurance awareness. 32.3 percent policyholders are with low level of insurance awareness, and the rest of 28.6 percent have high level of insurance awareness
- Demographic factors such as gender, age group, education, employment status, monthly income, place of residence, and level of insurance awareness are significantly associated. Education and residency are two of these which make a medium effect, whereas the others only have a small effect on level of insurance awareness.
- Demographic factors such as the number of dependents, the type of family, and the marital status had no impact on the level of insurance awareness.
- Insurance awareness positively influence microinsurance investment and policyholders' insurance awareness strengthened the impact of financial capability and microinsurance investment ($\beta = 0.321$, t -value = 15.28, $p < 0.01$).

7.4 Conclusion

The study on "Microinsurance - An Evaluation of Investment Determinants from the Perspective of Policyholders' in Kerala" sheds light on crucial aspects that underscore the significance of microinsurance within the context of Kerala, evaluating the determinants that influence policyholders' investment. Through a comprehensive analysis of these determinants, the study underscores the pivotal role microinsurance plays in providing financial security to individuals in Kerala, particularly those in low-income brackets or marginalized communities. The findings of this study underscore the current status and factors influencing policyholders' decisions regarding microinsurance investment. It reveals the complex interplay between socio-economic variables, financial capability, perceptions on accessibility, product affordability and appropriateness, and the level of awareness among policyholders. Moreover, the study highlights the critical role of education and awareness campaigns in promoting the uptake of microinsurance among the populace. Furthermore, the study's emphasis on the unique socio-economic landscape of Kerala provides a nuanced understanding of the specific challenges and opportunities for microinsurance penetration within the region. By evaluating policyholders' perspectives, the study not only identifies key determinants but also offers actionable insights for policymakers, insurance providers, and stakeholders to tailor microinsurance products that align more effectively with the needs and preferences of the target population.

In conclusion, this study significantly contributes to the body of knowledge surrounding microinsurance by delving into the specific context of Kerala and evaluating the investment determinants from the policyholders' viewpoint. The study has provided an accurate picture of Kerala's and India's life microinsurance markets. In the past few years, there hasn't been any noteworthy growth in new business. When it comes to LIC of India, Kerala State contributes less than 1% to the country's microinsurance market in recent year. The microinsurance sector's thirteen-year compound annual growth rate in the state of Kerala showed a negative growth rate of 9.15 percent. Over time, Kerala's share of India's microinsurance

market has decreased. The majority of current policyholders are also still largely unaware of the advantages of microinsurance and their perception of risk has a detrimental effect on microinsurance investment.

In terms of financial capabilities, half of the sample policyholders have a moderate level, and 25.2 percent have both low and high levels. In terms of overall perceived value, 24.9 percent of policyholders reported low levels. The vast majority of policyholders (47.9 percent) consider value to be moderate, while 28 percent consider value to be high. Policyholders' perceptions of risk are not distributed equally. Of the sample's policyholders, 48.6 percent perceive risk as high, 25.2 percent perceive risk as moderate, and the remaining 26.2 percent perceive risk as low. The results of the study show that, of the sample of policyholders, 43.08 percent have a high degree of positive attitude toward risk, while 56.92 percent have a low degree of positive attitude toward risk. financial capability, perceived value, perceived benefits and attitude towards risk were had a positive and significant impact on microinsurance investment whereas perceived risk was found to have a significant negative impact on microinsurance investment. Similarly informal strategies adopted by policyholders have negative relation to microinsurance policyholders. Among the determinants financial capability was a major factor by policyholders' investment. Insurance awareness strengthened the impact of financial capability and microinsurance investment.

Identifying the factors influencing microinsurance provides a road map for improving the accessibility, understanding its relevance and enhancing investment options, which will ultimately lead to better financial inclusion and residence among the vulnerable segments of society.

Chapter 8

SUGGESTIONS, IMPLICATIONS, AND SCOPE FOR FURTHER RESEARCH

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8.1 Introduction

In the preceding parts of this extensive microinsurance study, attempted to explore the diverse environment of microinsurance, examined its essential components, studied its growth and development, and assessed various determinants impact on individuals and communities in the state. As we conclude this in-depth investigation, now turn attention to what may be the most important portion of this study: the suggestions and implications generated from the research findings. In this chapter, bridge the theoretical and practical gaps by providing a road map for stakeholders to exploit the potential of microinsurance as a vehicle for sustainable development. Throughout this chapter, it will extract the valuable insights gathered from the study, outlining practical suggestions that may guide the design, implementation, and scaling of microinsurance programs. Furthermore, it will explore the far-reaching implications of these suggestions on various facets of stakeholders.

8.2 Suggestions

In the light of findings of the study the following suggestions are offered for the improvement of microinsurance market. To tap the potential market of insurable population and also to increase the microinsurance services among low-income people. Researcher has offered some suggestions based on findings of the study for the perusal of regulators and insurance company.

8.2.1 Regulators

- As it is for the public advantages, regulators should take on the role of raising knowledge about microinsurance among low-income people. The regulator

should take an active role in growing this sector. The regulator may publicise through the creation of audio-visual and other insurance literacy programmes.

- A council of microinsurance representatives, regulators, and government officials must be formed. This body should meet on a regular basis to examine challenges and establish strategies for the development of this industry. This body can also assist in the development of regulations.
- To address the concerns of microinsurance policyholders, it is desirable to establish distinct consumer protection systems for customers in the unorganised sector.

8.2.2 Insurance company

- Creation of microinsurance awareness throughout the segment by special microinsurance campaign. The study reveals that most of the customers are still not aware of the microinsurance policies and its providers. Raising awareness is the most important thing. Providers have to take suitable steps to give wide publicity about the microinsurance policies to reach lower income group. For this purpose, it can use the media like FM radio, newspapers, posters, village banners, and assistance of local authority like panchayats, etc.
- Increased awareness and acceptance of microinsurance products can result from SHG members' active participation in distribution. Self-Help Groups are people's second choice for borrowing money in an emergency for those who live in rural areas. SHG members can thereby increase the target group's penetration into microinsurance both directly and indirectly.
- It was revealed in the survey that the insurance agent was playing crucial role in supplying information, building customer relationship and in retaining policyholders. Therefore, it is strongly recommended that the companies must strengthen their network of agent by applying some motivational and performance appraisal techniques. As most of the agents are not regular employee of the insurance companies the company must absorb the agents on the basis of their performance

- The survey found that the insurance agent was essential in providing information, developing relationships with customers, and maintaining policyholders. To educate customers about their insurance options, insurance agents may be trained and sent door to door. Consultations and advice on policies should be given on an individual basis.
- Utilise various institutional supports, such as micro finance institutions, primary agricultural credit institutions, community-based service organisations, etc., to increase insurance awareness among the target people.
- For the long-term continuity of the policy, premium flexibility is favoured by the target population. The authorities have placed a strong emphasis on premium flexibility in the microinsurance regulations of 2005 and 2015. Taking into account their operational concerns, the company should implement it in the truest sense.
- Organising frequent financial literacy classes customised exclusively for microinsurance policyholders would help to create awareness among the target group. Budgeting, saving, debt management, and comprehending insurance plans are to be included in these classes. Improving microinsurance policyholders' financial capability is critical to ensuring that they can make well-informed decisions, successfully manage their finances, and maximise the benefits of their insurance coverage.
- Provide policyholders with one-on-one financial counselling sessions. Assist them in developing financial goals, budgets, and savings plans.
- Encourage policyholders to participate in peer learning groups where they can share their experiences and learn from one another. Such groups can help to reinforce healthy financial practises.
- Policy documents should be written in simple language. Provide clear and easily understandable information regarding insurance policies, such as coverage, rates, deductibles, and claims procedures.

- Reducing the perceived risk of microinsurance requires a holistic approach that combines education, transparency, affordability, and strong support systems. Steps shall be taken to provide convenient customer support services to handle policyholder problems and questions as soon as possible. Customer service staffs should be knowledgeable and empathetic.
- Develop content and marketing materials in local languages, considering the cultural nuances of the target audience.
- Keep premiums affordable, with options for low-income individuals to pay in small, manageable instalments
- Regularly assess the impact and effectiveness of microinsurance policies and make necessary adjustments based on feedback and changing circumstances.

8.3 Implication of the Study

All of the research questions are adequately answered in this study. The research has guided various conclusions and implications after data analysis. Some of the study's primary findings will benefit stakeholders in a several ways. Major implications of the study extend to various stakeholders who play different roles in the microinsurance ecosystem. Collaboration and coordinated efforts among these stakeholders are essential to leverage the potential of microinsurance as a tool for financial inclusion. Practical implications of the study pertaining to regulators, providers, intermediaries and agents and academic community are as follows:

8.3.1 Regulators

This study provides current market realities and characteristics of the microinsurance target population, which will assist regulators in alter the current restrictions and developing new guidelines to administer governance over the microinsurance industry accordingly. They can establish favourable regulatory environments to promote microinsurance investment.

8.3.2 Providers

Microinsurance companies and providers should view the study as an opportunity to expand their services and improve product offerings. Invest in innovative product development, distribution channels, and customer education to better serve low-income clients. Collaborate with other stakeholders for sustainable growth.

8.3.3 Intermediaries and Agents

The expansion of microinsurance can benefit insurance intermediaries and agents. They can invest in training and capacity-building to better serve low-income customers. Try to adapt new business models to reach underserved populations effectively.

8.3.4 Academic Community

Academicians and researchers can use the study as a platform to further explore the internal and external characteristics and aspects associated to microinsurance investment.

8.4 Scope for Further Research

Microinsurance is a vibrant and promising sector in the ever-changing world of finance and risk management. Microinsurance has evolved as a significant tool throughout the years, providing financial protection to those who had previously been on the outer limits of the insurance environment. However, as we go more into the complexities of microinsurance, it is discovered that this field ripe for additional investigation, innovation, and influence. Here researcher suggests some unexplored areas for further research in this field;

1. Comparative study of public and private Microinsurance sector.
2. Effectiveness of different distribution channels of Microinsurance.
3. Customer relationship management in Microinsurance sector.
4. Risk management practices followed by Microinsurance providers.

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APPENDIX

INTERVIEW SCHEDULE FOR POLICYHOLDERS

Section 1- Demographic Profile Details;

Name.....

- Gender : Male Female
- Age : Between 18 to 25 Between 26 to 33
 Between 34 to 41 Between 42 to 49
 50 and Above
- Education :
- Occupation :
- Monthly income :
- Marital Status : Married Unmarried
 Divorced Widowed
- Village/town/city where you live.....
- Approximate Monthly Expenditure.....
- Family Members Status

Number of dependent	Male		Female		Total	
Number of income earners						

- Are you a member of any social groups like kudumbasree/SHG etc.
 Yes No

Section 2- Questions relating to Insurance;

1. Do you think that insurance is necessary for individuals ?
 Yes No Don't Know
2. Do you think the micro insurance policy will be a need for the security?
 Not At All Important Slightly Important
 Moderately Important Very Important
 Extremely Important
3. Have you bought any microinsurance policy?
 Yes No
4. From where you got information about Microinsurance policies?

Insurance Agents		MFI	
NGO		SHG	
Peer Groups/Friends		Advertisement	

5. Why did you take policy? Is it due to?

- Agents force
- For effective savings
- To meet contingencies.
- Any other..... (Specify)

6. State your opinion towards the following statements regarding insurance service awareness ranging from strongly agree to strongly disagree

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

Insurance Awareness	SA	S	N	D	SD
The main purpose of insurance is to reduce the financial burden of risk faced by the policyholder					
Insurance is the best risk management tool when the chance of loss is low and the loss severity is high					
Regular payments are not necessary for claiming insurance policy					
Insurance company settle the claims, out of premium payment made by policyholders					
If a customer does not suffer any loss, he/she will get the money back					
An insured is always assured the policy amount regardless of the cause of loss.					
There is promptness in payments when approached by a policyholder.					
Irregular premium payment may lead to non payment of sum assured					
Claim settlements are not done during waiting period of a policy					
The insurance products that suit my requirements are well known					
The payments for the insurance policy are duly informed.					
Premium paid for insurance covers can get a maturity value after a specific period of time					

7. State your opinion towards the following statements regarding perceived benefits of microinsurance

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

Perceived benefits	SA	A	N	D	SD
Microinsurance reduces or eliminates losses hidden in life's uncertainty					
Microinsurance provides stability for wealth planning					
Insurance serves as capital or wealth accumulation					
The insurance policy assists me to plan my personal financial management					
The assets of the poor are protected from financial loss					
Microinsurance increase the productivity of people					
People are able to save on out of pocket expenditure					
With Microinsurance, one does not need to rely on other sources when disaster strikes					
Microinsurance can improve ability to cope with loss.					
Microinsurance Improve morale among communities					
With the Microinsurance policy, I obtain a sense of security					

8. State your opinion towards the following statements regarding microinsurance affordability, appropriateness and accessibility

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

Microinsurance Affordability	SA	S	N	D	SD
Premium amount can be paid out of my income					
Premium amount can be paid when income become irregular					
Benefits provided by microinsurance justify the premium costs.					
Microinsurance premiums are reasonable					
Microinsurance premiums represent good value for money					
The costs of microinsurance premiums is too high					

Microinsurance Affordability	SA	S	N	D	SD
Microinsurance Appropriateness					
Microinsurance products are customized according to risk covered					
Microinsurance provides the provision of additional non-insurance services					
Flexible Premium payment option are available under Microinsurance					
The range of insurance products is capable to meet customer needs					
The insurance coverage is clearly evident from the premium paid					
The Premium of insurance service is justified by the coverage provided					
Microinsurance properly covers risk faced by low-income people					
Microinsurance Accessibility					
The insurance company provides me with detailed information about the insurance coverage.					
Clarity in explaining policy's terms and conditions					
Accessible location of the LIC branch and Premium point					
Prompt & Efficient Grievance handling mechanism					
Easy access to information about the microinsurance products					

9. State your opinion towards the following statements regarding perceived risk of Microinsurance

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

Perceived Risk	SA	A	N	D	SD
Given the financial expenses associated with purchasing an insurance product, there is a substantial financial risk					
Considering the investment involved, purchasing the insurance product would be risky					
There is uncertainty in the receipt of desired protection from insurance					

Perceived Risk	SA	A	N	D	SD
Failure to perform the desired outcome, the insurance poses a threat to the physical well-being of me and my dependents					
Non-payment of the premium shall have certain consequences on policyholders					
The premium amount payable will increase the total debt					

10. State your opinion towards the following statements regarding attitude towards risk ranging from strongly agree to strongly disagree

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

Attitude towards Risk	SA	S	N	D	SD
When I experience fear, I feel Helpless and thus, perceive the event as Riskier					
Any risk events that I experienced in my life had an effect on my current behaviours and attitudes towards those risks					
With my life experiences, I have learned how to deal with risks and tend to take more precautions					
Accurate knowledge would reduce my fears and worries and reduce negative image about a risk Event					
When coming across a risky situation I am less likely to take control and rely on others for decision-making					

11. State your opinion towards the following statements regarding financial literacy, financial planning and saving behaviour

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

Financial Knowledge	SA	S	N	D	SD
It's easier to divide a lump sum amount among more than two persons.					
You can buy anything in the future at the price and quantity which is same as today.					
High inflation means that the cost of living is increasing rapid					
When the inflation rate increases, the cost of living rises.					
An investment with a high return is likely to be high risky					
It is possible to reduce the risk when we invest in more avenues than a single avenue.					

Financial Knowledge	SA	S	N	D	SD
I am aware about usage of simple interest					
Compound interest is different from simple interest.					
Financial Attitude					
A budget helps you how much money you spend on needs and wants.					
My earnings for each month are well known to me.					
Expenditure on each month is recorded accordingly.					
Money management is well organised					
When it comes to money, I think it is important to plan ahead and not live day to day.					
It is highly important to live within my means.					
The way I manage my money today will affect my future					
When I make financial plans I do everything I can to succeed					
Financial Behaviour					
It is important to establish financial target for the future					
There is always a tendency to save money for the future.					
Saving of money is regular even if it is a small amount.					
A sum of money always assured for managing bad times.					
Spending of money is more satisfactory than saving					
to save money buying of financial assets is preferable					

12. State your opinion towards the following statements regarding Microinsurance service action

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

Microinsurance Investment	SA	S	N	D	SD
The investment return expected from the premiums paid for insurance would encourage me to purchase an insurance policy.					
Before purchasing an insurance policy I carefully read and analyse the insurance contract and conditions.					
Before purchasing insurance services I want to have a discussion with the family members.					

Microinsurance Investment	SA	S	N	D	SD
Documentation procedure required should be considered for purchasing the life insurance policy.					
Decision to purchase a life insurance products influenced by the ability of the product to fulfil my needs.					
The fear about the hazardous living condition made you to take this policy.					

13. Below shows some factors which will affect the wellbeing of people, state your status before and after having microinsurance. Please tick in the appropriate box.

1-Very Poor 2- Poor 3- Fair 4- Good 5- Excellent

	Before					After				
	VP	P	F	G	E	VP	P	F	G	E
Peace of mind										
Financial security										
Confidence to cover emergency expenditures										
Social security & equality										
Empowerment of weaker sections of the society										
Equal status, participation & power of decision making in community										
Financial literacy and numeracy										
Communication and leadership skill										
Opportunity to develop social contact with people & officials										
Empowerment of the Individual decision making of household										
Vulnerability										
Standard of living										
Other _____										

14. Rank the coping strategies adopted/ to be adopted in case of major risks/shocks/problems encountered by you. Please give the first rank to the most important and so on.

Strategies	Ranks
Use savings	
Asking for donations or loans from family, friends or neighbours	
Taking a loan from a money-lender	
Postpone debt repayment	
Pawn assets such as land or jewellery	
Selling consumption assets such as jewellery	
Selling key production assets, such as livestock and land	
Reducing consumption	
Earning extra income through additional jobs or casual labour	
Send child for job	
Others (specify).....	

.....

