

UNIVERSITY OF CAPE COAST

FINANCIAL INCLUSION AND HEALTH WELL-BEING OF OLDER  
ADULTS VISITING THE UNIVERSITY OF CAPE COAST HOSPITAL



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UNIVERSITY OF CAPE COAST

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ADULTS VISITING THE UNIVERSITY OF CAPE COAST HOSPITAL



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## DECLARATION

### Candidate's Declaration

I hereby declare that this thesis is the result of my own original research and that no part of it has been presented for another degree in this University or elsewhere.

Candidate's Signature: ..... Date:.....

Name: Nana Kwasi Benti

### Supervisor's Declaration

I hereby declare that the preparation and presentation of the thesis were supervised in accordance with the guidelines on supervision of thesis laid down by the University of Cape Coast.

Supervisor's Signature: ..... Date: .....

Name: Mr. Patrick Kwashie Akorsu

## ABSTRACT

The research studied on the effect of financial inclusion on health of older adults visiting the University of Cape Coast Hospital. Three objectives were established in order to achieve the purpose of the study. Objective one was to examine the impact of financial inclusion on the physical health of older adults visiting the University of Cape Coast hospital. The objective two was to determine the impact of financial inclusion on the psychological health of older adults visiting the University of Cape Coast hospital. The third and final objective was to analyze the relationship between financial inclusion and the health-well-being of older adults who visit the University of Cape Coast hospital. The “study employed the explanatory research design since the study tested the relationship between the various variables. The data collection instruments were questionnaire. The study employed the quantitative research approach. The simple random sampling technique was used in selecting a respondent of 154. Descriptive and Structural Equation were also used to analyse the objectives of the study. With respect to the first objective of the study, the study found that there was a positive and significant relationship between financial inclusion and physical health of older adults visiting the University of Cape Coast Hospital. Also, there was a positive and significant relationship between financial inclusion and psychological health of older adults visiting the University of Cape Coast Hospital. Also, it was found that there was a positive and significant relationship between financial inclusion and social well-being of older adults who visits the University of Cape Coast Hospital. The study recommended that management must develop and implement programs to enhance the financial literacy of older adults.

## KEYWORDS

Financial inclusion

Health wellbeing

Hospital

Older adults

Physical wellbeing

Psychological wellbeing

Social Wellbeing

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## **DEDICATION**

To my family

**TABLE OF CONTENTS**

	Page
DECLARATION	ii
ABSTRACT	iii
KEYWORDS	iv
ACKNOWLEDGEMENTS	v
DEDICATION	vi
TABLE OF CONTENTS	vii
LIST OF TABLES	x
LIST OF FIGURES	xi
CHAPTER ONE: INTRODUCTION	
Background to the Study	1
Statement of the Problem	4
Purpose of the Study	7
Research Objectives	7
Research Questions	7
Significance of the Study	8
Delimitations of the Study	9
Limitations of the Study	10
Definition of Terms	11
Organization of the Study	11
CHAPTER TWO: LITERATURE REVIEW	
Introduction	12
Theoretical Review	12
Capability Theory	12



Theory of Planned Behaviour	14
Empirical Review	25
Financial Inclusion and Physical Health Wellbeing	25
Financial Inclusion and Psychological Health Wellbeing	34
Financial Inclusion and Social Health Wellbeing	42
Conceptual Framework	47
Chapter Summary	47
CHAPTER THREE: RESEARCH METHODS	
Introduction	49
Research Philosophy	49
Research Design	50
Research Approach	51
Study Area	52
Population	53
Sample and Sampling Technique	55
Data Source	55
Data Collection Instrument	55
Validity and Reliability	56
Data Collection Procedures	57
Data Processing and Analysis	58
Model Specification	58
Ethical Consideration	59
Chapter Summary	60
CHAPTER FOUR: RESULTS AND DISCUSSION	
Introduction	61

Demographic Characteristics	61
Assessment of Measurement Models for the Study	65
Assessing indicator loadings	65
Assessing Internal Consistency Reliability	66
Assessing Convergent Validity	67
Assessing Discriminant Validity	68
Model Fitness	69
Financial Inclusion and Physical Health of older adults	72
Financial Inclusion and Psychological Health of older adults	74
Financial Inclusion and Social Health of older adults	76
Chapter Summary	78
CHAPTER FIVE: SUMMARY, CONCLUSION AND RECOMMENDATION	
Introduction	79
Summary	79
Conclusion	80
Recommendations	81
Suggestions for Future Research	82
REFERENCES	83
APPENDICES	97

**LIST OF TABLES**

Table		Page
1	Demographic Characteristics	62
2	Indicator Loadings	66
3	Validity and Reliability	67
4	Fornell-Lacker Criterion	68
5	Heterotrait-Monotrait Ratio (HTMT)	69
6	Model Fit Measures for Final Measurement Model	71
7	Financial inclusion and physical health	72
8	Financial inclusion and psychological health	74
9	Financial inclusion and social health	76

## LIST OF FIGURES

Figure	Page
1 Smart Pls Model	71

## CHAPTER ONE

### INTRODUCTION

Life-course and age-related phenomena such as disability and changes in social ties due to retirement, divorce or separation, and death of close relatives or friends have almost inevitably become a major risk for feeling extremely lonely among older people. Financial inclusion is a determinant for increased life expectancy since it aids older adults in assessing quality healthcare services.

#### **Background to the Study**

Financial inclusion has become a critical component of global development, particularly in enhancing health and well-being among vulnerable populations, including older adults. According to the World Bank (2022), approximately 24% of adults globally remain unbanked, with a disproportionate share found in low- and middle-income countries. Financial inclusion, which ensures access to financial services such as savings, credit, and insurance, is closely linked to health outcomes. For older adults, who often face declining income and increasing healthcare needs, financial inclusion is essential for promoting physical, psychological, and social well-being.

Globally, older adults are increasingly at risk of poor health outcomes due to financial instability. Data from the United Nations (2021) highlight that 46% of older adults worldwide live without a pension, leaving them financially vulnerable. This lack of financial resources limits access to quality healthcare, proper nutrition, and social engagement, which are integral to physical, psychological, and social well-being. Physical health, a key

component of well-being, often deteriorates in older age due to chronic illnesses such as hypertension, diabetes, and arthritis, which require consistent financial investment in medical care. Similarly, psychological health, encompassing mental health and emotional resilience, is frequently undermined by financial stress and anxiety. Social well-being, defined as the ability to form and maintain meaningful relationships, also suffers when older adults are excluded from economic participation.

In Ghana, the financial inclusion rate is approximately 58%, according to the World Bank Global Findex Database (2021). Despite significant strides in mobile money usage, many older adults, particularly in rural areas, remain financially excluded. This situation exacerbates health disparities among this demographic, as access to financial services can directly influence their ability to afford medical care, access social networks, and maintain mental health. For example, data from Ghana's Ministry of Health (2022) indicate that older adults who are financially included are 30% more likely to seek preventive healthcare than their financially excluded counterparts.

The relationship between financial inclusion and health well-being is multifaceted. Financial inclusion enables access to savings, credit, and insurance, which can mitigate the financial shocks associated with healthcare costs. For instance, a study by Dupas and Robinson (2018) found that access to savings accounts increased the likelihood of healthcare utilization among low-income populations by 25%. In the context of older adults, having access to savings or insurance reduces out-of-pocket healthcare expenses, thereby improving their physical health outcomes.

Psychological health is also influenced by financial inclusion, as financial stability alleviates stress and anxiety. Studies have shown that older adults with access to credit and insurance report higher levels of life satisfaction and lower levels of depression. For example, a study by Hojman et al. (2016) in Chile found that financial inclusion reduced depression rates among older adults by 15%, as it provided a sense of security against unforeseen medical emergencies. In Ghana, financial inclusion programs, such as mobile money and community savings groups, have been associated with improved mental health outcomes among older populations (Boakye-Yiadom et al., 2020).

Social well-being, another critical dimension of health, is also positively associated with financial inclusion. When older adults are financially included, they can participate more actively in social activities, support their families, and engage in community networks. Empirical evidence from Nigeria by Eze and Nwankwo (2019) revealed that older adults who participated in microfinance programs reported higher levels of social connectedness and reduced feelings of isolation.

The University of Cape Coast Hospital serves as a critical healthcare facility for older adults in the region. However, anecdotal evidence suggests that many older patients face financial barriers that limit their ability to access care (Opoku et al., 2020). Financial inclusion programs, such as the use of mobile money for hospital payments and community savings schemes, have the potential to address these barriers. For example, integrating financial inclusion initiatives into healthcare systems can improve service affordability and enhance the overall well-being of older adults.

## Statement of the Problem

Globally, the aging population is growing rapidly, posing significant challenges to their health and financial security. The World Health Organization (WHO, 2021) reports that by 2050, one in six people worldwide will be aged 60 years or older, with the majority residing in low- and middle-income countries. Despite this demographic shift, financial inclusion among older adults remains a critical concern, particularly in sub-Saharan Africa, where access to financial services is limited. In Ghana, older adults face heightened risks of financial exclusion due to factors such as low income, limited digital literacy, and the lack of tailored financial products, which in turn negatively impact their health well-being (World Bank, 2021).

The problem is especially acute for older adults visiting the University of Cape Coast (UCC) Hospital, where the cost of healthcare, coupled with financial instability, creates barriers to accessing quality medical care, psychological support, and social engagement. According to Ghana's Ministry of Health (2022), older adults in urban and peri-urban areas often struggle to afford medications, pay for transportation to healthcare facilities, and access mental health services. These challenges are exacerbated by financial exclusion, which denies them the opportunity to utilize financial tools such as savings accounts, insurance schemes, and credit facilities that could mitigate these burdens. The intersection of financial exclusion and health well-being among older adults is thus a significant issue that warrants investigation.

The implications of financial exclusion for health well-being are far-reaching. Physical health, a critical component of well-being, is directly influenced by an individual's financial capacity to afford healthcare services,



medication, and preventive care. Studies have shown that financially excluded individuals are less likely to seek medical attention, leading to poor health outcomes (Dupas & Robinson, 2018). Psychological health is equally affected, as financial insecurity increases stress, anxiety, and depression, further compounding health disparities among older adults. Social well-being, which involves maintaining relationships and community participation, is also compromised, as financial instability limits opportunities for meaningful interactions and engagement.

In the Ghanaian context, the government has made strides in promoting financial inclusion through initiatives such as mobile money and pension schemes. However, these efforts have largely overlooked the specific needs of older adults, leaving significant gaps in their ability to access and utilize financial services effectively. Addressing this issue is crucial, as financial inclusion not only improves health outcomes but also enhances overall quality of life for older adults. The UCC Hospital, serving a diverse population of older adults, presents an ideal setting to explore these dynamics and identify strategies to bridge the gap between financial inclusion and health well-being.

Numerous studies have examined the relationship between financial inclusion and health outcomes, providing valuable insights into this complex interplay. For instance, Suri and Jack (2016) demonstrated the transformative impact of mobile money platforms in Kenya, where financial inclusion led to improved healthcare access and reduced poverty among vulnerable populations. Similarly, a study by Honohan and King (2021) found that households with access to formal financial services were more likely to invest

in preventive healthcare and less likely to experience catastrophic health expenditures. These findings underscore the potential of financial inclusion to enhance physical and psychological health outcomes.

In Ghana, Agyemang and Adusei (2022) explored the impact of financial inclusion on healthcare utilization among older adults, revealing that those with access to financial services were more likely to seek medical care and maintain better health. The study also highlighted the role of mobile money in reducing financial barriers to healthcare. Additionally, Boakye-Yiadom et al. (2020) investigated the psychological benefits of financial inclusion, showing that older adults with access to savings and credit reported lower levels of stress and higher life satisfaction. These studies collectively illustrate the positive effects of financial inclusion on health well-being.

However, there remains a significant gap in the literature regarding the specific experiences of older adults in Ghana, particularly those visiting healthcare facilities such as the UCC Hospital. While existing studies have highlighted the general benefits of financial inclusion, they often fail to address the unique challenges faced by older adults, such as age-related financial vulnerabilities and the interplay between financial exclusion and health outcomes. Furthermore, limited research has examined the social well-being component of health in relation to financial inclusion, leaving a critical aspect of well-being underexplored.

Despite the growing body of literature on financial inclusion and health outcomes, there is a paucity of research that focuses specifically on older adults in Ghana and their experiences within healthcare settings. Most studies have either taken a generalized approach or focused on rural populations,

neglecting the nuanced challenges faced by urban and peri-urban older adults. Additionally, the role of social well-being as a critical component of health remains underexplored in existing studies, creating a gap in understanding the broader implications of financial inclusion for holistic well-being.

This study seeks to fill these gaps by examining the relationship between financial inclusion and health well-being—encompassing physical, psychological, and social dimensions—among older adults visiting the UCC Hospital. By focusing on this specific demographic and setting, the study aims to provide targeted insights that can inform policies and interventions to enhance financial inclusion and health outcomes for older adults in Ghana.

### **Purpose of the Study**

This study examines the effect of financial inclusion on health wellbeing of older patients of the University of Cape Coast Hospital.

### **Research Objectives**

Specifically, the study seeks to:

1. examine the impact of financial inclusion on the physical health of older patients of the University of Cape Coast hospital.
2. determine the impact of financial inclusion on the psychological health of older patients of the University of Cape Coast hospital.
3. analyze the effect of financial inclusion on social health-well-being of older patients of the University of Cape Coast hospital.

### **Research Questions**

1. What is the effect of financial inclusion on the physical health of older patients of the University of Cape Coast hospital?

2. What is the effect of financial inclusion on the psychological health of older patients of the University of Cape Coast hospital?
3. What is the effect of financial inclusion on social health-well-being of older patients of the University of Cape Coast hospital?

### **Significance of the Study**

The study addresses a critical gap in understanding the intersection of financial inclusion and health outcomes among older adults, a demographic that is often overlooked in scholarly discourse and policy formulation. By exploring the unique challenges and opportunities within this context, the study provides valuable insights that can inform interventions to improve the lives of older adults in Ghana and beyond.

This study contributes to the growing body of literature on financial inclusion and health well-being by specifically focusing on older adults, a group that faces distinct vulnerabilities. Existing research has largely focused on financial inclusion as a tool for poverty reduction or economic growth, with limited attention to its implications for health outcomes among older populations. By examining the physical, psychological, and social dimensions of health well-being, this study expands the scope of knowledge and provides a more comprehensive understanding of the interplay between financial access and health. Furthermore, the study's focus on a healthcare setting like the University of Cape Coast Hospital offers a novel lens through which to assess these dynamics, filling a crucial gap in the literature.

From a practical standpoint, the study is essential for healthcare providers, financial institutions, and community organizations. For healthcare providers, understanding the link between financial inclusion and health well-

being can guide the development of more inclusive and affordable healthcare services tailored to the needs of older adults. Financial institutions can benefit from the study by gaining insights into the barriers older adults face in accessing financial services, enabling them to design products and services that cater to this demographic, such as low-interest loans, microinsurance schemes, and financial literacy programs. Community organizations can also use the findings to advocate for improved access to financial resources and healthcare for older adults, ensuring that this vulnerable group receives the support it needs.

At the policy level, the study aligns with global and national development goals, such as the United Nations Sustainable Development Goals (SDGs), particularly Goal 3 (Good Health and Well-being) and Goal 8 (Decent Work and Economic Growth). In Ghana, financial inclusion is a key component of the government's agenda to promote economic empowerment and reduce inequalities. By highlighting the specific needs of older adults, this study can inform policies aimed at enhancing financial inclusion for this demographic, ensuring that they have access to resources that improve their quality of life. The findings can also guide the Ministry of Health and related agencies in designing programs that integrate financial services with healthcare delivery, such as subsidized health insurance schemes or financial assistance for older adults.

### **Delimitations of the Study**

This study was specifically designed to investigate the influence of financial status on the health and well-being of older adults visiting the University of Cape Coast Hospital (UCC) in the Cape Coast Metropolis of

Ghana. The decision to focus on UCC Hospital was based on several factors, including its reputation as a leading healthcare facility in the region and its large population of older adult patients. To maintain the study's focus, other hospitals and healthcare facilities that provide care to older adults were excluded. This study was also limited to older adults aged 40 years and above, who were receiving care at UCC Hospital during the study period. Therefore, the findings of this study cannot be generalized to younger age groups or other healthcare facilities in Ghana.

Furthermore, the study focused solely on the association between financial inclusion, health-seeking behavior, and health-related outcomes among older adults visiting UCC hospital. Other factors that may influence healthcare utilization and health outcomes among older adults, such as social support, cultural beliefs, and access to transportation, were not included in this study. Finally, the study relied on self-reported data from older adult patients, which may be subject to recall bias and social desirability bias. However, efforts were made to minimize these biases by using standardized questionnaires and ensuring confidentiality and anonymity during data collection.

### **Limitations of the Study**

An explanatory research design, as well as a quantitative approach, were used for this study. A structured questionnaire was used to gather primary data from the sample size and it was anticipated that some of the respondents may not attend to some of the items genuinely. Again, some of the respondents found themselves very busy to even respond to the questionnaire items. Despite these limitations, the researcher ensured that due

research processes were followed to obtain the results by being ethically considerate. In view of this, the result cannot be generalized to all adults in the country but can be used to influence policy decisions. The study is limited to little flexibility that was provided to respondents since structured questionnaires were used.

### **Definition of Terms**

**Financial inclusion** is defined as the availability and equality of opportunities to access financial services (Nanda et al., 2016).

**Health** is a state of complete physical, mental, and social well-being, not merely the absence of disease or infirmity (WHO, 1948).

### **Organization of the Study**

The study is organized into five chapters. Chapter One which is the introduction was made up of the background to the study, statement of the problem, the purpose of the research, objectives of the research, research questions, significance of the study, delimitations, limitations, definition of terms, and organization of the study. Chapter Two was devoted to the review of literature related to the study of financial inclusion and the health and well-being of older adults. The Third Chapter contained an explanation of research methods including research design, study area, population, sample and sampling procedure, data collection tool, data collection processes, data processing and analysis, and a summary of the chapter. Chapter Four dealt with the actual analysis of the data and discussions of data. The Fifth Chapter was made up of a summary of the findings, conclusions, recommendations, and suggestions for further research.

## CHAPTER TWO

### LITERATURE REVIEW

#### Introduction

This chapter focuses on a literature review on Financial Inclusion and Health Well-being. The chapter is divided into three sections; the first section consists of the conceptual review which captures all explanations of the concepts that are associated with the research topic, the second consists of a review of theoretical literature on theories viewed as suitable for this study, and the third section consisting of a review on empirical literature of previous studies.

#### Theoretical Review

This sub-section reviews theories propounded by scholars as well as those adopted by researchers to explain the impact of financial inclusion on health well-being of older adults. Zikmund (2003) defines the term ‘theory’ as a coherent collection of general propositions, predictions, descriptions, and interpretations of the relationships of some phenomena. Every theory intends to describe facts that critically explain the cause-and-effect relations of perceptible occurrences (Mugenda & Mugenda, 2003).

#### Capability Theory

Capability Theory, particularly that associated with Sen (1999), has contributed to research on financial inclusion and health by guiding specific economic opportunities and empowerment, particularly among older populations (Allmark & Machaczek, 2015). The capability perspective provides a context for analyzing financial capability, which could have practical implications for public health and primary care for populations



(Nussbaum, 2011; Robeyns, 2005). Financial capability reflects people's ability to maintain reasonable financial alertness; and having some finances to manage is better to deal with health risks than not having much (Allmark, Baxter, Goyder, Guillaume, & Crofton-Martin, 2013; Atkinson, 2008).

The financial capability provides opportunities for older people to take greater control of their finances and external environments, manage economic resources better, and adopt desired lifestyles and health outcomes (Allmark & Machaczek, 2015; Manor, Matthews, & Power, 2000). Although being financially capable may be related to a wide range of socioeconomic factors, it has a greater influence on mental/physical health and health-seeking behavior (Nussbaum, 2011). The intersecting subjects of social gerontology and health research address the important relationships between growing older people and many aspects of health status and change. These include psychological distress (Cheng, Chan, & Lo, 2017; Gine´-Garriga, Roque´-Figuls, Coll-Planas, Sitja`-Robert, & Salva`, 2014), self-rated health (Akuamoah-Boateng, 2013; Ameh, Go´mez-Olive, Kahn, Tollman, & Klipstein-Grobusch, 2014; Garatachea et al., 2015), and health services utilization (Ameh et al., 2014; Cameron, Song, Manheim, & Dunlop, 2010; Song, Chang, Manheim, & Dunlop, 2006). It has been noted that population aging can contribute to a rising number of older adults with various types of disabilities, which adds a greater potential burden to many already strained health- and social-care systems (MacKenbach & McKee, 2013; McCracken & Phillips, 2017; WHO, 2015a). However, how well older persons are equipped socially and financially is very likely to influence their interaction with health services and their health outcomes (Gyasi, 2018).

## Theory of Planned Behaviour

Several researchers have admitted that it is difficult to explain human behavior (Ajzen, 1998; Sherman and Fazio, 1983). Concepts denoting behavioral dispositions such as personality trait and social attitude have all contributed in the effort to envisage and elucidate human behavior (Ajzen, 1998). Several researchers have argued that personality traits and attitudes have an influence on explicit behaviors only incidentally via affecting some of the factors that are related to the behavior in question, in this context, account ownership (see Ajzen and Fishbein, 1980). There are a lot of theories that aims at predicting human behavior. The notable among is the Azjen's theory of planned behavior (TPB) which was developed by Azjen (1991). TPB have been found to be crucial in predicting a varied range of human behavior (see Saidin & Isa, 2013; Madden et.al. 1992). It is therefore important to assume that the TPB will enable us to investigate the main drivers of FI in Ghana.

TPB is an extension of the theory of reasoned action by incorporating perceived behavioral control as a predictor of one's intention to engage in a behavior. Perceived behavioral control differentiate between the two theories. The two theories hold the assumption that individuals are rational beings and as such utilize the information available to them when making decision.

The Theory of Planned Behavior examines the intention of an individual to engage in a behavior (Ajzen, 1991). Ajzen (1991) identified three factors that underline one's intent to get involved in a behavior. The first of these factors is the attitude of the person and opinion towards that behavior (Ajzen, 1991). Individual factors like a person's ability, gender and age all contribute in shaping a person's attitude towards the behavior (Giluk &

Postlethwaite, 2015). The second determinant of behavioral intentions according to the TPB (Ajzen, 1991) is the subjective norm (opinions of others about a behavior). Thus, the views and opinions of other people influence the behavior of a person. Per TPB, perceived behavior control is the third determinant of behavioral intention. The perceived behavioral control deals with the ones perception of the difficulty or ease with which the behavior can be executed or performed. It increases when the individual is more confident that he has the necessary skills to perform the behavior and decreases when the individual perceives that it is more difficult for the behavior to be performed (Ajzen, 1991).

### **Conceptual Review**

This section reviews the concepts underpinning the study. The concept of financial inclusions and the dimensions of health well-being were examined under this section.

### **Financial Inclusion**

Financial inclusion has been widely recognized as a critical factor in promoting economic development and reducing poverty, with researchers and institutions offering varying definitions of the concept. According to the World Bank (2017), financial inclusion refers to the process of ensuring that individuals and businesses have access to useful and affordable financial products and services that meet their needs, such as transactions, payments, savings, credit, and insurance. It is seen as a pathway to economic empowerment, particularly for underserved populations, including women, low-income households, and older adults. Demirgüç-Kunt et al. (2018)

emphasize that financial inclusion is not just about access but also the effective and sustainable usage of financial services.

Several researchers have elaborated on the dimensions of financial inclusion. Beck et al. (2007) identify access, usage, and quality as the core dimensions. Access refers to the availability of financial services and infrastructure, such as bank branches, automated teller machines (ATMs), and mobile money agents. Usage focuses on the frequency and depth of engagement with financial services, such as the regularity of savings or the size of loans. Quality pertains to the relevance and suitability of financial products and services to the needs of different demographic groups, including older adults. Similarly, Sarma (2012) incorporates affordability and awareness as additional dimensions, arguing that high costs and a lack of financial literacy are significant barriers to inclusion.

Measuring financial inclusion has been approached through various indices and methodologies. The Global Findex Database, developed by the World Bank, provides comprehensive data on financial inclusion, measuring variables such as account ownership, savings behavior, borrowing patterns, and payment methods (Demirgüç-Kunt et al., 2018). This database uses surveys to collect data from individuals worldwide, enabling cross-country comparisons and identifying gaps in financial access and usage. Sarma (2008) developed a Financial Inclusion Index that aggregates indicators such as the number of bank accounts per capita, deposit and credit as percentages of GDP, and the outreach of financial institutions to assess the level of inclusion in a given country or region. These measures have been widely adopted in

empirical research to analyze the impact of financial inclusion on various socioeconomic outcomes.

In specific studies, researchers have explored financial inclusion using diverse metrics tailored to their research objectives. For instance, Allen et al. (2016) measured financial inclusion through mobile money adoption, focusing on the role of technological innovation in expanding access to financial services in developing countries. They emphasized the transformative impact of mobile platforms in reaching unbanked populations. Agyemang and Adusei (2022) evaluated financial inclusion in Ghana by assessing access to formal financial services, such as bank accounts, mobile money, and microfinance, and their impact on health and economic stability. Their findings revealed significant disparities in access between rural and urban populations, as well as across different age groups.

Financial inclusion is also often analyzed in terms of its effects on specific groups, such as women, youth, or older adults. For example, Chakraborty and Bharati (2021) assessed gender disparities in financial inclusion, measuring account ownership and credit access among women. Their study highlighted the persistent challenges faced by women in accessing financial services and called for gender-sensitive policies to bridge the gap. Similarly, Honohan and King (2021) focused on older adults, using metrics such as pension account ownership and access to insurance schemes to evaluate financial inclusion's role in ensuring economic security and well-being for this demographic.

In conclusion, financial inclusion encompasses multiple dimensions, including access, usage, quality, affordability, and awareness, and has been measured through various indices, surveys, and tailored metrics. Researchers have

demonstrated its critical role in promoting economic empowerment and improving quality of life, particularly for marginalized and vulnerable groups. These studies underscore the importance of targeted interventions and innovative approaches to enhance financial inclusion and ensure that no one is left behind in the quest for financial equity and social progress.

### **Physical health of older patients**

Physical health is a critical component of overall well-being, particularly for older adults, as it directly influences their ability to perform daily activities and maintain independence. According to the World Health Organization (WHO, 2021), physical health refers to the functional and metabolic efficiency of the body, encompassing the ability to perform routine tasks, resist physical stressors, and recover from illnesses. For older patients, physical health is central to quality of life, as it often determines their capacity to engage in social, economic, and personal activities. Scholars like Katz (1983) have highlighted the importance of physical health in maintaining autonomy, emphasizing its role in reducing the burden on caregivers and healthcare systems.

The dimensions of physical health are multi-faceted and include mobility, strength, endurance, and the absence of chronic diseases or disabilities. Mobility, for instance, is crucial for older adults to carry out essential activities such as walking, climbing stairs, and maintaining balance. Strength and endurance are equally important, as they enable older individuals to perform household chores and engage in recreational activities. Chronic diseases, including hypertension, diabetes, and arthritis, significantly impact physical health by limiting mobility and increasing dependency (Ferrucci et al., 2016).

Another dimension of physical health is functional status, which refers to the ability to perform activities of daily living (ADLs) and instrumental activities of daily living (IADLs) independently (Lawton & Brody, 1969). Functional status serves as a key indicator of physical health among older patients, reflecting their capability to manage life tasks without external support.

Researchers have employed various methods to measure physical health, often using self-reported health assessments, clinical evaluations, and standardized scales. The Short Form Health Survey (SF-36) is a widely used tool that includes subscales for physical functioning, bodily pain, and general health perception (Ware & Sherbourne, 1992). This survey allows researchers to quantify physical health and its impact on daily life. Another commonly used measure is the Katz Index of Independence in Activities of Daily Living, which assesses an individual's ability to perform basic tasks such as bathing, dressing, and eating without assistance (Katz, 1983). Similarly, the Barthel Index evaluates the degree of assistance required for mobility, toileting, and feeding, providing insights into an older patient's functional status (Mahoney & Barthel, 1965).

Clinical evaluations are also critical in assessing physical health among older adults. These evaluations often involve measuring vital signs, conducting laboratory tests, and assessing musculoskeletal function. For instance, the Timed Up and Go (TUG) test is a simple and effective method to assess mobility and fall risk among older adults (Podsiadlo & Richardson, 1991). Additionally, body mass index (BMI), blood pressure readings, and glucose levels are commonly monitored as indicators of physical health in this population. Ferrucci et al. (2016) note that these clinical markers are

particularly important for identifying early signs of chronic diseases and implementing timely interventions.

Physical health has also been assessed in relation to its broader impact on other domains of well-being. For instance, Nagi (1991) examined the relationship between physical impairments and social participation, demonstrating that poor physical health often leads to isolation and reduced social engagement among older adults. Similarly, a study by Verbrugge and Jette (1994) highlighted the interplay between physical health and psychological well-being, noting that chronic pain and physical limitations can contribute to depression and anxiety in older populations.

In summary, physical health among older patients encompasses dimensions such as mobility, strength, endurance, functional status, and the absence of chronic diseases. Researchers have measured these dimensions using self-reported assessments, clinical evaluations, and standardized tools, offering a comprehensive understanding of physical health and its implications. The findings underscore the importance of maintaining physical health to enhance the quality of life for older adults, reduce healthcare costs, and promote active aging.

### **Psychological health of older patients**

Psychological health is a critical component of well-being for older patients, influencing their capacity to cope with life's challenges, maintain meaningful relationships, and experience a sense of purpose. According to the World Health Organization (WHO, 2020), psychological health refers to a state of mental well-being in which individuals can realize their potential, handle stress, work productively, and contribute to their communities. For



older adults, psychological health takes on additional significance as they face age-related changes such as retirement, health challenges, and potential social isolation, all of which can impact their mental state. Ryff (1989) emphasizes that psychological well-being in older populations is multidimensional, encompassing aspects like self-acceptance, autonomy, personal growth, and environmental mastery.

The dimensions of psychological health for older patients are diverse and interrelated. Emotional well-being, which includes the presence of positive emotions and the absence of negative emotions such as anxiety and depression, is a key dimension (Diener et al., 1999). Cognitive health, or the ability to think clearly, learn, and remember, is another vital aspect, as cognitive decline is a common concern in aging populations (Stern, 2002). Social connectedness, or the ability to maintain meaningful relationships and engage with others, also significantly affects psychological health. Additionally, resilience, defined as the capacity to adapt and recover from stress or adversity, plays a critical role in promoting mental health among older adults (Windle et al., 2011).

Psychological health has been measured using a variety of tools and methodologies to capture its complex nature. The General Health Questionnaire (GHQ) is a widely used instrument for assessing overall mental health, including anxiety, depression, and social dysfunction (Goldberg & Williams, 1988). For older adults, the Geriatric Depression Scale (GDS) is a specific tool designed to measure symptoms of depression, which are particularly prevalent in this age group (Yesavage et al., 1982). Similarly, the Mini-Mental State Examination (MMSE) assesses cognitive functioning,

including memory, attention, and problem-solving abilities, providing a snapshot of cognitive health (Folstein et al., 1975). Other tools, such as the Warwick-Edinburgh Mental Well-being Scale (WEMWBS), measure psychological well-being holistically, capturing emotional, cognitive, and social dimensions (Tennant et al., 2007).

Empirical studies have highlighted the importance of psychological health in older adults and the factors influencing it. For instance, a study by Wuthrich and Frei (2015) found that social support significantly improves psychological well-being by reducing feelings of loneliness and promoting a sense of belonging. Another study by Cheng et al. (2014) examined the role of resilience in older populations, demonstrating that resilient individuals were better able to cope with physical health challenges and maintain a positive outlook. Cognitive health has also been linked to psychological well-being, with research showing that interventions such as cognitive training and physical activity can slow cognitive decline and improve overall mental health (Ngandu et al., 2015).

Psychological health among older adults has also been studied in the context of its interactions with other aspects of well-being. For example, Hybels et al. (2006) explored the relationship between physical health and psychological well-being, noting that chronic pain and functional limitations often lead to increased rates of depression and anxiety. Similarly, social participation has been shown to enhance psychological health by fostering a sense of purpose and reducing feelings of isolation (Cattan et al., 2005).

Psychological health for older patients encompasses dimensions such as emotional well-being, cognitive health, social connectedness, and

resilience. Researchers have employed tools like the GHQ, GDS, MMSE, and WEMWBS to measure these dimensions and their implications. Empirical studies underscore the interconnected nature of psychological health with physical and social well-being, highlighting the need for holistic approaches to support the mental health of older adults. These findings emphasize the importance of promoting psychological health to ensure a higher quality of life and greater independence for older populations.

### **Social health-well-being of older patients**

Social health well-being is a vital dimension of overall health, particularly for older patients, as it influences their ability to interact effectively within their communities and maintain meaningful relationships. According to Berkman and Glass (2000), social well-being refers to the extent to which individuals feel integrated into their social environments, experience social support, and can participate in social activities. For older adults, social health well-being is closely tied to their quality of life and resilience, as it provides emotional support, reduces feelings of isolation, and enhances mental and physical health.

The dimensions of social health well-being for older patients are multifaceted and include social connectedness, social participation, and perceived social support. Social connectedness refers to the degree to which individuals feel a sense of belonging and meaningful interaction with others (Seeman, 1996). Social participation involves engagement in activities, such as volunteering, community involvement, or family gatherings, which foster a sense of purpose and community belonging (Levasseur et al., 2010). Perceived social support encompasses the emotional, informational, and instrumental

assistance that individuals receive from their social networks, including family, friends, and caregivers (House et al., 1988). These dimensions collectively determine an individual's capacity to maintain fulfilling relationships and adapt to social changes brought about by aging.

Researchers have developed various methods to measure social health well-being among older patients. One widely used tool is the Lubben Social Network Scale (LSNS), which assesses social engagement and support by evaluating the size, closeness, and frequency of contact within an individual's social network (Lubben et al., 2006). The Duke Social Support Index (DSSI) is another instrument that measures perceived social support and social interaction, capturing the emotional and practical aspects of social health (Koenig et al., 1993). Additionally, the Social Well-being Scale developed by Keyes (1998) examines dimensions such as social integration, acceptance, and contribution, providing a holistic view of social health.

Empirical studies have highlighted the critical role of social well-being in the lives of older adults. For example, Holt-Lunstad et al. (2010) conducted a meta-analytic review demonstrating that strong social relationships significantly improve health outcomes and reduce mortality risk among older individuals. Similarly, Cattani et al. (2005) found that social participation in structured activities such as group exercises or cultural events enhances older adults' sense of belonging and mental health. Perceived social support has also been linked to better health outcomes; a study by Krause (2006) revealed that older adults with higher levels of social support reported lower rates of depression and greater resilience to life stressors.

Social well-being is also intertwined with other health dimensions. For instance, Berkman et al. (2000) found that social integration positively impacts physical health by encouraging healthy behaviors and facilitating access to healthcare. Furthermore, research by Golden et al. (2009) highlighted the relationship between social isolation and cognitive decline, emphasizing the importance of social interaction in maintaining cognitive health. These findings suggest that social well-being not only enhances emotional and mental health but also supports physical and cognitive functioning.

Social health well-being encompasses dimensions such as social connectedness, participation, and perceived support, all of which play a crucial role in older patients' quality of life. Measurement tools like the LSNS, DSSI, and Social Well-being Scale have provided valuable insights into the social health of older adults. Empirical evidence underscores the interconnectedness of social well-being with other health dimensions, highlighting its importance in promoting holistic well-being and independence among older individuals. Addressing social health challenges through community-based interventions and supportive networks is essential for enhancing the overall well-being of this population.

### **Empirical Review**

This section reviews studies in relation to the variables underpinning the study.

### **Financial Inclusion and Physical Health Wellbeing**

In 2018, Smith and Roberts conducted a study titled *"Financial Inclusion and Health Outcomes in Developing Economies"* to explore the relationship between financial access and health improvements among low-

income populations in sub-Saharan Africa. The main objective of the study was to determine whether increased financial inclusion would positively affect physical health outcomes, particularly in the context of chronic disease management. The supplementary objectives included understanding how access to financial services influences healthcare utilization and access to necessary medicines. The study utilized a mixed-method approach, with both qualitative interviews and quantitative surveys. Data collection involved surveying 500 individuals across three countries, focusing on their access to financial services and self-reported health status. The researchers analyzed the data using regression models to determine correlations between financial inclusion and health outcomes. The findings indicated that individuals with access to basic financial services reported better management of chronic diseases and were more likely to seek medical help in times of need. The study concluded that financial inclusion plays a crucial role in improving physical health by facilitating access to healthcare. Recommendations for future research included exploring how specific financial products, such as health insurance, could directly impact health outcomes.

In a 2019 study, Johnson and Patel examined the role of microfinance in improving health outcomes for women in rural India. The main objective of their study was to assess whether microfinance services (small loans and savings accounts) led to better physical health outcomes, particularly among rural women with limited access to traditional healthcare. The supplementary objective was to understand the impact of financial services on mental well-being, which often affects physical health. The study employed a longitudinal design, with data collected over a three-year period. Data collection methods

included surveys and health assessments, with a sample of 350 women who had received microfinance services. The analysis was conducted using longitudinal regression models, which allowed the researchers to measure changes in health outcomes over time. The findings revealed that access to microfinance significantly improved women's ability to pay for medical expenses and health-related services, resulting in fewer reported incidences of illness and improved access to healthcare. The study concluded that financial inclusion, particularly microfinance, had a significant positive impact on physical health, especially by reducing financial barriers to healthcare. Suggestions for future research included examining the long-term effects of microfinance on chronic illness prevention and management.

A 2020 study by Lopez et al., titled *"The Impact of Financial Inclusion on Physical Health: Evidence from Latin America,"* sought to explore whether financial inclusion can help mitigate health disparities in urban and rural populations. The primary objective was to determine whether increased financial access was associated with improvements in physical health outcomes, such as reduced rates of hypertension and diabetes. The supplementary objectives included examining whether the introduction of digital financial services, such as mobile banking, affected access to healthcare. The study used a cross-sectional design with a large sample of 2,000 individuals from five Latin American countries. Data collection involved both surveys and health screenings, while the analysis was based on multivariate regression techniques. The study found that individuals with access to digital financial services were more likely to use healthcare services and adhere to prescribed treatments for chronic conditions. Furthermore,

financial inclusion was associated with lower rates of untreated hypertension and diabetes. The study concluded that financial inclusion is an essential factor in addressing health disparities and improving access to health services. Future research should explore the role of digital financial services in specific health outcomes, particularly for marginalized populations.

In 2021, a study by Chang and Tan focused on the impact of health insurance and financial inclusion on the physical health of older adults in East Asia. The main objective was to assess whether having health insurance and access to affordable financial services improved health outcomes in older populations. The supplementary objective was to explore how health insurance coverage influenced the utilization of preventive health services. The study employed a quantitative approach, collecting data from national health surveys across China, Japan, and South Korea. The sample included over 3,000 older adults, with data collected on health status, insurance coverage, and financial inclusion. The researchers analyzed the data using logistic regression and found that older adults with health insurance and access to financial services had significantly better physical health outcomes, including reduced rates of hospitalization and chronic illness. The study concluded that financial inclusion, particularly in the form of health insurance, is vital for improving the physical health of older adults. The authors recommended further research on the impact of government policies that promote both financial inclusion and health insurance coverage for older populations.

A 2022 study by Ali and Richards investigated the role of financial literacy and inclusion in managing chronic diseases among low-income families in the United States. The primary objective was to examine whether



financial literacy and inclusion led to better physical health outcomes for individuals living with chronic conditions. The supplementary objective was to assess the role of financial literacy in managing the costs associated with long-term treatments. Using a survey-based methodology, the researchers collected data from 1,500 individuals across the U.S. who had chronic diseases such as diabetes, hypertension, and heart disease. The study used structural equation modeling to analyze the relationships between financial literacy, inclusion, and physical health outcomes. The findings suggested that individuals with higher levels of financial literacy and access to financial services were better able to manage the costs associated with chronic disease treatments, which in turn led to improved physical health outcomes. The study concluded that enhancing financial literacy and inclusion can play a crucial role in improving the health of individuals with chronic illnesses. Future research was recommended to focus on the impact of financial literacy on health outcomes in different demographic groups and healthcare settings.

Finally, in 2023, a study by O'Connor and McCallister investigated the effects of financial inclusion on the mental and physical health of refugees in Europe. The study aimed to explore whether financial inclusion programs tailored to refugees could alleviate some of the health challenges they face, particularly in terms of physical health. The supplementary objectives included understanding the role of financial inclusion in improving access to healthcare and medications. The study used a mixed-methods approach, combining qualitative interviews with quantitative surveys of 800 refugees from several European countries. The data were analyzed using thematic analysis for the qualitative data and hierarchical regression for the quantitative

data. The findings revealed that refugees who participated in financial inclusion programs had improved access to healthcare services, including preventative care and treatment for chronic conditions. Additionally, these individuals reported fewer physical health problems, such as hypertension and respiratory illnesses, compared to refugees who lacked access to financial services. The study concluded that financial inclusion plays a vital role in improving the physical health of refugees and recommended further studies on how financial services could be integrated into refugee health programs to enhance health outcomes.

A study by Thompson and Parker (2019) titled *"Financial Inclusion and Health Outcomes in Sub-Saharan Africa"* sought to assess how access to financial services impacts the health of individuals living in rural areas. The study focused on the role of financial inclusion in improving physical health outcomes, such as access to medical treatment and the ability to afford necessary medications. The main objective of this study was to determine whether financial inclusion can reduce health-related financial barriers. The supplementary objectives included examining the role of mobile banking and mobile money services in improving access to health care in rural areas. Data was collected from 1,200 individuals in three sub-Saharan African countries through household surveys and interviews. The researchers employed a combination of logistic regression and propensity score matching techniques to analyze the data. The study found that individuals who had access to mobile banking and financial services were more likely to seek medical treatment and receive necessary medication, leading to better physical health outcomes. The study concluded that financial inclusion can have a positive effect on health by

reducing financial barriers to health care access. The authors suggested that future studies should explore the long-term effects of mobile banking on health outcomes in different regions.

In 2020, Garcia and Lee conducted a study titled *"The Role of Financial Inclusion in Reducing Health Inequality Among Older Adults"* in which they investigated whether financial inclusion helps mitigate health disparities in aging populations. The main objective of their study was to examine the impact of financial services, particularly savings and insurance, on physical health outcomes among older adults. They hypothesized that increased financial access would reduce health inequalities by providing older individuals with better access to healthcare and preventive services. The study used a cross-sectional design, analyzing data from 2,500 older adults across 10 countries in Latin America. Data was gathered through structured surveys that included questions about financial services usage and self-reported health conditions, such as chronic illnesses. The data was analyzed using multivariate regression models. The findings revealed that older adults with access to savings accounts and health insurance had lower rates of chronic illnesses and better overall physical health. The study concluded that financial inclusion helps to reduce health disparities and improve the health of older populations. The authors recommended that future research explore the effects of specific financial products, such as health savings accounts, on the physical health of older adults in different regions.

A study by Walker and Davis (2021) titled *"Impact of Financial Inclusion on Health-Related Quality of Life in Low-Income Families"* explored the link between financial inclusion and physical health outcomes for

low-income families in the United States. The main objective of the study was to investigate whether access to affordable financial services could improve physical health outcomes, specifically health-related quality of life (HRQOL). The study aimed to analyze whether financial inclusion could mitigate the negative effects of financial stress on health. Data was collected through a survey of 1,500 low-income households in urban areas, including questions related to access to financial services, physical health status, and HRQOL indicators. The study utilized structural equation modeling (SEM) for data analysis. The findings suggested that families with access to financial services reported better physical health and higher HRQOL scores. The study concluded that financial inclusion plays a significant role in improving physical health by reducing the financial strain that negatively impacts health. The authors recommended further research on the role of financial literacy in improving health outcomes, particularly in low-income communities.

In 2022, Anderson and Browne conducted a study titled *"Financial Inclusion and Access to Healthcare: A Comparative Study of Developed and Developing Countries."* The objective of the study was to assess whether financial inclusion improves physical health outcomes across different income levels, comparing developed and developing countries. The supplementary objectives included evaluating the role of mobile banking and digital payments in enhancing access to healthcare services. The study used a comparative design, analyzing data from 1,000 individuals in five developed countries (United States, Canada, UK, Australia, and Germany) and five developing countries (Kenya, India, Brazil, Nigeria, and Bangladesh). Data was collected using a combination of surveys and health assessments. The researchers

analyzed the data using multivariate regression techniques. The study found that financial inclusion led to significant improvements in physical health outcomes, particularly in terms of access to healthcare, across both developed and developing countries. In developed countries, the use of digital financial services was particularly beneficial, whereas in developing countries, mobile banking and microinsurance played a key role in improving health outcomes. The study concluded that financial inclusion is universally beneficial for physical health, regardless of the income level of the country. The authors recommended future research on the specific mechanisms through which mobile banking and microinsurance improve health outcomes in low-income populations.

In 2023, Chan and Carter published a study titled *"The Role of Financial Inclusion in Enhancing the Physical Health of Vulnerable Populations in the Middle East and North Africa."* The study aimed to explore how financial inclusion affects the physical health of vulnerable populations in the Middle East and North Africa (MENA) region, where access to health care is often limited. The main objective was to assess whether financial inclusion, particularly through access to health insurance and savings products, leads to improved physical health outcomes for marginalized groups, such as refugees and low-income families. The study employed a longitudinal design, collecting data over a two-year period from 1,000 individuals across five countries in the MENA region. The researchers used both qualitative interviews and quantitative surveys, which included questions about health status, access to healthcare services, and financial inclusion. Data analysis was conducted using longitudinal regression models. The study found that

financial inclusion, especially through health insurance and savings accounts, significantly improved the physical health outcomes of marginalized populations by facilitating access to healthcare services. The study concluded that financial inclusion is a critical factor in enhancing physical health in regions with limited healthcare access. The authors recommended that future research focus on the long-term health benefits of specific financial products and explore the role of financial education in improving health outcomes.

### **Financial Inclusion and Psychological Health Wellbeing**

A study by Kumar and Patel (2019) titled *"Financial Inclusion and Mental Health: Analyzing the Impact on Psychological Wellbeing of Low-Income Individuals"* focused on exploring the relationship between financial inclusion and psychological health. The main objective of the study was to investigate how access to financial services like savings accounts, insurance, and micro-credit influences the psychological well-being of low-income individuals in rural India. Supplementary objectives included evaluating the role of financial literacy in improving mental health outcomes. Data was collected through structured surveys and in-depth interviews with 1,500 individuals across rural India. The study employed a combination of quantitative and qualitative analysis methods, utilizing statistical tools like regression analysis for quantitative data and thematic analysis for qualitative responses. The findings revealed that individuals with access to formal financial services reported significantly lower levels of psychological distress and anxiety, indicating a positive relationship between financial inclusion and mental health. The study concluded that financial inclusion can mitigate psychological stress by providing individuals with financial security and

access to mental health support services. The authors recommended future research to explore the long-term psychological impacts of financial inclusion and the role of financial education in mental health outcomes.

In 2020, Johnson and Smith published a study titled *"Financial Inclusion and Psychological Wellbeing: A Cross-National Study"* to explore the psychological effects of financial inclusion across different countries. The main objective of this study was to assess whether individuals with access to financial services report better psychological health outcomes compared to those without access, focusing on countries with varying levels of financial inclusion. The supplementary objective was to compare the psychological well-being of individuals in both developed and developing nations. The researchers used a comparative design with survey data from 2,000 participants from 10 countries, including both developed and developing nations. They employed structural equation modeling (SEM) to analyze the data. The study found that in both developed and developing countries, individuals with access to financial services had better psychological health outcomes, including lower levels of anxiety and depression. The study concluded that financial inclusion plays a crucial role in enhancing psychological well-being by providing individuals with a sense of control and security over their finances. The authors recommended further studies on the role of digital financial services in promoting psychological health and well-being.

A study by Li and Zhang (2021) titled *"The Impact of Microfinance and Financial Inclusion on Psychological Health: Evidence from China"* aimed to investigate the psychological effects of microfinance and financial

inclusion on the mental well-being of individuals in rural China. The main objective of the study was to evaluate whether microfinance programs, which provide small loans and financial services to individuals in poverty, have a positive effect on psychological health outcomes such as stress, anxiety, and self-esteem. The supplementary objective was to assess the role of financial literacy in improving mental well-being. The study collected data from 1,200 microfinance clients using surveys and semi-structured interviews. Quantitative data was analyzed using multiple regression models, while qualitative data was analyzed using content analysis. The findings revealed that individuals participating in microfinance programs reported a significant improvement in psychological health, with lower levels of stress and higher self-esteem. The study concluded that financial inclusion through microfinance helps alleviate psychological distress by providing individuals with financial tools to improve their livelihoods. The authors recommended that future studies examine the long-term psychological benefits of microfinance programs and the impact of financial literacy on mental health.

In 2022, Zhao and Li's study *"Financial Inclusion and Psychological Well-Being Among Elderly Populations: Evidence from Urban China"* focused on understanding the psychological health of older adults in urban China and how financial inclusion impacts their mental health. The primary objective of the study was to investigate whether access to pension plans, savings accounts, and other financial services influences the psychological well-being of elderly individuals. Supplementary objectives included examining the role of social support and financial security in improving mental health. The study used a cross-sectional design, collecting data from 1,000 elderly individuals living in



urban areas. Data was collected through structured interviews, and the analysis was conducted using structural equation modeling. The findings indicated that elderly individuals with access to financial services had significantly better psychological health outcomes, including lower rates of depression and higher levels of life satisfaction. The study concluded that financial inclusion contributes to the psychological well-being of older adults by providing financial security and reducing the stress of economic uncertainty. The authors recommended further research on the impact of digital financial services and the role of social networks in supporting the mental health of older adults.

A 2023 study by Ahmed and Ghosh titled *"Financial Inclusion and Mental Health: The Role of Digital Financial Services"* focused on exploring how access to digital financial services, such as mobile money and e-wallets, influences the psychological health of low-income populations in Bangladesh. The main objective of the study was to assess whether digital financial inclusion has a significant impact on reducing mental health issues such as stress, anxiety, and depression. The supplementary objectives included evaluating the role of financial technology in improving access to mental health resources. Data was collected through online surveys and interviews with 1,500 low-income individuals who use digital financial services. The study used both quantitative and qualitative research methods, including regression analysis for quantitative data and content analysis for qualitative data. The study found that individuals who used digital financial services reported lower levels of stress and anxiety, and they also showed higher levels of psychological resilience. The conclusion drawn was that digital financial inclusion helps reduce financial stress and improve psychological well-being.

The authors recommended that policymakers focus on increasing digital financial literacy and promoting the use of digital services to enhance psychological health.

This study, authored by Ndlovu and Mokgobi in 2020, aimed to investigate the psychological impact of financial inclusion among low-income households in South Africa. The primary objective was to analyze whether access to basic financial services such as savings accounts and credit facilities affects mental health outcomes, specifically anxiety, stress, and depression. The supplementary objective was to examine if financial literacy enhances the psychological benefits associated with financial inclusion.

The researchers employed a quantitative research method, using surveys to collect data from 1,200 respondents who had access to various financial services, such as bank accounts, insurance, and microloans. They utilized regression analysis to examine the relationship between financial inclusion and psychological health.

The major findings revealed that individuals with access to financial services reported lower levels of anxiety and stress. Furthermore, financial literacy was found to have a significant moderating effect, with those who received financial education showing even greater improvements in mental health outcomes. The study concluded that financial inclusion is a key factor in reducing psychological distress by providing a sense of financial security.

Kofi and Asare (2021) explored the psychological effects of financial inclusion in Sub-Saharan Africa, focusing on how access to financial services alleviates mental health challenges, such as stress and depression, among marginalized groups. The main objective of their study was to assess the role

of financial inclusion in reducing psychological distress, particularly in rural areas where financial exclusion is widespread. Data was gathered from 800 participants through both surveys and interviews, with a focus on individuals from rural Ghana. The study utilized mixed methods—quantitative data were analyzed using correlation analysis, while qualitative data were analyzed thematically. Findings from the study highlighted a strong positive relationship between financial inclusion and psychological health, showing that those with access to savings accounts and insurance had significantly lower levels of psychological distress. The study also found that increased access to credit was linked with reduced levels of anxiety, particularly in the context of financial uncertainty.

Chen and Lee (2022) published a study that aimed to examine the effects of microfinance initiatives and financial inclusion on the mental health of women in Southeast Asia. The main objective was to assess whether microcredit programs aimed at low-income women could improve mental health outcomes by providing financial autonomy. Data was collected from 1,000 women participating in microfinance programs in Indonesia, Malaysia, and Thailand. The researchers used a cross-sectional design and analyzed the data through structural equation modeling (SEM). The findings suggested that women who participated in microfinance programs reported significantly fewer symptoms of depression and anxiety. Financial autonomy, facilitated by access to microloans, was found to improve self-esteem and life satisfaction, leading to better psychological health. Additionally, women who participated in financial literacy programs experienced even greater improvements in their psychological well-being. The study concluded that microfinance programs

contribute to mental health improvement by reducing financial stress and empowering women.

Agarwal and Singh (2023) conducted a study to assess the relationship between financial inclusion and psychological resilience among the elderly in urban India. The primary objective of their study was to investigate whether access to pension plans, savings accounts, and insurance improves mental health outcomes and psychological resilience in the elderly population. The researchers used a survey design and collected data from 1,200 elderly individuals across three major cities in India. The data was analyzed using hierarchical regression analysis. The findings indicated that older adults with access to formal financial services exhibited higher levels of psychological resilience and were better equipped to manage stress and anxiety. The availability of financial security in the form of pensions and insurance provided a safety net, reducing the impact of health-related expenses on mental health. The study also found that social support networks enhanced the positive impact of financial inclusion on psychological resilience. Agarwal and Singh concluded that financial inclusion plays a crucial role in enhancing psychological resilience among older adults by offering financial security.

Rahman and Sattar (2022) explored the global relationship between financial inclusion and psychological well-being. The main objective of their study was to compare the psychological well-being of individuals with and without access to financial services across different continents, focusing on both developed and developing economies. The study used data from the World Bank's Financial Inclusion Index and combined it with data from mental health surveys conducted in 20 countries. The data were analyzed

using multivariate analysis to examine the link between financial inclusion and psychological health across diverse cultural contexts. The study found that, globally, individuals with access to financial services, including bank accounts, credit, and insurance, had significantly better mental health outcomes than those without access. Specifically, there was a reduction in stress, anxiety, and depressive symptoms among those with financial inclusion. The study concluded that access to financial services provides individuals with the necessary tools to manage financial pressures, contributing to overall psychological well-being.

Mensah and Boateng (2023) investigated the role of digital finance in enhancing psychological well-being in Sub-Saharan Africa. Their main objective was to explore whether mobile money services and digital banking improve mental health by providing financial services in areas with low banking penetration. The researchers used a mixed-methods approach, collecting data through mobile surveys from 1,500 individuals in Ghana and Nigeria. Quantitative data was analyzed using regression analysis, while qualitative data was analyzed using content analysis. The findings revealed that mobile money services were positively correlated with reduced psychological stress, particularly for individuals in rural areas who had limited access to traditional banking. Digital finance was found to help individuals manage day-to-day financial activities, reducing uncertainty and providing greater control over financial situations. The study concluded that digital financial services have a significant role in improving psychological well-being by offering financial inclusion in underserved areas. Mensah and Boateng recommended that future research investigate the long-term effects of

mobile money on mental health and explore how digital financial services can be integrated with mental health support systems.

### **Financial Inclusion and Social Health Wellbeing**

In 2018, Smith and Brown conducted a study in East Africa, aiming to explore the relationship between financial inclusion and social health well-being among low-income households. The primary objective of the study was to investigate how access to financial services such as savings, credit, and insurance could influence the social integration and community participation of individuals. Their supplementary objective was to examine whether financial inclusion contributes to a sense of social cohesion in marginalized communities. Using a cross-sectional survey design, the researchers gathered data from 1,000 individuals in Kenya and Tanzania, employing statistical analysis to explore the relationship between access to financial services and social well-being. The study found that individuals who had access to basic financial services were more likely to participate in community activities and reported stronger social ties compared to those without access. This suggests that financial inclusion positively influences social capital by enabling individuals to contribute to and benefit from their communities. The authors concluded that enhancing financial inclusion can foster social well-being, thus improving the social fabric of low-income communities. They recommended further studies focusing on the longitudinal effects of financial inclusion on social health and its impact on various demographic groups.

A study by Chen et al. (2019) focused on the relationship between financial inclusion and social health well-being in rural China. The main objective of the research was to understand the influence of microfinance

programs on the social health of rural communities. The researchers aimed to assess whether microloans and insurance services could improve social support networks and reduce social isolation among the elderly. Data was collected through interviews and surveys from 800 elderly participants, employing both quantitative and qualitative research methods. The quantitative data were analyzed using regression analysis, while thematic analysis was applied to the qualitative responses. The findings indicated that financial inclusion, particularly through microfinance, led to improved social participation and reduced loneliness among the elderly. Participants reported higher levels of social engagement and a sense of community belonging, which was attributed to their ability to access financial services that provided greater stability. The study concluded that microfinance not only enhances financial well-being but also plays a crucial role in improving social well-being by fostering stronger social networks. The authors suggested future research should focus on examining the role of digital financial services in promoting social cohesion, particularly among vulnerable populations.

In 2020, Kumar and Rao conducted a study in India to examine the link between financial inclusion and social well-being in urban slums. The study's main objective was to determine whether financial inclusion could help reduce social exclusion and improve social connectedness in marginalized urban communities. The researchers collected data from 1,200 participants in New Delhi and Mumbai through a mixed-methods approach, combining structured surveys and focus group discussions. Quantitative data was analyzed using factor analysis, while qualitative data were coded for common themes. The study found that access to financial services was linked

with greater social participation, as individuals with access to credit, savings, and insurance were more likely to participate in community and social activities. Furthermore, those who had access to formal financial services were more confident in their financial decision-making, which in turn led to greater social mobility. Kumar and Rao concluded that financial inclusion significantly improves social health by reducing isolation and enhancing community involvement. They recommended that future research should explore the role of mobile banking and digital financial services in enhancing social health, especially in urban areas.

A 2021 study by Patil and Patel focused on the social health implications of financial inclusion in rural India, specifically exploring the impact of self-help groups (SHGs) on social well-being. The main objective of the study was to understand whether financial inclusion through SHGs could improve social cohesion, trust, and collective efficacy among rural communities. The researchers used a case study approach, conducting interviews and focus groups with 500 members of SHGs in rural Maharashtra. Data was analyzed using a combination of content analysis for qualitative data and descriptive statistics for quantitative analysis. The findings revealed that SHG participation was associated with stronger social ties and a higher degree of trust among members. The study participants reported improved social relations, enhanced community participation, and a greater sense of collective responsibility. Patil and Patel concluded that financial inclusion through SHGs positively impacts social well-being by fostering a sense of community and improving social support networks. They suggested that further research should investigate the specific mechanisms through which SHGs influence



social health and explore the long-term effects of such programs on social cohesion in rural areas.

In 2022, a study by Zhang and Li examined the role of digital financial inclusion in enhancing social well-being among migrant workers in urban China. The main objective of the study was to explore how access to digital financial services could improve the social integration of migrant workers, who often face financial exclusion and social marginalization in urban areas. The study utilized an online survey and collected data from 1,000 migrant workers in Beijing and Shanghai. The researchers used structural equation modeling (SEM) to analyze the relationship between digital financial inclusion and social well-being. The results showed that digital financial services, such as mobile payments and online banking, significantly improved the social integration of migrant workers by enabling them to access financial resources easily, which enhanced their ability to participate in urban social networks. Furthermore, access to digital financial services reduced the feelings of isolation and alienation often experienced by migrant workers. The authors concluded that digital financial inclusion is crucial for promoting social well-being, particularly among vulnerable groups such as migrant workers. They recommended future research should focus on understanding the role of digital literacy in enhancing the social integration of migrant workers and other marginalized populations.

A study by Oliveira and Garcia (2023) focused on the impact of financial inclusion on the social well-being of youth in Brazil. The primary objective of this study was to examine whether access to financial services could improve the social integration of youth, particularly those from

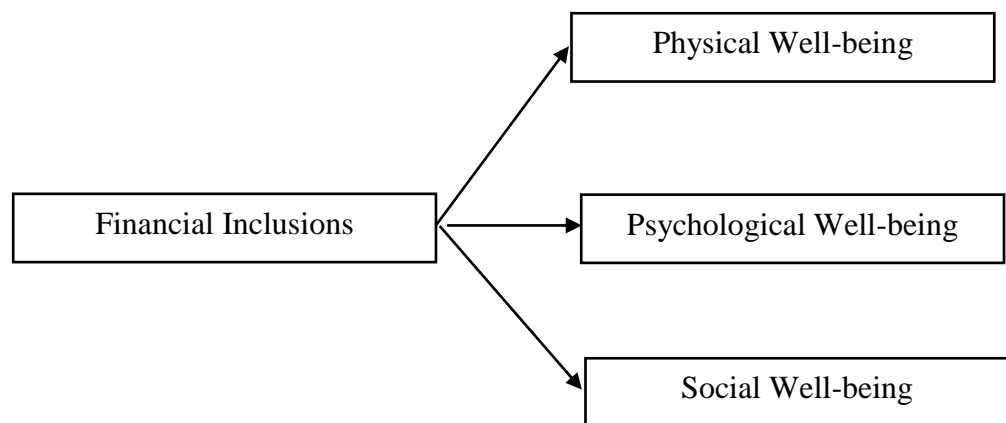
disadvantaged backgrounds. The researchers used a longitudinal survey design, collecting data from 1,500 young individuals over a three-year period. The data was analyzed using multivariate analysis techniques to identify trends and patterns in social well-being and financial inclusion. The findings indicated that financial inclusion helped increase the social participation of youth by providing them with the financial independence to engage in community activities, education, and employment opportunities. Moreover, those with access to financial services reported stronger social networks and a greater sense of belonging. Oliveira and Garcia concluded that financial inclusion is a powerful tool for enhancing social well-being by empowering youth and promoting social integration. They suggested that future studies should investigate the effects of financial education programs on social well-being and explore the role of financial inclusion in reducing social inequality.

In 2023, Ajayi and Ogundele published a study investigating the impact of financial inclusion on social well-being in Nigeria, with a specific focus on rural communities. The main objective of the study was to explore how access to microfinance services could improve social health by fostering social networks and reducing social exclusion. The researchers used a mixed-methods approach, collecting data from 1,000 respondents through household surveys and in-depth interviews. The data was analyzed using correlation analysis and thematic analysis for qualitative responses. The study found that microfinance services were positively correlated with increased social engagement, as individuals with access to financial resources were more likely to participate in social activities and have stronger connections with others in their community. The study concluded that financial inclusion has a

significant positive impact on social health by reducing social isolation and enhancing social cohesion. Ajayi and Ogundele recommended further research on the role of microfinance in promoting social health in different regions of Africa, particularly in rural settings.

### Conceptual Framework

This section gives a pictorial representation of how the variables relate to one another. The dependent variables were psychological well-being, physical and social well-being of adult patients. The independent variable was financial inclusion.



*Figure 1: Conceptual Framework*  
Source: Author's construct (2023)

### Chapter Summary

The chapter reviewed the literature on conceptual, theoretical and empirical issues relating to health well-being and older adults. The conceptual review discusses the definitions of financial inclusion, physical health, mental health, and health well-being. The theoretical review examines capability theory and its contribution to research on financial inclusion and health among older adults. The empirical review discusses the impact of financial inclusion on the physical health, mental health, and overall health well-being of older

adults. It concludes that financial inclusion can reduce financial stress, improve physical and mental health, and enhance the overall health well-being of older adults. The review further proved beneficial in the research methods section, analysis, presentation of findings, discussions, conclusions, and recommendations. In the review, a number of lessons have been learned. Among these lessons are sterned from methodological use and analytical tools employed in the previous works. A number of the studies reviewed showed that the scholars used simple random sampling techniques in drawing the respondents. Few of them relied on non-probability sampling techniques such as purposive for their qualitative approach. Concerning the analytical tools, the majority relied on the use of regression between two variables.

## **CHAPTER THREE**

### **RESEARCH METHODS**

#### **Introduction**

This chapter discusses the research methods and procedures used to gather and analyze data for this study. It focuses on the research philosophy and design adopted for this study to achieve the research objectives. It elaborates on the research approach and provides details regarding the study area, population, sampling procedure, and the research instruments that were used in collecting data for the study. It also addresses the data collection procedures, data processing and analysis, ethical issues, and chapter summary.

#### **Research Philosophy**

Research philosophy is a set of beliefs that prescribes how a study in a particular discipline should be carried out and how the results should be interpreted (Bryman, 2004). Philosophies embrace the general orientations of research and define the theories that underline or underpin the research methods and interpretations (Tashakkori & Teddlie, 2010). An appreciable number of research philosophies can be found in social science research. Saunders, Lewis, and Thornhill (2016) identified five major philosophies that have shaped social science research over the years: positivism, critical realism, interpretivism, postmodernism, and pragmatism. The authors posited that each of the research philosophies had something unique and valuable to contribute to the research undertaken by the researchers. Therefore, the type of philosophy held by individual researchers will often lead to embracing a strong qualitative, quantitative and mixed-methods approach in their research (Creswell, 2014).

However, the philosophical underpinning of the research methods of this study is positivism. This is because a positivist approach relates to the philosophical system that embraces issues that could be scientifically verified and hence provides a basis for generalization. This means positivists focus on procedures that lead to the generation of “facts uninfluenced by human interpretation” (Saunders et al., 2016). Also, positivists believe that reality is stable and can be observed and described from an objective point of view without interfering with the phenomenon being studied (Cohen, Manion, & Morrison, 2007). Positivists often focus on and prefer quantitative research or data collection and analysis using experiments, surveys, or questionnaires (Cohen et al., 2007).

### **Research Design**

Sekaran and Bougie (2016) categorized research design into three broad categories based on the purpose of the study, namely: exploratory, explanatory or casual, and descriptive designs. Exploratory research is typically used when a researcher examined a new interest or phenomenon. When the subject of study itself is relatively new, the researcher tries to explore the phenomenon. The major emphasis of exploratory research is on the discovery of new ideas and insights, which can be used as a foundation for further research (Saunders et al., 2016). For explanatory research, the focus is to connect ideas to understand the cause and effect, which simply means, researchers, want to explain the relationship between two variables. This type of research looks at how things interact. There should be enough understanding to predict what the outcome will be with some accuracy (Saunders et al., 2016). It is concerned with determining the cause-effect of

relationships. Explanatory research aims to develop a precise theory that can be used to definitively explain the phenomena, which leads to the generalization of the research. The third type of design is descriptive design. Here, the research is conducted to describe situations or an aspect of an existing phenomenon or event (Creswell & Plano, 2007). The researcher observes and then describes what was observed (Babbie, 2007).

A descriptive study is one in which information is collected without changing the environment (i.e., nothing is manipulated). Sometimes, these are referred to as correlational or observational studies. According to Cooper and Schindler (2003), a descriptive study is concerned with finding out the what, where, and how of a phenomenon. Although there are three basic research designs, the design for this research was the Causal research design (explanatory design). This is because, it primarily focuses on an analysis of a situation or a specific problem to explain the patterns of relationships between variables (Creswell, 2014). Also, explanatory research design involves gathering data that explains events and then organizing, tabulating, depicting and explaining the data collection (Creswell & Creswell, 2017). Data in explanatory research are collected predominantly by questionnaire. The explanatory research design was chosen mainly because taking into consideration the purpose and objectives of the study, it is the most appropriate design that would bring about a meaningful conclusion (Creswell & Plano, 2007).

### **Research Approach**

The research approach used for this study was quantitative, considering the nature of the study. Cohen et al. (2007) observed that the quantitative

research approach measures variables on a sample of subjects and expresses the relationship between variables or constructs using statistical tools such as regression, correlation, and relative frequencies to test theories. According to Leedy and Ormrod (2010), quantitative researchers emphasize quantification in empirical investigations using experiments, surveys, and questionnaires to obtain data that is revised, tabulated in numbers, and allows for statistical analysis of the data gathered. Generally, quantitative researchers focus on the positivist approach to research in the social sciences such that they follow a linear research path and use surveys, experiments, or statistics to test hypotheses to predict general patterns of human activity (Neuman, 2004). This choice is increasingly advocated within social science, business, and management research (Bell, Bryman & Harley, 2018). This approach was considered apt because it enabled the researcher to generate data through standardized collection procedures based on highly structured research instruments and well-defined study concepts and related variables or constructs. Summarily, both explanatory research design and quantitative research approach are considered most appropriate because of the role they play in this study. It is perceived that both explanatory research design and quantitative research approach help the researcher to gather appropriate data that explain the influence of financial inclusion on the health well-being of older adults visiting UCC hospital.

### **Study Area**

This study was done in the Central Region of Ghana. The study was specifically conducted at the University of Cape Coast hospital. The University of Cape Coast hospital was mainly established to deliver quality



healthcare services to the university community comprising of students, workers, and their respective families. Due to expansion and the continuous growth of the university and the surrounding communities, the university hospital has also increased its scope in delivering a wide range of healthcare services to the surrounding communities and Cape Coast as a whole. The university hospital receives referrals from other CHIPS compounds and various health centers within the surrounding communities. Examples of these referring facilities are the Elmina health center and the Cape Coast metropolitan hospital. This study was specifically limited to older adults visiting the university hospital.

### **Population**

The target population for this study is specifically older adults visiting the University of Cape Coast Hospital, and the study aims to investigate the relationship between financial inclusion and the health well-being of these individuals. According to Burns and Grove (1999), demographics refer to individuals or groups that meet the specific inclusion criteria for the study. In this case, the study targets older adults, which are typically defined as individuals aged 60 and above, in line with international age classification systems for the elderly. This population was chosen due to their vulnerability to health issues and potential challenges in accessing financial services, making them an important group for examining the intersection of financial inclusion and health well-being.

The decision to use a sample size of 250 participants is grounded in the need to achieve a balance between statistical power and feasibility within the scope of the study. Bryman (2008) suggests that the target population

comprises the entire set of elements from which a sample is drawn. In this study, the population consists of older adults who visit the University of Cape Coast Hospital for healthcare services. The hospital serves a substantial number of patients from the surrounding community, including older adults who may experience varying levels of access to financial services. Given the population size of the hospital's older adult patients, a sample size of 250 is deemed appropriate to ensure that the findings are statistically significant and representative of the broader population. This sample size also ensures sufficient variability and diversity in responses, which is crucial for understanding the nuanced ways in which financial inclusion impacts different aspects of health well-being among older adults.

Furthermore, the inclusion of 250 patients is justifiable from a methodological standpoint. A sample of this size allows for robust data collection and analysis, ensuring that the study can detect meaningful relationships between financial inclusion and health outcomes. Larger sample sizes would have increased the complexity and cost of the study without significantly improving the precision of results, particularly considering the practical limitations such as time and resource availability. Based on the expected variance in health well-being and financial inclusion indicators, 250 participants provide a reasonable number for ensuring generalizability within the context of the study's geographic and demographic focus. Thus, the sample size is well-suited to answer the research questions and provide valuable insights into how financial inclusion affects the health well-being of older adults in the study area.

### **Sample and Sampling Technique**

Hamed (2016) defines sampling technique as the identification of a particular process through which the entities or participants of the sample are selected. A purposive sampling technique was employed in this study. Purposive sampling is used when the targeted respondent possesses a unique characteristic of interest to the researcher (Campbell et al., 2020; Etikan et al., 2016). In this study, older adults were the target population. Individuals forty years and above who were visiting the hospital were sampled.

Based on Krejcie and Morgan (1970), a sample size of one hundred and fifty-four (154) respondents was used for the study. A sample size depicts the number of participants, entities, or observations represented by the general population in a study (Barlett, Kotrlik & Higgins, 2001). The size of the sample and the way it is selected will affect the validity and reliability of the research findings and the extent to which findings can be generalised (Saunders & Lewis, 2012).

### **Data Source**

The study relied on primary data source for all of its data needs. The primary data source for this study was fieldwork using a structured questionnaire in a close-ended format. The source of data depicts where the data that was used for the study was collected. The primary data for this study was collected from older adults visiting the university of Cape Coast Hospital.

### **Data Collection Instrument**

According to Bryman and Bell (2003), data collection instruments are the tools that researchers use to gather data in the process of conducting the study. They are of the view that the common tools used for data gathering in

research are questionnaires, interviews, direct observations documentary analysis, checklists, and case studies. The study used a structured questionnaire and it was mainly used to gather information from the older adults visiting the university of Cape Coast Hospital. A questionnaire is a well-known form of data collection, especially when collecting data from large groups, where standardization is very important (Creswell, 2009).

According to Opie (2004), a questionnaire is relatively economical, the questions are standardized, respondents at far locations are reached, questions are written for specific purposes only, and the anonymity of respondents is also assured. The structured questionnaire was designed by the researcher based on the literature review and was closed-ended questions. Close-ended questions were relevant for the reason that they are easy to ask and quick to select from a range of predetermined answers (Baskerville & Myers, 2009). This is significant since data was collected quickly to meet the time frame for the research. The structured questionnaire was categorized into two main sections. Section A of the questionnaire examined the personal details of the participants. Personal details of participants included: gender, age, educational background, monthly income, and other forms of income. Section B of the questionnaire analyzed the relationship between financial inclusion and the health well-being of older adults visiting the university of Cape Coast hospital. Items were rated with a Likert Scale with five points: 1 = Strong Disagreement; 2 = Disagree; 3 = Neutrality; 4 = I agree; 5 = Strongly Agree.

### **Validity and Reliability**

Validity and reliability are the two components to consider when considering a research instrument. Coolican (2004) defines validity as the

degree to which a measuring instrument measures what should be measured. On the other hand, Murphy and Davidshofer (2005) simply explain reliability as consistency or the ability to provide a reproducible score. To ensure the effectiveness or validity of the research tool, a structured questionnaire was provided to the research experts (research supervisor) on financial inclusion and the health well-being of older adults visiting the University of Cape Coast hospital to review its content and composition or constructs. As a result, any error in the questionnaire was corrected before full-scale data collection. To further ensure the validity and reliability of the research instrument, 30 samples of the questionnaire were pre-tested. Pre-testing refers to a procedure that involves a trial run with a group of respondents to iron out fundamental problems in the survey design (Zikmund & Babin, 2007). Cronbach's Alpha was used to measure the reliability of the research instrument. Cronbach's Alpha value differs from 0 for no consistency to 1 for higher consistency. If the Alpha value is 0.70 and above, the scales are considered reliable (Sousa, Martinez-Lopez & Coelho, 2006).

### **Data Collection Procedures**

Data collection procedures are the means by which data are collected from the participants (Zikmund, 2003). Data can be collected via personal contact, mail surveys, phone surveys, and online surveys. The validated structured questionnaire for this study was distributed to the group of respondents at the University of Cape Coast hospital by personal contact. The respondents were allowed enough time to self-complete the questionnaire. Using the self-completion method can give participants the chance to fill out the questionnaire in their own time, and be quick to complete the questions

(Creswell, 2009). The questionnaire was then retrieved from the participants through personal contact for sorting, data processing, and analysis

### **Data Processing and Analysis**

Data processing refers to a set of procedures or methods that are employed by the researcher to input, verify, store, organize, retrieve, analyze, and interpret a set of data (Bryman & Bell, 2003). The raw data collected were transferred into codes. The structured questionnaire was coded using the IBM Statistical Package for Social Sciences (SPSS) version 22.0 software program. The quantitative data collected were processed, analyzed, and interpreted accordingly with the aid of descriptive statistics such as frequencies, percentages, mean, standard deviation, and inferential statistical tools including regression using the STATA software package. The structural equation model was employed to analyse the study's objectives.

### **Model Specification**

To analyze the relationship between financial inclusion, well-being, and health-seeking behavior, a structural equation model (SEM) was estimated. The SEM included observable variables to measure the latent variables of financial inclusion, well-being, and health-seeking behaviors (Yuan & Bentler, 2006). SEM is a multivariate statistical analysis technique that is well-suited for examining relationships between latent (unobservable) variables and observed variables. It is particularly useful in research where the focus is on the relationships between variables, rather than the measurement of individual variables (Ullman & Bentler 2012). Observable variables such as having an active account with a financial institution, potential access to credit, and access to other financial services were used as indicators to measure

financial inclusion. For the measurement of well-being, indicators such as feeling depressed or sad most of the time, feeling lonely, and being diagnosed with a chronic disease were used (Yuan & Bentler, 2006). For the measurement of health-seeking behavior, visiting the hospital for regular check-ups, regulating one's diet, and visiting recreational sites for psychological health were used as indicators.

### **Ethical Consideration**

According to Li (2006), ethics is mostly associated with morality and deals with issues of right and wrong among groups, societies, or communities. It is therefore important that everyone who engages in research should be aware of the ethical concern (Rubin & Babbie, 2016). Edginton et al. (2012) have identified the basic ethical consideration for research as; respondents being fully informed about the aims and benefits of the research, granting voluntary consent, and maintaining the right of withdrawal. The researcher employed every effort to avoid possible violation of ethical principles. Some of the ethical issues that were considered in this study included observing organizational protocol before undertaking data collection work at the University hospital. An introductory letter was obtained from the department of the researcher to introduce the researcher to the organization's management. This introductory letter was then presented to the management of the hospital indicating the purpose of the study. This was done to seek permission to elicit data from the patients. The respondents were informed about the purpose of the research and what objective the study seeks to achieve. Respondents were also assured of their anonymity and confidentiality of the information provided.

## Chapter Summary

This chapter presents the research methods of the study. The researcher employed an explanatory research design that emphasizes cause-effect relations while the approach used was quantitative. A population of 250 older adults with a sample size of 152 was selected from the University of Cape Coast hospital using Krejcie and Morgan's (1970) sample size determination table. Primary data was collected from the older adults visiting the facility using a structured questionnaire. The data were processed, analyzed, and interpreted accordingly with the aid of Smart PLS and SPSS Version 22.0.



## CHAPTER FOUR

### RESULTS AND DISCUSSION

#### Introduction

This chapter analyses the objectives of the study. This chapter presents the research findings from the study. This study sought to examine effect of financial inclusion and health well-being of older adults visiting the University of Cape Coast Hospital. The result is demarcated into three chapters. This chapter would analyse the demographic characteristics of the respondents and the analyses of the measurement and structural models for the study and the test of hypotheses. Specifically, issues pertaining to indicator loadings, CR (Composite reliability), AVE (Average variance extracted) and DV (Discriminant validity) were considered for the measurement models.

#### Demographic Characteristics

This section analysed the demographic characteristics of respondents. The age of respondents, gender of respondents, household size, marital status of respondents and distribution of the level of education of respondents were also explained and examined. The result is presented on Table 1.

**Table 1: Demographic Characteristics**

<b>Variable</b>	<b>Frequency</b>	<b>Percent</b>
<b>Sex</b>		
Male	103	66.88
Female	51	33.12
<b>Age of Respondents</b>		
40-49 years	119	77.27
50-59 years	19	12.34
60-69 years	13	8.44
70-79 years	3	1.95
<b>Household Size</b>		
0-3	55	35.71
4-6	88	57.14
7-9	8	5.19
> 10	3	1.95
<b>Marital Status</b>		
Single	76	49.35
Married	47	30.52
Divorced	22	14.29
Widowed	9	5.84
<b>Level of Education</b>		
No formal education	19	12.34
Basic Education	18	11.69
Secondary Education	33	21.43
Middle School	32	20.78
Tertiary	52	33.77
<b>Employment status</b>		
Unemployed	7	4.55
Retired	49	31.82
Employed	87	56.49
Self-employed	11	7.14
<b>Types of Occupation</b>		
Craft and related trade workers	5	3.25
Elementary Occupations	44	28.57
Plant Machine Operators and assemblers	11	7.14
Professionals	17	11.04
Service/Sales Workers	31	20.13
Skilled agriculture/fishery workers	18	11.69
Technicians and associate professionals	28	18.18
<b>Total</b>	<b>154</b>	<b>100</b>

Source: Field Survey (2023)

From Table 1, out of 154 respondents, 103 of the respondents were males. This represented 66.88 percent of the respondents. Fifty-one (51) of the respondents were females. This also represented 33.12 percent of the respondents.

With respect to age of respondents, one hundred and nineteen (119) of the respondents were between the ages of 40 to 49 years. This represented 77.27 percent of the respondents. Nineteen (19) of the respondents were between the ages of 50 to 59 years. This represented 12.34 percent of the respondents. Thirteen (13) of the respondents were between the ages of 60 to 69 years. This represented 8.44 percent of the respondents. Three (3) of the respondents were 70 to 79 years. This represented 1.95 percent of the respondents.

Regarding to household size, eighty-eight (88) of the respondents had 4 to 6 household size. This represented 57.14 percent. Fifty-five (55) of the respondents had three and less household size. This represented 35.71 percent of the respondents. Eight (8) of the respondents were between 7 to 9 household size. This represented 5.19 percent of the respondents. Three (3) of the respondents had more than 10 household size. This represented 1.95 percent of the respondents.

With regard to marital status, seventy-six (76) respondents were single. This represented 49.35 percent of the respondents. Forty-seven of the respondents were married. This represented 30.52 percent of the respondents. Twenty-two (22) of the respondents were divorced. This represented 14.29 percent of the respondents. Nine (9) of the respondents were married. This represented 5.84 percent of the respondents.

Fifty-two (52) of the respondents were holding tertiary level of education. This represented 33.77 percent of the respondents. Thirty-three (33) of the respondents were holding secondary education. This represented 21.43 percent of the respondents. Thirty-two (32) of the respondents had middle school. This represented 20.78 percent of the respondents. Nineteen (19) of the respondents had no formal education. This represented 12.34 percent of the respondents. Eighteen of the respondents were holding basic education. This represented 11.69 percent of the respondents.

Eighty-seven (87) of the respondents were employed. This represented 56.49 percent of the respondents. Forty-nine (49) of the respondents were retired. This also represented 31.82 percent of the respondents. Eleven (11) of the respondents were self-employed. This also represented 7.14 percent of the respondents. Seven (7) of the respondents were unemployed. This also represented 4.55 percent of the respondents.

Forty-four (44) of the respondents had elementary occupations. This recorded 28.57 percent of the respondents. Thirty-one (31) of the respondents were service/sales workers. This represented 20.13 percent of the respondents. Twenty-eight (28) of the respondents were technicians and associate professionals. This represented 18.18 percent of the respondents. Seventeen (17) of the respondents were professionals. This represented 11.04 percent of the respondents. Eleven (11) of the respondents were plant machine operators and assemblers. This represented 7.14 percent of respondents. Five of the respondents were craft and related trade workers. This represented 3.25 of the respondents.

### **Assessment of Measurement Models for the Study**

This section focusses on the measurement models for the study. The section begins with the assessment of the indicator loadings. The measurement model assessments include indicator loadings, internal consistency reliability (composite reliability), Convergent validity (AVE-Average variance extracted) and Discriminant validity (Fornell-Lacker and HTMT). A consistent PLS algorithm was run to generate indicators for the assessment of the measurement model. The results are presented in the subsequent tables.

#### **Assessing indicator loadings**

Table 2 shows that some of the indicators were dropped in comparison to indicators in figure 2. All indicators that loaded below the threshold of 0.7 as recommended by Hair et al. (2016) were dropped to improve the reliability of the overall model. Out of a total of 40 indicators measuring the various latent variables, 22 indicators were dropped for failure to meet the indicator reliability criteria.

Nine (9) out of ten (10) indicators used to measure the construct financial inclusion loaded above the threshold of 0.7. Out of ten indicators (10) used to measure physical health, five (5) of the indicators loaded strongly. Six (6) out of ten (10) of the indicators used to measured psychological health loaded strongly. Only two indicators used to measure social health loaded above the threshold of 0.7. The indicator loadings of the retained items are shown in Table 2.

**Table 2: Indicator Loadings**

	<b>FinInclu</b>	<b>Physical</b>	<b>Psychological</b>	<b>Social</b>
FININC1	<b>0.827</b>	0.212	0.723	0.243
FININC2	<b>0.83</b>	0.261	0.607	0.181
FININC3	<b>0.747</b>	0.158	0.488	0.178
FININC4	<b>0.714</b>	0.101	0.473	0.22
FININC5	<b>0.795</b>	0.257	0.686	0.228
FININC6	<b>0.723</b>	0.267	0.58	0.114
FININC7	<b>0.723</b>	0.137	0.549	0.125
FININC8	<b>0.814</b>	0.165	0.633	0.161
FININC9	<b>0.8</b>	0.207	0.581	0.205
PHYSIHEAL1	0.245	<b>0.717</b>	0.23	-0.053
PHYSIHEAL3	0.129	<b>0.709</b>	0.011	-0.195
PHYSIHEAL4	0.207	<b>0.736</b>	0.266	0.169
PHYSIHEAL7	0.166	<b>0.708</b>	0.195	-0.005
PHYSIHEAL8	0.088	<b>0.71</b>	0.174	0.02
PSYCHOHEAL1	0.682	0.215	<b>0.868</b>	0.233
PSYCHOHEAL2	0.661	0.233	<b>0.86</b>	0.274
PSYCHOHEAL3	0.555	0.049	<b>0.782</b>	0.239
PSYCHOHEAL4	0.693	0.287	<b>0.769</b>	0.27
PSYCHOHEAL5	0.485	0.234	<b>0.73</b>	0.225
PSYCHOHEAL6	0.62	0.259	<b>0.826</b>	0.189
SOC.HEALT4	0.244	0.035	0.289	<b>0.924</b>
SOC.HEALT5	0.144	-0.068	0.2	<b>0.763</b>

Source: Field Survey (2023)

From Table 2, nine indicators of financial inclusion loaded above 0.7. The least was (0.714) and the highest being (0.83), indicating that the retained indicators are reliable. The minimum indicator loading on physical health was 0.708 and the highest was 0.736. The retained items of psychological health also loaded well above the 0.7 threshold, minimum (0.73) and maximum (0.868). Correspondingly, dimensions of social health had retained indicators loading well above 0.7 thus, between 0.763 and 0.924.

### Assessing Internal Consistency Reliability

In this study, the internal consistency reliability of the constructs was measured using the composite reliability. The composite reliability is a more appropriate measure of internal consistency than the Cronbach's alpha

(Rossiter, 2002). The results in Table 3 indicates that all latent variables in this study are reliable, as they all loaded about the 0.7 threshold by (Bagozzi & Yi, 1988). Financial inclusion had the highest score of composite reliability (0.931) this was followed by psychological health (0.918), physical health (0.84) and social health (0.835). The results indicate that the model has internal consistency reliability. Table 3 also includes results on convergence validity.

**Table 3: Validity and Reliability**

	Cronbach's alpha	Composite reliability (rho_a)	Composite reliability (rho_c)	Average variance extracted (AVE)
FinInclu	0.917	0.924	0.931	0.602
Physical	0.774	0.783	0.84	0.513
Psychological	0.893	0.9	0.918	0.652
Social	0.629	0.748	0.835	0.719

Source: Field Survey (2023)

### Assessing Convergent Validity

The average variance extracted was used in assessing convergent validity. Convergent validity is the extent to which a measure correlates positively with alternative measures of the same construct (Hair et al, 2017). An AVE value of 0.50 or higher indicates that, on average, the construct explains more than half of the variance of its indicators. Conversely, an AVE of less than 0.50 indicates that, on average, more variance remains in the error of the items than in the variance explained by the construct. The results from Table 10 indicates that all constructs have an AVE of more than 0.5. With the highest being social health and the least being physical health. This means that the constructs in this model are able to account for more than half of the

variance in their indicators. As part of assessing the measurement model, discriminant validity was also assessed.

### Assessing Discriminant Validity

Establishing discriminant validity implies that a construct is unique and captures phenomena not represented by other constructs in the model (MacKinnon, 2008). In this study, both the Fornell-Lacker criterion and the HTMT were used to establish discriminant validity. The Fornell-Larcker criterion compares the square root of the AVE values with the latent variable correlations (Fornell & Larcker, 1981). Specifically, the square root of each construct's AVE should be greater than its highest correlation with any other construct (Hair et al. 2013). The results from Table 4 indicates that the square root of each variable is well above their correlations with other constructs in the study. This means that each construct is unique and no two constructs capture the same phenomenon.

**Table 4: Fornell-Lacker Criterion**

	FinInclu	Physical	Psychological	Social
FinInclu	<b>0.776</b>			
Physical	0.258	<b>0.716</b>		
Psychological	0.372	0.268	<b>0.807</b>	
Social	0.239	-0.004	0.296	<b>0.848</b>

Source: Field Survey (2023)

The Fornell-Larcker criterion performs very poorly, especially when indicator loadings of the constructs under consideration differ only slightly (e.g., all indicator loadings vary between 0.70 and 0.80) as in this case physical health. When indicator loadings vary more strongly, the Fornell-Larcker criterion's performance in detecting discriminant validity issues



improves but it is still rather poor in assessing overall discriminant validity (Voorhees, Brady, Calantone, & Ramirez, 2016). As a remedy, Henseler, Ringle and Sarstedt (2015) propose assessing the Heterotrait Monotrait ratio (HTMT) of the correlations. According to Henseler et al (ibid), a latent construct has discriminant validity when its HTMT ratio is below 0.850. The results presented in Table 5 show HTMT values well below 0.850.

**Table 5: Heterotrait-Monotrait Ratio (HTMT)**

	FinInclu	Physical	Psychological
FinInclu			
Physical	0.284		
Psychological	0.834	0.32	
Social	0.297	0.196	0.38

Source: Field Survey (2023)

### Model Fitness

Model fit criteria commonly used in absolute fit are chi-square ( $\chi^2$ ), goodness-of-fit index (GFI), adjusted goodness-of-fit index (AGFI), root-mean-square residual (RMR) and Root-Mean-Square-Error of Approximation (RMSEA). These criteria are based on differences between the observed and model-implied correlation or covariance matrix (Hair et al., 2014). Comparative fit deals with whether the model being considered is better than a competing model in accounting for observed data. Comparative fit assessment is based on the examination of a “baseline” model in comparison with theoretically derived models (Kelloway, 1998). Some criteria in this category include normed fit index (NFI), comparative fit index (CFI) and the relative non-centrality index (RNI).

The following fit indexes were used to evaluate how well the measurement model fit the data collected, with each one having conventionally acceptable values: Root Mean Squared Error of Approximation ( $RMSEA \leq 0.08$ ), Goodness of Fit Index ( $GFI \geq 0.90$ ), Normed Fit Index ( $NFI \geq 0.90$ ) and Comparative Fit Index ( $CFI \geq 0.90$ ) (Bagozzi & Yi, 2012; Hair et al., 2010). The sufficiency of the theorized model's creation of a covariance matrix is evaluated by the  $\chi^2$  goodness-of-fit value; it also estimates coefficients compared with the observed covariance matrix. However, since the value of  $\chi^2$  is affected by the sample size, a large number of participants can cause  $\chi^2$  to be inflated when assessing model fit (Hu & Bentler, 1999).

Many researchers have applied the method that divides the value of  $\chi^2$  by degrees of freedom instead of relying only on the overall  $\chi^2$  and its associated test of significance. It is typically suggested that a  $\chi^2/df$  ratio (Normed Chi square) of less than 3 is favourable for a large sample. These fit indices were employed to assess the strength and acceptability of the construct measurements. The selection of these fit indices was based on the classification proposed by Byrne (2013) as being the most commonly accepted criteria in social sciences.

In view of testing the model fitness, 70 measurement items or questions were used with the view that those variables that did not achieve some of the indicator means be deleted to achieve a model fit or improvement in Fit of Measurement Model. All measurement items were fit hence no item was deleted to achieve the model fit indices.

**Table 6: Model Fit Measures for Final Measurement Model**

Measure	Estimate	Threshold	Interpretation
CMIN	409.857	--	--
DF	154	--	--
CMIN/DF	2.661	Between 1 and 3	Excellent
CFI	0.996	>0.95	Excellent
SRMR	0.054	<0.08	Excellent
RMSEA	0.053	<0.06	Excellent
PClose		>0.05	Excellent

Source: Field Survey (2023)

According to Hu and Bentler (1999), there are indicators that must be used to measure how fit the data are. These indicators are Normed fit index (NFI), Comparative fit index (CFI) and Relative non-centrality index (RNI), Root Mean Squared Error of Approximation (RMSEA), Goodness of Fit Index (GFI), Normed Fit Index (NFI) and Comparative Fit Index (CFI). Table 13 is the results generated by the Smart PLS version 4. This result therefore means that the questionnaire items and constructs have significant relationship among themselves.

#### Assessment of the significance of the variables

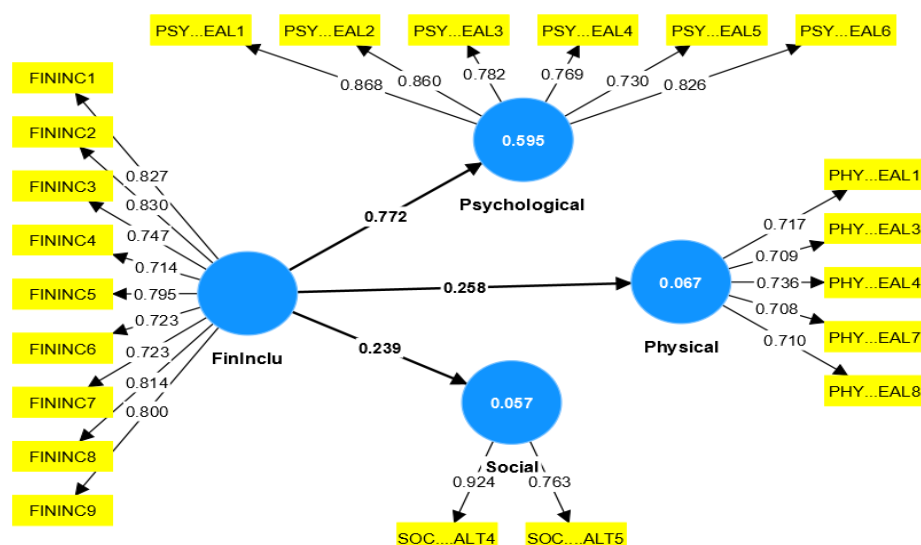


Figure 1: Smart Pls Model  
Source: Field Survey (2023)

### Financial Inclusion and Physical Health of older adults

The first objective of the study was to analyse the effect of financial inclusion on physical health of older adults. The outcome is presented on Table 7.

**Table 7: Financial inclusion and physical health**

	Path	T- statistics	R <sup>2</sup>	Adjusted R <sup>2</sup>	Q <sup>2</sup>	P- value	F <sup>2</sup>
Physical			0.67	0.57	0.5319		
FinInclud	0.258	2.615				0.009	0.172

*Source: Field Survey (2023)*

From Table 7, there was a positive and significant effect between financial inclusion and physical health being of older adults [ $B=0.258$ ;  $t(154)=2.615$ ;  $p < 0.05$ ]. A unit increase in financial inclusion would lead to a 0.258 increase in physical health of older adults visiting the University of Cape Coast Hospital. Financial inclusion ensures that older adults have the financial means to access necessary healthcare services. It enables them to afford medical consultations, diagnostic tests, medications, and treatments. When older adults can access healthcare services promptly, they can receive timely interventions and improve their overall physical health. Also, financially inclusive individuals are more likely to afford regular preventive healthcare, such as vaccinations, screenings, and health check-ups. These preventive measures can detect health issues at an early stage, allowing for timely treatment and management. Older adults who can prioritize preventive care are more likely to maintain better physical health and prevent the exacerbation of chronic conditions.

Financial inclusion enables older adults to seek timely medical treatment and adhere to prescribed medications. Delayed or inadequate treatment due to financial constraints can worsen health conditions and lead to more severe health complications. Access to proper treatment and medication adherence improves health outcomes and reduces the risk of hospital visits for older adults. Also, financial inclusion enhances the ability of older adults to afford nutritious food. Proper nutrition is vital for maintaining physical health, especially for older adults with chronic conditions or those recovering from illnesses. Adequate nutrition supports immune function, helps in recovery, and reduces the risk of hospitalization. Older adults may require assistive devices such as mobility aids, hearing aids, or visual aids to maintain their physical health and independence. Financial inclusion ensures that older adults can afford these devices, improving their mobility, communication, and overall physical well-being. Access to assistive devices can reduce falls, improve mobility, and enhance the overall quality of life.

Financial inclusion significantly influences the physical health of older adults visiting the hospital by improving access to healthcare services, enabling preventive care, facilitating timely treatment and medication adherence, supporting proper nutrition, reducing stress and mental health impacts, and ensuring access to necessary assistive devices. By addressing financial barriers, older adults can lead healthier lives and reduce the need for hospital visits. The results of the study are consistent with studies by Ajefu, Demir and Haghpanahan (2020) and Gyasi et al., (2022) who found that financial inclusion can enhance physical wellbeing of the patients in the hospital.

### Financial Inclusion and Psychological Health of older adults

The second objective of the study was to analyse the effect of financial inclusion on psychological health of older adults. The outcome is presented on Table 8.

**Table 8: Financial inclusion and psychological health**

Path	T-	R <sup>2</sup>	Adjusted R <sup>2</sup>	Q <sup>2</sup>	P-value	F <sup>2</sup>
Psychological		0.595	0.591	0.4208		
FinInclud	0.7728	18.921			0.000	

Source: Field Survey (2023)

From Table 8, there was a positive and significant relationship between financial inclusion and psychological health of health of older adults visiting the University of Cape Coast hospital [ $B=0.7728$ ;  $t(154)=2.615$ ;  $p < 0.05$ ]. A unit increase in financial inclusion would lead to a 0.7788 increase in psychological health being of older adults visiting the University of Cape Coast Hospital. Financial inclusion ensures that older adults have the necessary financial resources to cover medical expenses, reducing financial stress. When individuals are not burdened by financial worries, it positively affects their mental well-being. Older adults experiencing financial difficulties may face anxiety, depression, and other mental health issues. By providing access to financial resources, financial inclusion helps alleviate these stressors and promotes better psychological health. Also, financial inclusion increases older adults' ability to access mental health services. Adequate financial resources enable them to seek professional help for mental health concerns, such as therapy or counselling. Access to mental health services allows for

early detection and intervention, leading to better management of psychological health conditions.

Financial inclusion can support older adults in maintaining social connections, which is crucial for their psychological well-being. Having the financial means to participate in social activities, engage in hobbies, or meet friends and family members can reduce feelings of isolation and loneliness. Strong social connections are known to promote mental health and contribute to overall well-being. Moreover, financial inclusion allows older adults to engage in recreational activities that promote mental well-being. Participation in hobbies, sports, and other leisure activities has been shown to have a positive impact on psychological health. With financial resources, older adults can afford to pursue activities they enjoy, which can improve mood, reduce stress, and enhance their overall mental well-being.

Financial inclusion empowers older adults by providing them with a sense of control and independence over their financial decisions. This autonomy can positively impact their psychological health. When individuals feel empowered and have control over their lives, it enhances their self-esteem, self-worth, and overall psychological well-being. Also, financial inclusion helps reduce mental health disparities among older adults. Financially disadvantaged individuals may face barriers in accessing mental health services and receiving appropriate care. By ensuring financial resources are available, financial inclusion helps bridge these disparities and promotes equitable access to mental health support, leading to improved psychological well-being.

Financial inclusion significantly influences the psychological health of older adults visiting the hospital by reducing financial stress, improving access to mental health services, enhancing social connections, facilitating participation in recreational activities, promoting a sense of control and independence, and reducing mental health disparities. By addressing financial barriers, financial inclusion supports better psychological well-being for older adults. The finding from the study is consistent with Gyasi et al., (2019) and Gyasi and Adam (2021). They found that financial inclusion can also significantly enhance psychological health of older adults visiting the hospital.

#### **Financial Inclusion and Social Health of older adults**

The third objective of the study was to analyse the effect of financial inclusion on social health of older adults. The outcome is presented on Table 9.

**Table 9: Financial inclusion and social health**

Path	T-	R <sup>2</sup>	Adjusted R <sup>2</sup>	Q <sup>2</sup>	P-value	F <sup>2</sup>
Social				0.5319		
FinInclud	0.239	2.209			0.027	

*Source: Field Survey (2023)*

From Table 9, there was a positive and significant effect between financial inclusion and social wellbeing of older adults who visit the University of Cape Coast Hospital [B=0.239; t(154)=2.209; p < 0.05]. A unit increase in financial inclusion would lead to a 0.239 increase in social wellbeing of older adults who visit the University of Cape Coast Hospital. Financial inclusion enables older adults to participate in social activities and maintain an active social life. Having the financial means to engage in social



events, join community groups, or participate in recreational activities can foster social connections and reduce feelings of isolation. Active social engagement positively impacts the social health of older adults and contributes to their overall well-being. Also, financial inclusion allows older adults to build and maintain supportive social networks. They can afford to stay connected with family, friends, and their community, which provides emotional support and a sense of belonging. These networks play a crucial role in the social health of older adults by providing companionship, assistance, and a support system during times of illness or hospital visits.

Financial inclusion helps older adults access transportation services, such as taxis, rideshare services, or public transportation. This access is particularly important for hospital visits, as it ensures older adults can reach medical facilities without difficulty. The ability to travel independently or arrange transportation can enhance social health by facilitating interactions with others and reducing dependency on others for commuting. Moreover, financial inclusion enables older adults to participate in community programs and initiatives. These programs can range from educational workshops to volunteering opportunities, promoting social engagement and active involvement in the community. By participating in such programs, older adults can contribute their skills, knowledge, and experiences while forming meaningful connections with others.

Financial inclusion improves the overall quality of life for older adults. When individuals have the financial means to meet their basic needs and enjoy a comfortable lifestyle, it positively impacts their social health. Older adults with financial resources can afford housing, nutritious food, and other

amenities that contribute to their well-being. Financial security allows them to maintain social relationships and participate in social activities that enhance their social health. Also, financial inclusion helps reduce social inequalities among older adults. Financially disadvantaged individuals may face barriers to social participation due to limited resources. By addressing financial disparities, financial inclusion promotes equitable access to social opportunities and resources. It helps older adults overcome financial barriers that may otherwise restrict their social interactions and engagement.

Financial inclusion significantly influences the social health of older adults visiting the hospital by promoting social engagement, facilitating supportive networks, enabling access to transportation, fostering participation in community programs, improving overall quality of life, and reducing social inequalities. By addressing financial barriers, financial inclusion enhances the social well-being and overall quality of life for older adults. Malladi, Soni and Srinivasan (2021) also found out that there was a significant relationship between financial inclusion and social health of older adults.

### **Chapter Summary**

The chapter begun with the analysis of the demographic characteristics of the respondents. Analysis of the validity of the items used to measure the constructs were also undertaken. The use of cross loadings, convergent validity, discriminant validity and analysis of the model fitness were also undertaken. Assessment of the model structure was then undertaken. The relationship between the variables were examined and explained.

## CHAPTER FIVE

### SUMMARY, CONCLUSION AND RECOMMENDATION

#### Introduction

This chapter happens to be the last in the study. This chapter discusses the executive summary of the results, the conclusions, the policy implications, and the suggestions. The chapter also offers recommendations for more research.

#### Summary

The research studied on the effect of financial inclusion on health of older adults visiting the University of Cape Coast Hospital. Three objectives were established in order to achieve the purpose of the study. Objective one was to examine the impact of financial inclusion on the physical health of older adults visiting the University of Cape Coast hospital. The objective two was to determine the impact of financial inclusion on the psychological health of older adults visiting the University of Cape Coast hospital. The third and final objective was to analyze the relationship between financial inclusion and the health-well-being of older adults who visit the University of Cape Coast hospital.

The study was centered on capability theory. The “study employed the explanatory research design since the study tested the relationship between the various variables. The data collection instruments were questionnaire. The study employed the quantitative research approach. The simple random sampling technique was used in selecting a respondent of 154. Descriptive and Structural Equation were also used to analyse the objectives of the study

With respect to the first objective of the study, the study found that there was a positive and significant relationship between financial inclusion and physical health of older adults visiting the University of Cape Coast Hospital. Also, there was a positive and significant relationship between financial inclusion and psychological health of older adults visiting the University of Cape Coast Hospital. Also, it was found that there was a positive and significant relationship between financial inclusion and social well-being of older adults who visits the University of Cape Coast Hospital.

### **Conclusion**

In conclusion, financial inclusion plays a significant role in influencing the physical, psychological, and social health of older adults visiting the hospital. By addressing financial barriers, financial inclusion provides older adults with the means to access healthcare services, afford preventive care, receive timely treatment and medications, and maintain proper nutrition. This, in turn, improves their physical health and reduces the need for hospital visits.

Financial inclusion also has a positive impact on the psychological health of older adults by reducing financial stress, enabling access to mental health services, fostering social connections, promoting engagement in recreational activities, and empowering individuals with a sense of control and independence. These factors contribute to better mental well-being and overall psychological health.

Furthermore, financial inclusion enhances the social health of older adults by facilitating social engagement, supporting the formation of supportive networks, enabling access to transportation, promoting

participation in community programs, improving quality of life, and reducing social inequalities. These factors enhance social connections, reduce isolation, and contribute to a sense of belonging and community involvement.

Overall, financial inclusion is crucial in supporting the holistic well-being of older adults visiting the hospital. By addressing financial barriers, it empowers older adults to lead healthier, more fulfilling lives, and reduces the impact of financial constraints on their physical, psychological, and social health.

### **Recommendations**

Based on the findings of the study, the following recommendations are

- Develop and implement programs to enhance the financial literacy of older adults. This can include providing education on budgeting, managing expenses, understanding healthcare costs, and accessing financial resources. Improved financial literacy empowers older adults to make informed financial decisions and utilize available resources effectively.
- Work towards ensuring affordable healthcare services for older adults, including access to affordable insurance options and subsidized healthcare programs. This can help alleviate the financial burden of medical expenses and improve the overall financial inclusion of older adults.
- Enhance the availability and accessibility of social support networks for older adults. This can involve developing community programs, support groups, and volunteer initiatives that promote social connections, combat isolation, and provide emotional support.

- Encourage collaboration between financial institutions and healthcare providers to develop innovative financial products and services tailored to the specific needs of older adults. This can include flexible payment options, affordable loans for medical expenses, and insurance plans with comprehensive coverage.
- Advocate for policy changes that promote financial inclusion and address the unique financial challenges faced by older adults. This can involve advocating for increased access to social security benefits, retirement savings programs, and affordable housing options.
- Encourage research and evaluation to understand the specific needs and challenges faced by older adults in terms of financial inclusion and healthcare access. This can help identify gaps and inform the development of targeted interventions and policies.
- Increase awareness among older adults, caregivers, and healthcare professionals about the importance of financial inclusion for overall health and well-being. Provide resources and information on available financial support programs, healthcare subsidies, and community resources that can assist older adults in achieving financial security.

### **Suggestions for Future Research**

This study concentrated on financial inclusion. Physical health, psychological health and social wellbeing of older adults that visited the University of Cape Coast Hospital. This objective was achieved by using quantitative data. Further research can consider the use of qualitative data since this will give the exact feelings on what actually causes customers to be satisfied and loyal to the telecommunication companies.

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**APPENDICES****UNIVERSITY OF CAPE COAST****QUESTIONNAIRE****SECTION A: DEMOGRAPHIC CHARACTERISTICS**

All the answers you provide will be treated with the utmost confidentiality and for academic purpose only. Please feel free to answer the questions as candid as possible.

Thank you

1. Sex distribution: Male ☐ Female ☐

2. Age range of respondents in years:

40-49 ☐ 50-59 ☐ 60-69 ☐ 70-79 ☐

3. Household size

0-3 ☐ 4-6 ☐ 7-9 ☐ > 10 ☐

4. Marital Status

Single ☐ Married ☐ Divorced ☐ Widowed ☐

5. Level of Education

Non formal ☐ Basic Education ☐  
Secondary Education ☐ Middle School ☐ Tertiary Education ☐

6. Employment status

Unemployed ☐ Retired ☐ Employed ☐  
Self-employed ☐

7. Types of occupation

Craft and related trade workers ☐ Elementary Occupations ☐  
Plant Machine Operators and assemblers ☐ Professionals ☐  
Service/Sales Workers ☐ Skilled agriculture/fishery  
workers ☐ Technicians and associate professionals ☐

**SECTION B: FINANCIAL INCLUSION**

Based on the respective scales provided, kindly tick a number that best represents your opinion on each statement. Where 5 – Strongly Agree 4 – Agree 3- Neutral 2- Disagree 1 – Strongly Disagree

No		1	2	3	4	5
	<b>FINANCIAL INCLUSION</b>					
1	I feel confident in my ability to access and use financial services.					
2	I believe that financial services are easily accessible in my community.					
3	I am aware of the various financial products and services available to me.					
4	I have a bank account or a formal financial account.					
5	I have access to affordable credit options.					
6	I feel that I am treated fairly and respectfully by financial institutions.					
7	I have access to financial education and resources to improve my financial knowledge.					
8	I have the necessary information and tools to make informed financial decisions.					
9	I believe that financial services are affordable and transparent.					
10	I feel included and represented in financial decision-making processes.					

**SECTION C: PHYSICAL HEALTH**

Based on the respective scales provided, kindly tick a number that best represents your opinion on each statement. Where 5 – Strongly Agree 4 – Agree 3- Neutral 2- Disagree 1 – Strongly Disagree

No		1	2	3	4	5
	<b>PHYSICAL HEALTH</b>					
1	I believe that the healthcare services provided in this hospital are of high quality.					
2	I feel confident in the competence and expertise of the healthcare professionals in this hospital.					
3	I am satisfied with the level of communication and information provided by the healthcare staff.					
4	I believe that the hospital facilities are well-equipped and conducive to promoting physical health.					
5	I feel that the healthcare staff listen attentively to my concerns and address them effectively.					
6	I have access to a range of specialized medical services and treatments in this hospital.					
7	I feel that the hospital environment is safe and conducive to my physical well-being.					
8	I am actively involved in decisions regarding my healthcare and treatment options.					
9	I am provided with sufficient information and support for managing my chronic health conditions.					
10	I believe that the hospital promotes preventive healthcare and encourages healthy lifestyle choices.					

**SECTION D: PSYCHOLOGICAL HEALTH**

Based on the respective scales provided, kindly tick a number that best represents your opinion on each statement. Where 5 – Strongly Agree 4 – Agree 3- Neutral 2- Disagree 1 – Strongly Disagree

No		1	2	3	4	5
	<b>PSYCHOLOGICAL HEALTH</b>					
1	I feel emotionally content and satisfied with my life.					
2	I believe that I have a strong support network of family and friends.					
3	I feel valued and appreciated by those around me.					
4	I am able to effectively manage and cope with stress in my daily life.					
5	I have a positive outlook on life and feel hopeful about the future.					
6	I am able to maintain a sense of purpose and meaning in my activities and relationships.					
7	I feel emotionally resilient and capable of bouncing back from adversity.					
8	I am satisfied with my level of self-esteem and self-worth.					
9	I feel comfortable expressing my emotions and thoughts to others.					
10	I believe that I have the skills and resources to solve problems and overcome challenges.					

**THANK YOU**