THE IMPACT OF MINDFULLNESS IN THE RELATIONSHIP OF FINANCIAL LITERACY AND FINANCIAL WELLBEING: EVIDENCE FROM BALOCHISTAN, PAKISTAN

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by

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AVE	Average Variance Extracted
CFPB	Consumer Financial Protection Bureau
CMV	Common Method Variance
CMB	Common Method Bias
CB-SEM	Covariance-Based Structural Equation Modelling
CR	Composite Reliability
DV	Discriminant Validity
FPSB	Financial Planning Standards Board
FWB	Financial Wellbeing
FSE	Financial Self-efficacy
FSA	Financial Socialization Agent
FL	Financial Literacy
FA	Financial Awareness
FO	Financial Optimism
FWBS	Financial Well-being Scale
FMBS	Financial Management Behaviour Scale
HTMT	Heterotrait-Monotrait
LOT-R	Life Orientation Test-Revised
MD	Mindfulness
NIBAF	National Institute of Banking and Finance
NFLS	National Financial Literacy Survey
OECD	Organization of Economic Cooperation Development
PBS	Pakistan Bureau of Statistics
PLS-SEM	Partial Least Square – Structural Equation Modelling
SBP	State Bank of Pakistan
SPSS	Statistical Package for Social Science
TCS	Theory of Consumer Socialization
VIF	Variance Inflation Factor

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KESAN KESEDARAN KENDIRI DALAM HUBUNGAN ANTARA LITERASI DAN KESEJAHTERAAN KEWANGAN: BUKTI DARI BALOCHISTAN, PAKISTAN

ABSTRAK

Literasi kewangan diakui secara meluas sebagai elemen asas dalam memperkasakan individu untuk membuat keputusan kewangan yang berinformasi dan mencapai kesejahteraan kewangan. Walaupun pentingnya literasi kewangan, terdapat kekurangan kajian yang ketara mengenai tahap literasi kewangan dan kesannya terhadap kesejahteraan kewangan di Pakistan, terutamanya di kawasan yang kurang bernasib baik dari segi ekonomi dan mempunyai kepelbagaian demografi seperti Balochistan. Kajian ini bertujuan untuk meneroka pengaruh faktor psikologi (optimisme kewangan, kecekapan kendiri kewangan, kesedaran minda), faktor kewangan (kesedaran kewangan, literasi kewangan), dan faktor sosial (agen sosialisasi kewangan) terhadap kesejahteraan kewangan individu yang menetap di Balochistan. Secara khusus, kajian ini menyiasat kesedaran minda dan kecekapan kendiri kewangan sebagai pembolehubah pemoderatan, manakala literasi kewangan berfungsi sebagai pembolehubah pengantaraan dalam kerangka teori yang dibangunkan. Berasaskan Teori Proses Dua, Teori Pembelajaran Sosial, dan Teori Sosialisasi Pengguna, kajian ini menyumbang kepada literatur sedia ada dengan mengintegrasikan perspektif teori ini untuk menilai penentu literasi kewangan dan kesejahteraan kewangan di Balochistan. Kajian ini menggunakan reka bentuk penyelidikan keratan rentas, dengan menggunakan pensampelan bertujuan untuk mengumpul data daripada 704 responden di lima daerah paling ramai penduduk di Balochistan. Sebanyak 608 respon yang sah, dengan kadar tindak balas sebanyak 76%, telah dianalisis. Ciri-ciri pengukuran telah dinilai melalui ujian kesahihan konvergen dan diskriminan, dan hipotesis diuji menggunakan Pemodelan Persamaan Struktur Kaedah Kuasa Dua Terkecil Separa (PLS-SEM). Dapatan kajian menunjukkan bahawa optimisme kewangan dan kesedaran kewangan mempunyai pengaruh positif terhadap literasi kewangan. Tambahan pula, literasi kewangan secara signifikan menjadi pengantara dalam hubungan antara optimisme kewangan dan kesedaran kewangan dengan kesejahteraan kewangan, manakala agen sosialisasi kewangan tidak memberi kesan langsung terhadap kesejahteraan kewangan. Analisis pemoderatan menonjolkan bahawa kecekapan kendiri kewangan memperkukuhkan hubungan antara agen sosialisasi kewangan, kesedaran kewangan, dan literasi kewangan. Selain itu, kesedaran minda menunjukkan kesan pemoderatan yang ketara dalam hubungan antara literasi kewangan dan kesejahteraan kewangan. Kajian ini menyediakan implikasi teori dan praktikal yang penting. Dengan memperluaskan literatur sedia ada mengenai penentu psikologi, kewangan, dan sosial terhadap kesejahteraan kewangan, kajian ini menawarkan pandangan yang berharga kepada penggubal dasar dan pengamal, terutamanya di Balochistan, yang bertujuan untuk meningkatkan kesejahteraan kewangan melalui pendidikan dan intervensi kewangan yang disasarkan. Kajian ini diakhiri dengan perbincangan dan cadangan untuk penyelidikan masa depan bagi meneroka dengan lebih lanjut kerumitan kesejahteraan kewangan dalam konteks sosio-ekonomi yang berbeza. Secara keseluruhan, penyelidikan ini meningkatkan pemahaman tentang pelbagai faktor yang mempengaruhi kesejahteraan kewangan dan menawarkan sumbangan yang signifikan kepada teori dan amalan.

THE IMPACT OF MINDFULLNESS IN THE RELATIONSHIP OF FINANCIAL LITERACY AND FINANCIAL WELLBEING: EVIDENCE FROM BALOCHISTAN, PAKISTAN

ABSTRACT

Financial literacy is widely recognized as a fundamental element in empowering individuals to make informed financial decisions and attain financial wellbeing. Despite its importance, a notable dearth of research exists on financial literacy levels and their impact on financial wellbeing in Pakistan, particularly in economically disadvantaged and demographically diverse regions such as Balochistan. This study aims to explore the influence of psychological factors (financial optimism, financial self-efficacy, mindfulness), financial factors (financial awareness, financial literacy), and social factors (financial socialization agents) on the financial wellbeing of individuals residing in Balochistan. Specifically, the research investigates mindfulness and financial self-efficacy as moderating variables, with financial literacy serving as a mediating variable within the framework. Grounded in the Dual Process Theory, Social Learning Theory, and Consumer Socialization Theory, this research contributes to the existing literature by integrating these theoretical perspectives to evaluate the determinants of financial literacy and financial wellbeing in Balochistan. The study adopts a cross-sectional research design, employing purposive sampling to collect data from 704 respondents across the five most populous districts of Balochistan. A total of 608 valid responses, reflecting a 76% response rate, were analysed. Measurement properties were assessed through convergent and discriminant validity tests, and the hypotheses were tested using Partial Least Squares Structural Equation Modeling (PLS-SEM). The findings reveal that financial optimism and financial awareness positively influence financial literacy. Furthermore, financial literacy significantly mediates the relationship between financial optimism and financial awareness with financial wellbeing, whereas financial socialization agents do not directly impact financial wellbeing. The moderation analysis highlights that financial self-efficacy substantially strengthens the relationships among financial socialization agents, financial awareness, and financial literacy. Moreover, mindfulness exhibits a significant moderating effect on the relationship between financial literacy and financial wellbeing. This study provides important theoretical and practical implications. By expanding the existing literature on psychological, financial, and social determinants of financial wellbeing, the research offers valuable insights for policymakers and practitioners, particularly in Balochistan, who aim to improve financial wellbeing through targeted financial education and interventions. The study concludes with a discussion and offers recommendations for future research to further investigate the complexities of financial wellbeing in diverse socio-economic contexts. Overall, this research enhances the understanding of the multifaceted drivers of financial wellbeing and offers a significant contribution to both theory and practice.

CHAPTER 1

INTRODUCTION

1.1 Introduction

Financial wellbeing is widely recognized as a vital component of overall quality of life, encompassing the ability to manage financial resources effectively to satisfy both present and future needs (Netemeyer et al., 2018). It encompasses more than just having a substantial income; rather, it involves efficient daily financial management, resilience to financial disruptions, and the autonomy to make decisions that facilitate a fulfilling life (Atul & Sangeeta, 2022). Financial wellbeing is influenced by multiple factors, including economic conditions, personal financial management skills, and psychological elements, such as financial confidence and future planning (Brüggen et al., 2017; Khan et al., 2023). A high level of financial wellbeing fosters reduced stress, enhanced life satisfaction, and the ability to achieve long-term objectives. Conversely, inadequate financial wellbeing can lead to financial stress, compromised mental health, and limited life choices, underscoring the importance of comprehending the elements that improve financial wellbeing.

Financial literacy, defined as the capacity to comprehend and utilize financial information and instruments, is a vital skill for effective personal financial management (Hasler & Lusardi, 2017). It includes a broad range of competencies, encompassing comprehension of fundamental financial concepts such as interest rates, inflation, risk diversification and practical skills like budgeting, saving, investing, and debt management. Financial literacy empowers individuals to make informed decisions aligned with their financial objectives, avoid common financial threats, and address unexpected financial challenges (Zaimovic et al., 2023). Despite its significance, numerous individuals lack sufficient financial literacy, leading to suboptimal financial practices, including excessive spending, inadequate savings, and poor investment decisions (OECD, 2022). However, recent studies (Arofah, 2019; Böhm et al., 2023; Castañeda et al., 2022; Goyal & Kumar, 2021) indicate that financial literacy is positively correlated with desirable financial behaviors, such as increased savings rates, reduced debt levels, and enhanced retirement planning. Enhancing financial literacy through targeted education and interventions is essential for enabling individuals to manage their finances proficiently.

Research has extensively established the link between financial literacy and financial wellbeing, emphasizing the significant impact of financial knowledge and awareness on financial wellbeing and stability (Ingale & Paluri, 2020). Individuals with high financial literacy are better equipped to make informed financial decisions that enhance their financial well-being, including effective budget management, strategic investing, and emergency preparedness (Michael & Urban, 2020). Financial literacy provides the foundation for financial wellbeing by equipping individuals with the necessary competencies to navigate financial challenges, avoid high-cost financial products, and attain their financial objectives (Kadoya & Khan, 2018; Mireku et al., 2023). Furthermore, financial literacy enhances individuals' ability to manage their finances effectively, positively influencing their financial behaviors and, consequently, their financial well-being.

However, most of previous research on financial well-being has either focused on individuals aspects such as income, education, or fundamental financial education programs or has focussed on relatively homogeneous, well-resourced communities in

Western or urban Asian contexts. Research that concurrently examines psychological dispositions i.e. (optimism), social influences (financial socialisation agents), and financial factors (financial awareness) remains scarce, with virtually no studies conducted in the chronically underserved, linguistically diverse, and low-literacy province of Balochistan, Pakistan. Consequently, recent studies provides limited insight into how these interconnected factors manifest in contexts with limited formal financial access, significant language barriers, and where only approximately 6% households has the fundamental levels of financial literacy.

This study differentiate with recent studies in four aspects. First, by examining the combined effects of financial optimism, financial socialisation agents, and financial awareness on financial literacy and financial wellbeing in a unified framework, it provides the most thorough model to date for Balochistan. Previous empirical studies often examined each variable optimism (Grevenbrock 2020), socialisation agents (Khawar & Sarwar 2021), or awareness (Damayanti et al. 2018) in isolation, failing to capture their interacting dynamics. Second, this study presents two least explored psychological moderators to the field of behavioral finance, illustrating that financial self-efficacy enhances the relationship between financial socialization agents & financial awareness and financial literacy, additional mindfulness strengthens the association between financial literacy and FWB. Additionally, Previous studies provided inconclusive results on the impact of optimism, social influences, and awareness on financial wellbeing. Current research elucidates the mediating effect of FL on FO & FA improve FWB.

Third, rational for the study is employed integrated theoretical farmwork using Dual-Process Theory with Social Learning and Consumer Socialisation Theory, illustrating the interaction between rapid, intuitive judgements (System 1) and analytically reasoned decisions (System 2) synthesis broadens the scope of behavioural finance beyond typical western context. Finally, By employing the integrated mediated moderated model, the study demonstrates a comprehensive way to assess complex financial behaviour mechanisms, offering a framework for future research in the developing countries. Collectively, these components an insufficiently explored context, a multifaceted explanatory framework, innovative psychological moderators, a cohesive theoretical perspective, and a rigorous empirical methodology distinctly distinguished this study from the current literature and enable it to guide more precise, culturally sensitive financial well-being policies in particularly Balochistan, Pakistan and beyond.

The primary objective of this study is to investigate the impact of financial optimism, financial socialization agents, and financial awareness on financial literacy. Additionally, this research examines the possibility that enhanced financial literacy contributes to improved individual financial well-being. This study examines two moderating effects of financial self-efficacy and mindfulness as well as the mediating influence of financial literacy. This chapter is organized as follows: beginning with the study's background, followed by the research motivation, problem statement, objectives, and questions. Subsequently, it outlines the study's scope, significance, key terms definitions, and thesis organization.

1.2 Background of the Study

From the outset, individuals strive to achieve life goals, with happiness often interpreted as accomplishing one's aspirations. Notably, accumulating wealth, pursuing career objectives, advancing education, and making meaningful contributions to others' lives are metrics for quantifying individual success (Shim et al., 2009). However, financial constraints significantly impact purchasing power, quality of life, and long-term goal achievement for individuals and their families. In contrast, wellbeing encompasses a state of mental and physical comfort and fulfilment. Specifically, financial well-being represents an individual's perception of financial circumstances' satisfaction level. Emerging in industrialized nations, financial wellbeing concepts have been integrated into fields like medicine, economics and finance, psychology, and public health (Brenner et al., 2020; Lee et al., 2020). According to the Consumer Financial Protection Bureau (CFPB, 2019), financial wellbeing is characterized by effective daily and monthly financial management, resilience in unforeseen financial circumstances, achievement of financial objectives, and financial independence to make life-enhancing decisions. Similarly, Mahendru et al. (2022) define financial wellbeing as behaviors promoting financial independence and timely payment of existing and future financial commitments.

However, the concept of wellbeing has evolved to encompass both material and immaterial aspects of an individual's financial situation, enhancing quality of life, financial stability, sense of safety and comfort, and contentment with resource distribution (Philippas & Avdoulas, 2020; Taft et al., 2013). In recent years, the concept of financial wellbeing has gained significant traction, particularly following the far-reaching consequences of the COVID-19 pandemic on individuals' personal, economic, and business spheres in early 2020. Financial wellbeing has become a pressing concern for individuals, households, societies, and nations, driven by low savings rates and inadequate long-term financial planning for retirement (Mahendru et al., 2022).

In today's competitive world, financial stability is essential for society as a whole. Enhancing individual financial wellbeing, which encompasses effective financial management skills, is crucial for improving overall welfare (Brüggen et al., 2017; Gutter & Copur, 2011). The literature suggests that financial mismanagement stems not from inadequate revenue, but rather from a lack of financial literacy and ineffective prioritization of spending habits (Adam et al., 2017; Chu et al., 2017). Given the increasing digitization, accessibility, and availability of financial markets in recent years, this issue has taken on added significance. Unfortunately, individuals often make suboptimal financial decisions due to a limited understanding of fundamental financial principles. Consequently, individuals and businesses with low financial literacy levels risk making costly mistakes when managing money or making economic decisions (Arceo-Gomez & Villagómez, 2017).

Furthermore, the concept of financial literacy was initially introduced by the US non-profit organization, the Jumpstart Coalition for Personal Financial Literacy. According to Jumpstart, financial literacy encompasses the skills to effectively utilize financial resources and the ability to make wise financial decisions (Hastings et al., 2013). Researchers have defined financial literacy in various ways. Atkinson and Messy (2012) describe financial literacy as a combination of knowledge, abilities, attitudes, and behaviors that influence financial decisions and ultimately contribute to wellbeing. In contrast, Finke and Huston (2014) view financial literacy as a distinct concept that encompasses the application of financial knowledge and expertise to achieve positive outcomes, rather than merely the decision-making process itself.

Furthermore, researchers such as Abdullah et al. (2019); Baranidharan et al. (2023); Iram et al. (2022); Narmaditya and Sahid (2023) emphasize that assessing an individual's financial literacy level is crucial for making informed financial decisions and achieving financial wellbeing. The importance of financial literacy has intensified following the Asian financial crisis in 1998, the global financial crisis in 2007-2009, and the European sovereign debt crisis in 2012 (Lusardi, 2019; Yong & Tan, 2017). The evolving superannuation landscape, increasing longevity, and lasting effects of financial crises underscore the need for financial literacy as a best practice for individuals and society to manage their finances and protect against fraudulent activities. Consequently, governments, banks, employees, community groups, financial markets, and other institutions, alongside individuals, are increasingly prioritizing financial literacy, particularly in developing nations (Al-Tamimi, 2009; Firli, 2017). Financial literacy encompasses the ability to gather, comprehend, and evaluate financial data to make sound decisions, as well as the willingness to accept the consequences of those decisions (Bongomin et al., 2017).

Financial literacy is essential for individuals to make informed decisions in complex financial environments, significantly impacting their financial wellbeing. Research by Ingale and Paluri (2020); Mutamimah and Indriastuti (2023); Prameswari et al. (2023); Skagerlund et al. (2018); Zaimovic et al. (2023) consistently show a strong correlation between financial literacy and financial wellbeing. Lusardi (2019) argues that individuals with high financial literacy levels are more likely to exhibit prudent financial behavior, leading to improved financial outcomes. Moreover, possessing financial literacy is critical for developing resilience against economic uncertainty and unforeseen financial shocks (Hastings et al., 2013).

Tinghög et al. (2021) suggest that individuals with optimistic views tend to anticipate positive life outcomes, whereas those with pessimistic views anticipate negative outcomes. Their study highlights the established correlation between financial optimism, financial literacy, and financial wellbeing. Notably, individuals with a positive outlook on their financial future exhibit higher work engagement, greater savings propensity, active stock market participation, and an increased likelihood of investing in specific equities. However, extreme financial optimism is linked to risky financial habits and behavior, whereas moderate financial optimism promotes responsible financial decisions and self-control (Mawad, 2022). Similarly, Strömbäck et al. (2020) observed that optimists typically display improved financial behavior, feeling less concerned and more secure about their financial situations.

According to Grevenbrock (2020), pessimism significantly impacts individuals' financial literacy and well-being. Individuals with a negative and pessimistic attitude tend to postpone financial decisions, show less interest in financial knowledge, and exhibit risk-averse behaviors, hindering financial literacy development. A negative outlook can also discourage financial education pursuit and dampen motivation to improve financial abilities, restricting informed financial decision-making (Chhatwani & Mishra, 2021). Moreover, pessimism adversely affects financial welfare by influencing risk-taking behaviors, impeding investment choices, and leading to suboptimal financial planning (White et al., 2021). Dhaoui (2015) study revealed that pessimism decreases financial involvement and reduces the likelihood of taking essential financial risks, ultimately diminishing financial wellbeing. Understanding the complex relationship between pessimism, financial literacy, and financial wellbeing is crucial for developing targeted interventions that address psychological barriers and promote favourable financial outcomes.

Additionally, research by Asad et al. (2018); Mohamed (2017); Rea et al. (2019); Riaz et al. (2022); Zhao and Zhang (2020) indicate that financial socialization agents, such as parents, peers, schools, and media, play a pivotal role in shaping individuals' financial literacy and wellbeing. These agents influence financial attitudes, behaviors, and skills developed from a young age. Financial socialization is crucial as it establishes the foundation for individuals' financial perceptions and management throughout their lives. Recent studies demonstrate that effective financial socialization fosters improved financial literacy, which, in turn, enhances financial wellbeing (Mohamed, 2017; Rea et al., 2019; Zhao & Zhang, 2020).

The existing literature highlights the critical interaction between financial socialization agents and financial literacy in determining financial wellbeing. Well-socialized individuals are more likely to develop sound financial habits and decision-making skills, essential for achieving long-term financial wellbeing (Sharif & Naghavi, 2020; Ullah & Yusheng, 2020). Financial socialization agents play a significant role in developing financial literacy by providing knowledge and behavioural cues that form the basis of financial understanding (Rea et al., 2019). Recently, the importance of understanding financial socialization agents' influence on financial literacy and wellbeing has gained traction, particularly amidst economic uncertainty and evolving financial landscapes. Research emphasizes the need for parents and educators to actively promote financial literacy from an early age, equipping individuals with the necessary skills to navigate complex financial environments (Asad et al., 2018).

Conversely, financial awareness, the foundational stage of financial education, encompasses individuals' ability to recognize and comprehend basic financial concepts and their significance in everyday decision-making (Lusardi & Messy, 2023). Amidst today's intricate financial landscape, heightened financial awareness is crucial for informed decision-making regarding savings, investments, and expenditures, ultimately enhancing financial security and overall wellbeing (OECD, 2022).

Building on financial awareness, financial literacy encompasses the knowledge, skills, and confidence necessary for effective financial resource management. According to Grohmann et al. (2018), financial literacy involves understanding key concepts such as interest rates, inflation, diversification, and risk which enables individuals to navigate financial products and services with confidence. This knowledge is essential for making informed decisions aligned with long-term financial goals, fostering resilience against economic shocks (Lusardi, 2019). Moreover, financial literacy is particularly vital in regions with lower economic development, where educational gaps often result in poor financial outcomes (Atkinson & Messy, 2019).

Recent studies He and Ahunov (2022); Liu and Lin (2021); Prameswari et al. (2023) underscore the significance of enhancing financial literacy and awareness in reducing financial vulnerability and improving financial wellbeing, particularly in diverse demographic regions with socioeconomic disparities. Financial wellbeing, the ultimate goal of financial literacy initiatives, refers to the state where individuals meet their current and ongoing financial obligations, feel secure in their financial future, and make choices enabling them to enjoy life (Sági et al., 2020). Research highlights that financial awareness represents a basic understanding of financial concepts, laying the foundation for financial literacy. Financial literacy, in turn, encompasses a deeper comprehension and application of financial knowledge, including budgeting, investing, and debt management (Kenayathulla et al., 2020a; Lusardi, 2019; OECD, 2019; Yau & Wong, 2022). This knowledge is critical for informed decision-making contributing to financial wellbeing (Shim et al., 2019). Moreover, empowering individuals with sound financial decision-making tools can reduce poverty, enhance individual prosperity, and contribute to broader economic stability in these regions.

The prevalence of inadequate financial literacy can also be attributed to the lack of mindfulness, which involves attentive and non-evaluative observation of the current situation to gain a comprehensive understanding. Mindfulness is defined as "a method for enhancing awareness and skilfully coping with mental processes that contribute to emotional anguish and maladaptive behavior" (Baer et al., 2006). Conversely, mindfulness serves as a therapeutic approach and strategic tool to cultivate consciousness. According to Riaz et al. (2022), mindfulness entails paying complete attention to one's actions, enabling individuals to fully comprehend their circumstances and lived experiences. This study aimed to investigate the hypothesis that individuals often make financial decisions without considering potential outcomes due to inadequate financial literacy.

Self-efficacy manifests in various aspects of an individual's behavior, including resilience, outlook, and autonomy. According to Bandura's (1994) social learning theory, individuals with higher financial self-efficacy tend to view financial challenges as opportunities rather than barriers. Financial self-efficacy refers to an individual's confidence in managing financial resources, making informed decisions, and navigating complex financial situations (Amatucci & Crawley, 2011; Ghosh & Vinod, 2017). Research by Farrell et al. (2016) demonstrates that financial self-efficacy is distinct from financial literacy variables and positively impacts personal financial management behavior. Notably, investment and savings are associated with higher financial self-efficacy, whereas debt-related products are linked to lower financial self-efficacy. These dimensions of financial self-efficacy underscore the importance of recognizing that financial literacy encompasses not only understanding, proficiency, and trust in financial institutions but also modifying attitudes and behavior to achieve financial prosperity (Arofah, 2019).

1.2.1 Overview of Financial Wellbeing

Pakistan is a South Asian nation categorized as a lower-middle-income country by the World Bank. Comprising four provinces Punjab, Sindh, Khyber Pakhtunkhwa, and Balochistan Pakistan's regional dynamics vary significantly. Whereas, Balochistan considers as Pakistan's largest province by area but least populous, consistently ranks lowest across multiple development indicators compared to Punjab, Sindh, and Khyber Pakhtunkhwa (KPK). With a literacy rate of just 42% overall and only 32.8% among females, it lags far behind Punjab (70.5%), Sindh (65.4%), and KPK (59.1%) as of 2023 (PBS, 2023). Similarly, educational access remains problematic: nearly 47% of school-aged children in Balochistan are out of school versus 24% in Punjab, 44% in Sindh, and 32% in KPK. These deficiencies directly impact financial literacy, as lower educational attainment restricts individuals' ability to understand and manage financial information.

Poverty in Balochistan is significantly more severe than in other provinces. Estimates from 2019–20 show Balochistan's national poverty rate at approximately 40.7%, compared to Punjab's 16.3%, Sindh's 24.6%, and KPK's 27%. International data indicate that around 60% of Balochistan's population suffers from multidimensional poverty well above KPK (44%) and Punjab (34%). Additionally, traditional income poverty thresholds reveal that 69% live under $3.65/day in Balochistan, versus 33% in Punjab and 42% in Sindh. Such entrenched poverty suggests limited disposable income and financial resilience, posing critical obstacles to financial wellbeing.

Financial exclusion further characterizes Balochistan's disadvantaged landscape. Recent coverage shows that female account ownership in Balochistan is in single digits, whereas it is roughly 17% in Punjab, but still only 1% in Azad Kashmir. Nationwide data reflect a 13% overall female formal account ownership, contrasting with 34% for men. These disparities are exacerbated in Balochistan, where women's access to banking and financial services is severely restricted, thereby hindering their financial autonomy and participation in economic activities. Whereas, Punjab emerges as the most enriched province, with higher literacy, lower poverty, and stronger financial inclusion, especially among women. Sindh and KPK occupy intermediate positions, with Sindh struggling in urban poverty zones and KPK hampered by remittance dependency . Compared to other provinces Balochistan remains the most marginalized highest poverty and exclusion, lowest literacy, and minimal formal financial participation.

Notably, Balochistan, the country's poorest province, accounts for approximately 74% of impoverished households in rural areas (Hassan et al., 2020). Despite being the largest province by land area, Balochistan boasts an abundance of natural resources, including minerals, oil, and gas. The study emphasises on Balochistan because of its distinctively adverse socio-economic and demographic characteristics in comparison to the other provinces of Pakistan like Punjab, Sindh, and Khyber Pakhtunkhwa. Balochistan, the largest province by land size and abundant in natural resources, possesses the lowest financial literacy rate (5.6%) in Pakistan, extensive financial exclusion, and the greatest rural poverty rate (about 74%) (PBS, 2023). Additionally, cultural, linguistic, and infrastructural obstacles exacerbate the issue in Balochistan, over 63% of the population experiencing linguistic barriers, while more than 60% indicate insufficient access to regional bank branches. These components establish situations that substantially diverge from those in the rest of Pakistan, prompting a context-specific assessment. The study offers new insights by examining an under-explored area characterised by significant socioeconomic and demographic diversity, where conventional financial education methods have not succeeded.

In 2021, Balochistan faced significant financial wellbeing challenges, with Balochistan's circumstances being particularly dire. Notably, Balochistan had a higher rate of unbanked individuals due to insufficient funds, at 69% compared to Pakistan's national average of 55%. This disparity highlights widespread financial exclusion in Balochistan, potentially limiting access to formal financial services for a substantial portion of the population (PBS, 2017; State Bank of Pakistan, 2021). Furthermore, data reveals that only 1.50% of Balochistan's residents have saved for retirement, significantly lower than Pakistan's national average of 6%. The stark difference in financial status across age groups in Balochistan underscores a lack of financial preparedness for retirement, leaving the senior population vulnerable (PBS, 2017; State Bank of Pakistan, 2021).

The level of apprehension regarding medical expense coverage in the event of severe illness or accident was significantly greater in Balochistan, with 72% of individuals expressing concern, compared to Pakistan's national average of 59% (Hasan et al., 2023). Concerns regarding the payment of school tuition or education costs were significantly higher in Balochistan at 47%, compared to the national average of 27%. Similarly, 68% of respondents expressed concern about sufficiency of funds for monthly expenses or bills, exceeding the national average of 57%. Notably, 46% of respondents identified generating emergency finances within 30 days as the most pressing financial problem in Balochistan, a concern shared by only 16% nationally. This disparity highlights the urgent need for targeted interventions and policy measures to address Balochistan's acute financial issues (PBS, 2017; State Bank of Pakistan, 2021).

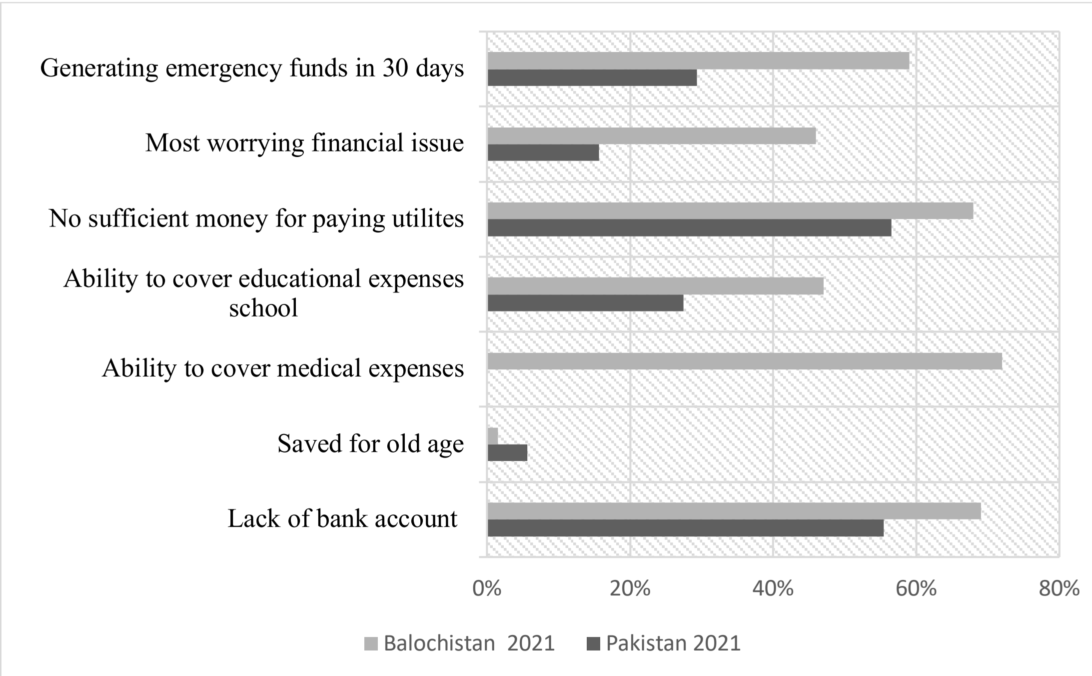

Figure 1.1 Preview of Financial Well-being in Balochistan (PBS, 2023)

1.2.2 Overview of Global Financial Literacy Initiatives

The Standard & Poor's Ratings Services Global Financial Literacy Survey (S&P Global FinLit Survey), conducted by Klapper et al. (2015), provides invaluable insights into financial literacy across diverse countries. The survey assessed participants' knowledge of four fundamental concepts: interest rates, interest compounding, inflation, and risk diversification, through targeted questions. Respondents who correctly answered at least three of these four concepts were considered financially literate. The S&P Global FinLit Survey revealed that only approximately one-third of respondents demonstrated financial literacy. Notably, women, low-income individuals, and those with limited education were more likely to lack basic financial understanding, a trend consistent across both developed and emerging economies. Figure 1.1 presents the financial literacy rates of various countries, as reported in the survey.

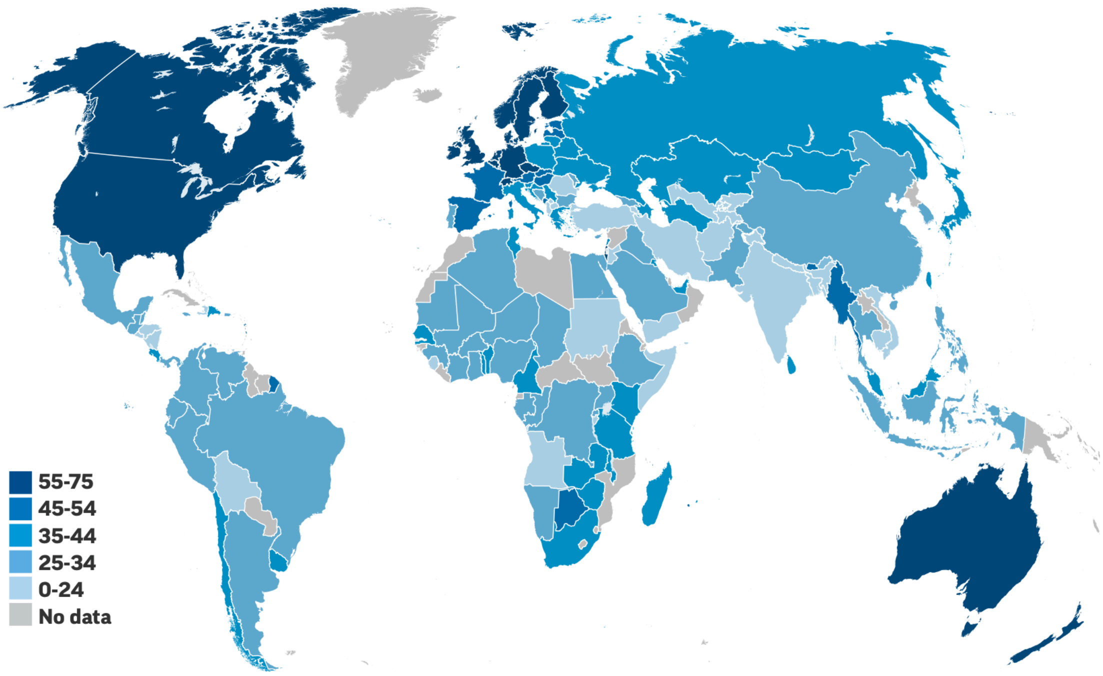

Figure 1.2 Percentage of Adults Financial Literacy around the World by (Klapper & Lusardi, 2020)

Adults in Israel, the Netherlands, Norway, Sweden, and the United Kingdom boast financial literacy rates of at least 65%. As illustrated in Figure 1.1, advanced economies like Australia, Canada, Denmark, Finland, Germany, and others dominate the top ranks of global financial literacy. In stark contrast, South Asia harbors some of the lowest financial literacy scores, with only approximately 29% of the population demonstrating financial literacy, significantly below the global standard. Similar challenges persist in Asia and the Middle East, mirroring those in Africa. Yemen and Afghanistan rank among the lowest, with financial literacy rates of 13% and 14%, respectively. Other countries with subpar financial literacy include Kyrgyzstan (19%), Nepal (18%), Bangladesh (19%), Cambodia (18%), and Pakistan (26%). China, the world's second-largest economy, scored a surprising 28% (Standard & Poor's Ratings Services). However, Myanmar and Bhutan stand out as exceptions, with remarkable financial literacy rates exceeding 50% of their populations.

1.2.3 Overview of Pakistan's Financial Literacy

Pakistan, with a population of approximately 231.4 million people (PBS, 2017), faces significant financial inclusion challenges. The State Bank of Pakistan (SBP) conducts a comprehensive national survey every three years to assess financial literacy levels across the country, providing provincial-level data. The most recent survey was conducted in 2019 revealed significant disparities in financial literacy across Pakistan's provinces. Notably, Punjab province exhibited the highest financial literacy level, with 25.3% of households demonstrating adequate financial knowledge. In contrast, Sindh, Khyber Pakhtunkhwa, and Balochistan reported lower levels, at percentages of 18.5%, 12.5%, and 5.6%, respectively (see Fig. 1.4).

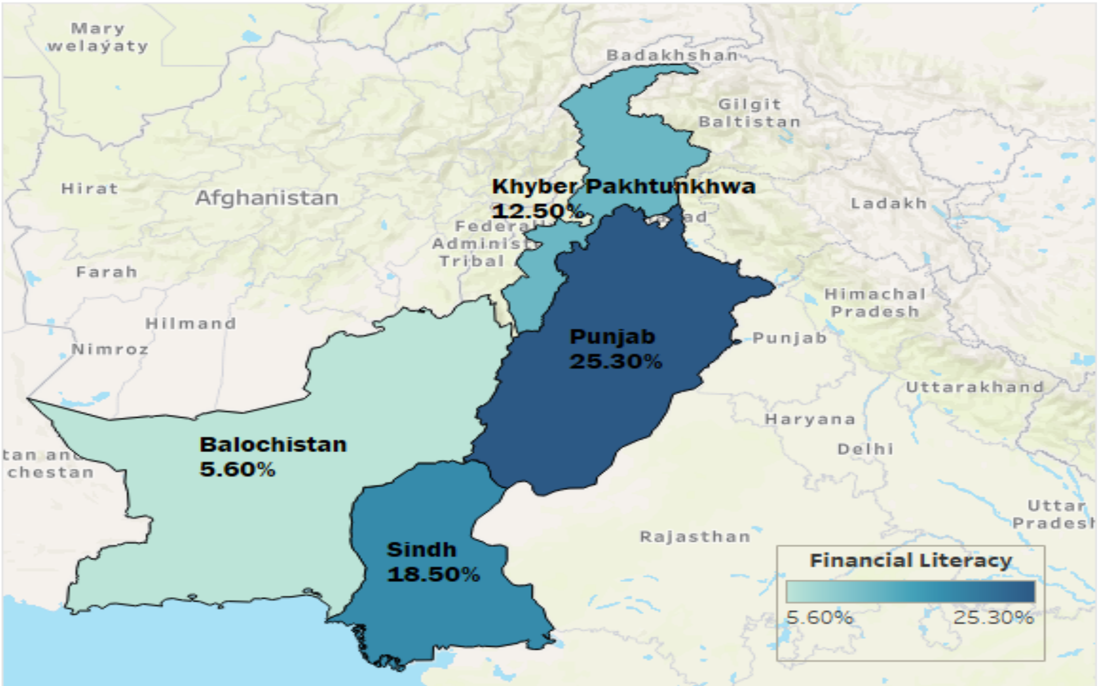

Figure 1.3 Overview of Financial Literacy Rate Across the Provinces of Pakistan

Source: PBS (2017)

According to the World Bank's 2017 Global Findex database, Pakistan has the lowest financial access rate globally, with 100 million unbanked adults 50% of the population (Demirgüç-Kunt et al., 2020). The Financial Literacy Survey 2021-22, conducted by the National Institute of Banking and Finance (NIBAF) and the State Bank of Pakistan (SBP) as part of the National Financial Literacy Program (NFLP), reveals alarming trends: one in three Pakistanis (53% of adults) lack confidence in their own money management skills. Further research reveals that 41% of respondents exhaust their monthly income, and 56% spend more than they earn. Additionally, only 15% can sustain themselves for over six months without employment, while a mere 61% have savings lasting only two months.

Although the survey revealed that Pakistanis were disproportionately affected by COVID-19 outbreaks, with approximately 54% of private-sector employees losing their jobs and over 60% depleting their funds, the pandemic's economic impact was severe. Nevertheless, Pakistan's financial sector exhibits alarmingly low penetration rates, with only 2.4% of the population accessing credit through official financial institutions. Furthermore, a stark gender disparity exists, with a mere 5% female participation rate in the finance sector, significantly lower than South Asia's average of 37% (State Bank of Pakistan). This disparity highlights a critical knowledge gap, potentially stemming from a lack of understanding about financial products and their utilization, which contributes to the significant percentage of the population lacking access to essential banking services.

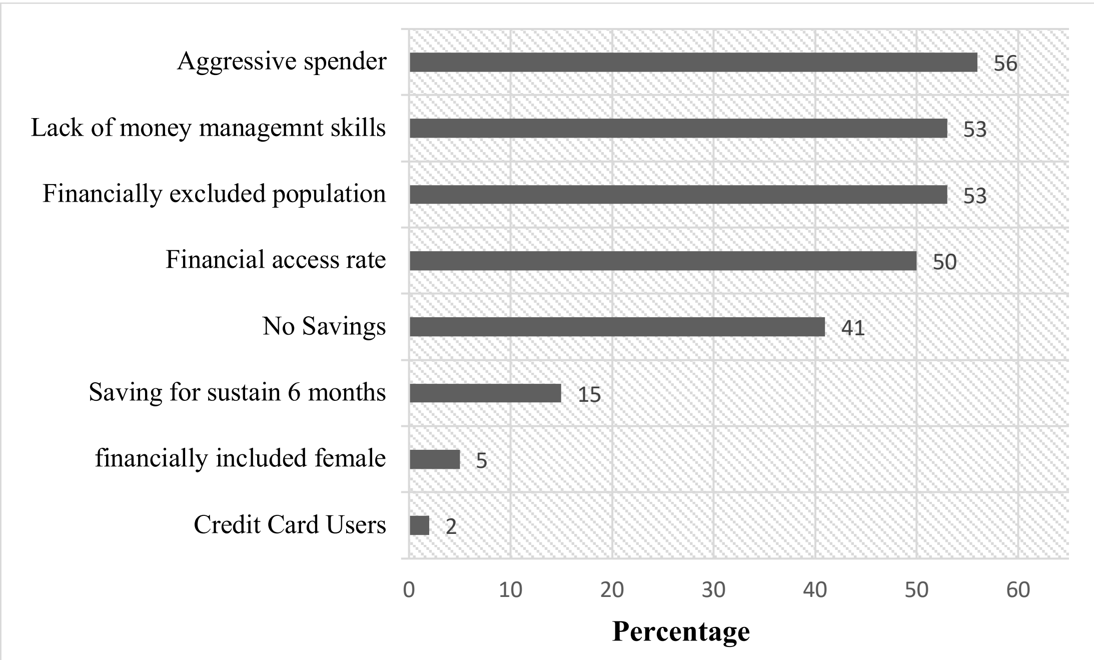

Figure 1.4 Preview of Financial illiteracy in Pakistan (PBS, 2023)

1.2.4 Overview of Balochistan's Financial Literacy

The demographic characteristics of Balochistan as per PBS (2023) visually represents the ethnic-linguistic composition in figure 1.5. According to PBS (2023), Balochistan's population is predominantly composed of two major ethnic groups:

Balochi (35.49%) and Pashto (35.34%), together accounting for over 70% of the province's demographic makeup. These are followed by Brahvi (17.12%), Punjabi (4.56%), Sindhi (3.00%), and Urdu-speaking or other groups (4.49%). The linguistic diversity of the region, as highlighted in Figure 1.5 adds another layer of complexity to implementing financial literacy programs and promoting financial wellbeing. Communication barriers and cultural factors can significantly affect outreach, comprehension, and the adoption of financial practices among various ethnic groups.

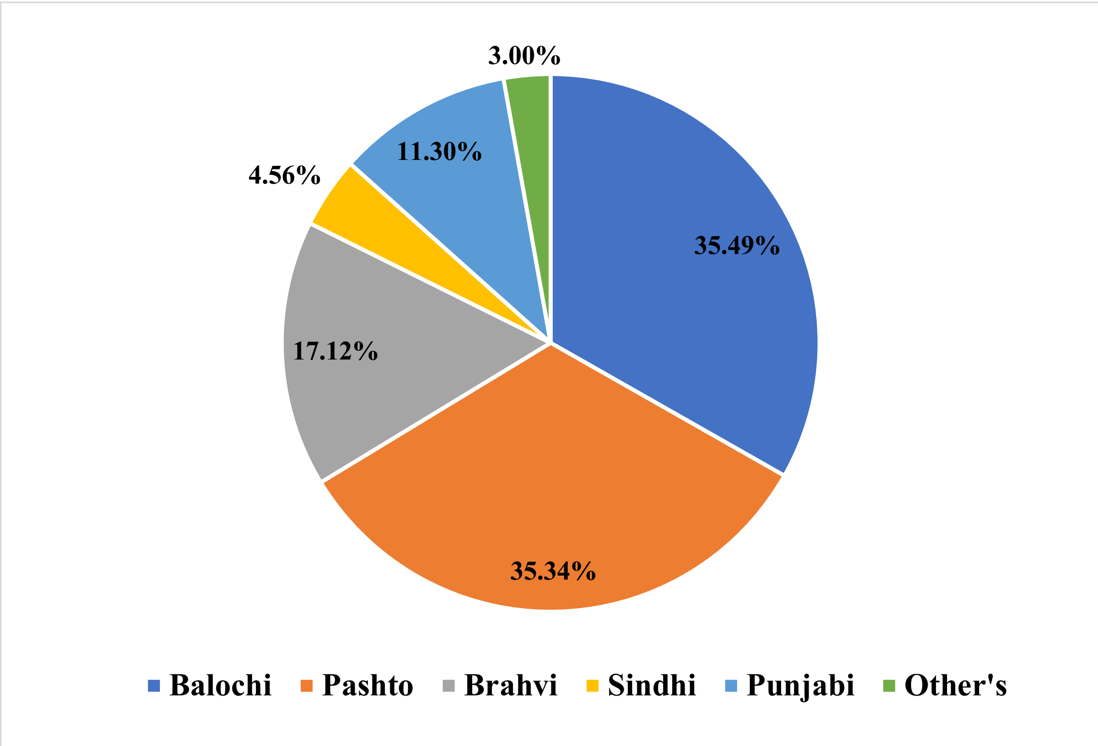

Figure 1.5 Demographic Characteristics of Balochistan (PBS, 2017)

According to provincial data, approximately 4.3 million people possess some level of education. A breakdown of the educated population reveals that 34.89% have education below the primary level, 21.06% have completed primary education, 14.18% have completed middle school, and 14.15% have completed matriculation. At higher education levels, 6.40% hold an intermediate degree, 4.46% are graduates, and 2.17% possess a master's degree or higher. Additionally, 0.19% hold a diploma or certificate, and 2.51% possess other qualifications. Notably, women's educational attainment exceeds men’s at lower levels (below primary) but declines at higher levels. Moreover, urban areas exhibit higher educational attainment rates compared to rural areas.

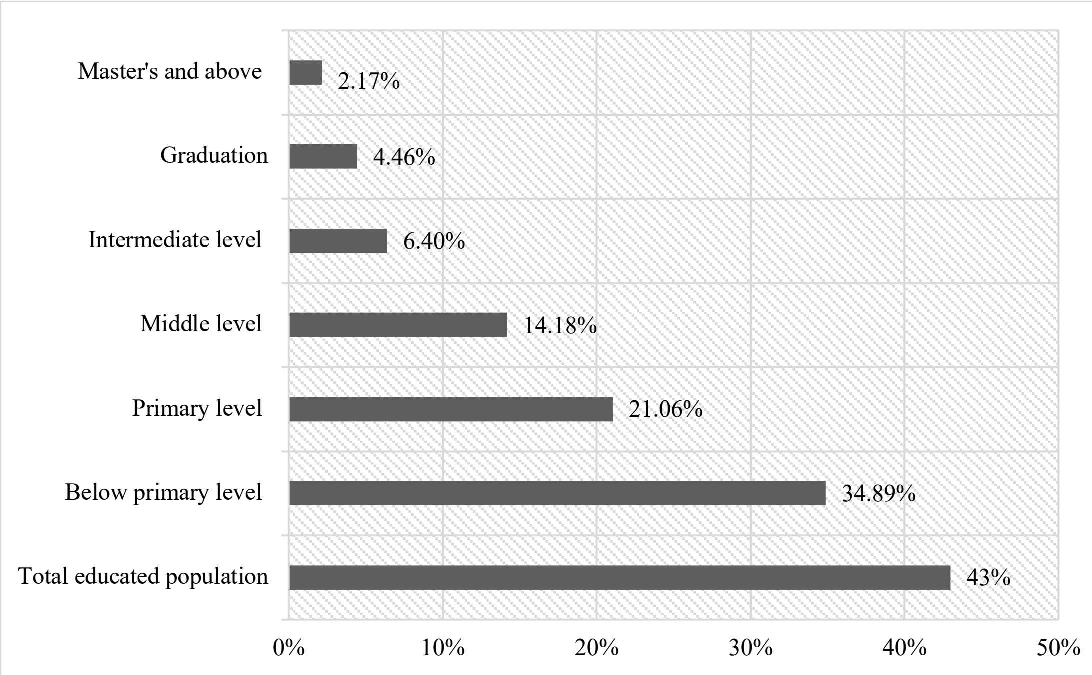

Figure 1.6 Balochistan’s Educational Attainment (PBS, 2023)

Survey findings reveal significant disparities in financial literacy. Notably, financial literacy rates are consistently higher in urban regions compared to rural areas across all provinces. Furthermore, a pronounced gender gap exists, with males exhibiting higher financial literacy levels than females across all provinces.Table 1.1 presents the percentage of individuals in Balochistan utilizing formal financial services out of the 12.34 million population in Balochistan, only 17% (2.1 million) are part of formal financial institutions, 15.8% are well-literate, while 55.6%, 23.1%, and 7.5% of the population are categorized as sufficiently literate, less literate, and not literate, respectively, in the use of banking services.

Table 1.1 Percentage (%) of Individuals in Balochistan Using Formal Financial Services.

	Bank	**Insurance**	**Financial Funding**	**Pensions Funds**	**Capital Market**
Well Literate	15.8	17.84	9.8	7.13	3.79
Sufficiently Literate	55.6	41.69	17.89	11.74	2.40
Less Literate	23.1	0.68	.21	2.11	0.33
Not Literate	7.5	39.80	72.10	79.03	81.03

Source: (Naz et al., 2020)

According to Naz et al. (2020) (Table 1.1), only 15.8% of the population demonstrates in-depth knowledge of banking products, while literacy rates for other financial products remain consistently low, below 20%. Although 55.6% of the population possesses sufficient banking knowledge, a staggering 70% lack an understanding of complex financial concepts, including financial funding institutions, pension funds, and capital markets. This significant knowledge gap underscores the need for improved financial literacy in Balochistan, essential for enhancing residents' financial well-being.

Whereas Hassan et al. (2020) conducted a study to identify reasons for underutilization of financial services in Quetta, the capital city of Balochistan, Pakistan, their findings revealed that the primary reason for non-account holding was involuntary self-exclusion. Specifically, factors contributing to involuntary self-exclusion included insufficient income, perceived risk, discrimination, contractual complexities, and unfavourable product features. Furthermore, the most commonly reported reasons were low education (64.8%), language barriers (63.87%), and lack of bank branches (60.8%) (Table 1.2).

Table 1.2 Barriers to Bank Account Access in Balochistan

Reasons	**Percentage**
Financial Literacy	
Low education	64.8
Unaware of banking services	52.7
Insufficient income and savings	25.8
Limited financial literacy	40.7
No need for financial services	25.0
Socialization Agents	
Someone else in the family has an account	26.8
Religious reasons (Islamic rules and regulations)	51.8
Language barriers	63.9
Financial Awareness	
Stringent bank regulations	35.1
Unsuitable banking products and services	35.1
Lack of bank branches	60.8
High transaction fees	43.5
Inconvenient banking hours	55.5

Source: (Hassan et al., 2020)

Although Hassan et al. (2020) found that respondents were educated, they likely lacked financial literacy, contradicting the common assumption that higher education guarantees banking knowledge. This research reveals that even educated individuals may not understand the banking system without proper financial education (Hassan et al., 2020; Riaz et al., 2022). A key factor contributing to this disconnect is the language barrier. Notably, 63.87% of survey participants cited language problems as a major issue, citing difficulties in communicating and utilizing banking services due to English-dominated documentation. This language barrier is exacerbated in Balochistan, where local languages such as Pashto, Baluchi, Bravi, and Hazargi predominate. Specifically, Urdu is not the native language of many residents, contributing to challenges in opening bank accounts (Hassan et al., 2020).

The third most commonly agreed reason for not having a bank account is the unavailability of bank branches. The primary reasons for voluntary self-exclusion include lack of necessity and cultural or religious motivations. Notably, 26.84% of respondents reported that they do not have a bank account because another family member already possesses one. Furthermore, 25.9% reported that they do not require any financial service, citing cash-based salary receipts and reliance on informal financial mechanisms, such as revolving savings and informal lending, for their financial needs. From a policy perspective, these individuals do not present a concern, as their non-use of financial products stems from a lack of demand rather than access barriers.

Despite growing global interest in financial literacy and individual financial well-being, research has primarily focused on isolated aspects or demographic and socioeconomic factors (Bharucha, 2017; Bujan et al., 2016; Damayanti et al., 2018; Jayanthi & Rau, 2019; Kadoya & Khan, 2020; Karakurum-Ozdemir et al., 2019; Lee et al., 2021; Mouna & Anis, 2017; Polisetty et al., 2021; Singla & Mallik, 2021; Twumasi, Jiang, Adhikari, et al., 2021). Notably, few studies have explored the broader financial and psychological determinants of financial literacy, while many have examined demographic and socioeconomic factors (Bawre & Kar, 2019; Castañeda et al., 2022; Mirzaei & Buer, 2022). This study aims to address the scarcity of comprehensive research on financial literacy.