

THE SOCIO-TECHNICAL DIVIDE: A COMPARATIVE QUALITATIVE ANALYSIS OF
BANKING EXPERIENCES IN LOW-INCOME AND HIGHER-INCOME COMMUNITIES

Valery "Val" Kaba

A Dissertation

Submitted to the Graduate College of Bowling Green
State University in partial fulfillment of
the requirements for the degree of

DOCTOR OF ORGANIZATION DEVELOPMENT AND CHANGE

August 2024

Committee:

Steven Cady, Committee Chair

Hee Soon Lee,
Graduate Faculty Representative

Jeanelle Sears

Carol Gorelick

© 2024

Valery "Val" Kaba

All Rights Reserved

ABSTRACT

Steven Cady, Committee Chair

This qualitative study employed a socio-technical framework as a lens to investigate the banking experiences of low-income and higher-income individuals, shedding light on the nuances of their interactions with traditional banks. Using comparative deductive thematic analysis, semi-structured interviews were conducted with 18 participants, equally divided between low-income and higher-income groups. The study revealed disparities in banking experiences, with low-income community members facing less favorable outcomes in specific areas.

The findings have significant practical implications for enhancing community relations, refining banking operations, and improving financial education, particularly in low-income communities. This research lays the groundwork for future studies to explore bank employees' perspectives and expand on the current findings, ultimately contributing to a more comprehensive understanding of the interactions between individuals and banking institutions. By illuminating the lived experiences of diverse community members, this study informs strategies for more inclusive and equitable banking products and services.

Keywords: Socio-technical lens, banking experiences, low-income communities, higher-income communities, comparative deductive thematic analysis, community relations, financial inclusion, banking

I dedicate this dissertation to my loved ones, who have been my rock throughout my educational, personal, and professional journey.

To my incredible wife, Faleisha, your love and support have been my driving force. Your encouragement to pursue my dream of earning a doctoral degree has meant the world to me. You're cheerleading and unwavering belief in me has kept me going. To my precious children, Jeremiah, Zane, and Alaina, your bright faces and joyful spirits inspire me daily.

To my parents, Mami and Old Man, your guidance and support have shaped me into who I am today. Your teachings on perseverance and grit have been invaluable. Thank you, Mother, for instilling in me the importance of never giving up, and thank you, Father, for being a constant source of encouragement.

To my loving siblings, Jaffah, KK, Pa Chi, Sista Mimi, and Olga, and my dear Uncle Charles, Auntie Gera, Auntie T, and dear friends, thank you for your unwavering support and encouragement.

Lastly, I thank Dr. Steven Cady, my chair, whose leadership, guidance, and belief in my potential have been instrumental in my success. Thank you for your unwavering support and guidance throughout this journey

ACKNOWLEDGMENTS

I would like to extend my sincere gratitude to my dissertation committee, comprising of Dr. Steven Cady (Chair), Dr. Jeanelle Sears, Dr. Carol Gorelick, and Dr. Hee Soon Lee (Graduate Faculty Representative). Each of you has contributed uniquely to my journey, opening my eyes to new perspectives and offering encouragement throughout the challenging dissertation process.

I also want to thank my BGSU Cohort 3 family for their friendship and support. Sharing this experience with you has created unbreakable bonds, built trust, and fostered a sense of community, making this journey truly enjoyable.

Additionally, I would like to acknowledge the support of my work colleagues and the Cameroonians in the Toledo (CAMTOL) community. Your collective encouragement and support have made this experience truly special, and I am grateful for your presence in my life.

TABLE OF CONTENTS

	Page
CHAPTER 1. INTRODUCTION	1
CHAPTER 2. LITERATURE REVIEW	4
Low-Income Versus Higher-Income Communities	4
Low-Income Communities	4
Higher-Income Communities.....	7
Services in Low Versus Higher-Income Communities	8
Quality Healthcare	8
Education and Youth Services	8
Affordable Housing	9
Nutrition and Healthy Food	9
Employment and Job Training.....	9
Childcare and Family Support	9
Community Safety and Policing	10
Financial Services and Banking.....	10
Banking Services in Low Versus Higher-Income Communities	11
Socio-Technical Systems	13
Overview of Socio-Technical Systems	13
Components of Socio-Technical Systems	14
Socio-Technical Systems Applied to Banking in Low Versus Higher-Income Communities.....	17
Research Question	18
Summary	19

CHAPTER 3. METHODS AND PROCEDURE.....	20
Research Design.....	20
Researcher Positionality.....	21
Ethical Considerations	22
Incentives	22
Participants.....	23
Recruitment.....	23
Sampling Strategy	24
Data Collection	24
Data Analysis	25
Rigor	26
Biases	27
Summary	27
CHAPTER 4. RESULTS	29
Demographics	32
Credibility of Emergent Themes.....	39
Deductive Themes	40
Socio Thematic Category.....	41
Technical Thematic Category	42
Socio-Technical Thematic Category.....	42
Other Thematic Category	43
Comparative Analysis.....	44

Socio Category	44
Relationships Quotes for Low-I Versus High-I	46
Communication Quotes for Low-I Versus High-I	46
Culture and Values Quotes for Low-I Versus High-I	47
Technical Category	48
Technology Quotes for Low-I Versus High-I	49
Physical Structure Quotes for Low-I Versus High-I	50
Processes Quotes for Low-I Versus High-I	51
Other Category	52
Reason for Visit Quotes for Low-I Versus High-I	54
Time of Visit Quotes for Low-I Versus High-I	49
Same Participant, Same Bank, Different Experience	55
Summary	56
CHAPTER 5. DISCUSSION	57
Research Question	57
Demographics	57
Socio Category	59
Relationships for Low-I Versus High-I	59
Communication for Low-I Versus High-I	60
Culture and Values for Low-I Versus High-I	61
Technical Category	62
Technology for Low-I Versus High-I	62
Physical Structure for Low-I Versus High-I	63

Processes for Low-I Versus High-I.....	63
Other Category	64
Reason for Visit for Low-I Versus High-I.....	64
Time of Visit for Low-I Versus High-I.....	64
Limitations	65
Practical Implications	67
Implications for Traditional Banking Operations	67
Implications for Training and Talent Development.....	68
Implications for Community Relationships	68
Implications for Product Design and Financial Education Initiatives	69
Summary.....	69
Future Research	70
Research on the Perspectives of Bank Employees	70
Research That Expands on the Socio-Technical Framework Sub-Themes	70
Research That Includes Middle-Income Households	70
Research That Expands on Same Individual, Same Bank, Different Experience.....	71
Quantitative Research	71
CHAPTER 6. CONCLUSION.....	72
Reflections	72
Final Thoughts	72
REFERENCES	74
APPENDIX A. INITIAL OUTREACH TO POTENTIAL PARTICIPANTS	81

APPENDIX B. RECRUITMENT FLYER	82
APPENDIX C. INVITATION LETTER	83
APPENDIX D. INTERVIEW PROTOCOL.....	86
APPENDIX E. INFORMED CONSENT FORM.....	91
APPENDIX F. POST-INTERVIEW FOLLOW-UP MESSAGE	97

LIST OF FIGURES

Figure		Page
1	Components of Socio-Technical Systems	15

LIST OF TABLES

Table		Page
1	Research Participation Criteria	30
2	Interview Length and Words Transcribed Per Interview	31
3	Participant Race/Ethnicity Distribution	33
4	Participant Race/Ethnicity Distribution from Low-Income Group	33
5	Participant Race/Ethnicity Distribution from Higher-Income Group.....	34
6	Participant Gender Distribution	35
7	Participant Gender Distribution from Low-Income Group	35
8	Participant Race/Ethnicity Distribution from Higher-Income Group.....	36
9	Education Level Distribution	37
10	Education Level Distribution from Low-Income Group	37
11	Education Level Distribution from Higher-Income Group	38
12	Participant Age.....	39
13	Number and Percentage of Quotes Coded Within Each Group in Each Category	41
14	Low-I Versus High-I for Socio Sub-Themes.....	45
15	Low Versus High-I for Technical Sub-Themes	49
16	Low Versus High-I for Other Sub-Themes Discussion.....	53

CHAPTER 1. INTRODUCTION

Communities have existed since prehistoric humans lived in small groups and tribes, gathering and hunting food for sustenance (McNeill, 2009). Despite their evolution into contemporary 21st-century communities, the fundamental concept of communities involves groups of people with shared values encompassing culture, religion, ethnicity, and economy. Humans inherently need a sense of belonging, which communities worldwide provide (Putnam, 2000). Understanding communities can be enhanced by examining their income levels and the need for services, as these vary between low-income and higher-income communities (Beloin & Peterson, 2000; Chetty et al., 2014). Income levels and banking services have significant connections, as conventional banking primarily focuses on managing finances. *Conventional banking*, sometimes referred to as *traditional banking*, is a for-profit system of retail banking where banks accept deposits from the public and provide loans and other everyday banking services, such as check-cashing, bill payments, investment advice, and money management to customers (Climent, 2018). Investigating conventional banking services can help understand the disparities in experiences, volume, and types of banking products used by members of low-income versus higher-income communities.

Disparities persist in the type and level of banking services available to low-income communities compared to higher-income communities, significantly disadvantaging low-income community members (Squires & O'Connor, 1998). Low-income communities have limited access to conventional banks and consequently rely on higher-cost alternative banking outlets, such as check-cashing businesses, for their everyday banking needs. There is, therefore, a need to make banking services accessible to low-income communities.

One approach to understanding this issue is through the *socio-technical systems* (STS) lens, which examines both the social (human) and technical (technological and procedural) aspects of how banks deliver services in different communities. *Social/human* aspects of how banks deliver services refer to employees' interactions with customers, such as in-person or phone meetings. On the other hand, *technical/technological* aspects of how banks deliver services refer to the established technology and processes within the banking structure that facilitate delivering services to customers without necessary human interaction, such as ATMs and technology software.

Conventional banking institutions can leverage social interactions alongside the increasing impact of technology to provide consistent, fair, and inclusive services to all communities, regardless of social status (Durkin et al., 2015). Such actions could promote equity and support positive community development (Gilchrist & Taylor, 2016). The level of proactive outreach by conventional banks to their customers varies based on income levels and growth potential (Bryl et al., 2009). Members of low-income communities often remain uninformed about promotional and ongoing products and services that could benefit them. They may also be unaware of potentially less-costly options, such as obtaining a loan for a car, securing short-term credit, and gaining quick access to paychecks.

This study engages a comparative qualitative approach to explore the experiences of individuals living in low- versus high-income communities, guided by a Deductive Thematic Analysis approach. Components of the STS framework will provide the lens for the design and analysis of this study. The STS lens offers a comprehensive view of both the social and technical aspects of the banking experience (Smith et al., 2009; Chambers et al., 2011; Merriam & Tisdell,

2016). The next section begins with a literature review describing the variables and concludes with the research question.

CHAPTER 2. LITERATURE REVIEW

The banking sector is pivotal in economic development and individual financial well-being, serving as a conduit for savings, investments, and access to essential financial services. However, individuals' experiences within different socio-economic levels can vary significantly, shaping their interactions and perceptions of banking institutions. Understanding these dynamics through a socio-technical systems (STS) lens offers a comprehensive framework to explore how socio-economic factors intersect with technological infrastructures, organizational structures, and societal norms to influence banking experiences.

In this literature review, I aim to investigate the banking experiences of low-income communities compared to those in higher-income communities, utilizing the STS lens as a theoretical framework. By examining existing literature, this review seeks to uncover key themes and insights relevant to defining and understanding the characteristics of low- and higher-income communities. Additionally, I will provide an overview of STS and its application in banking.

Through this review, I aim to contribute to the existing body of knowledge by synthesizing findings from diverse disciplinary perspectives, including sociology, economics, information systems, and urban planning. By evaluating the literature, I seek to identify gaps, challenges, and opportunities for future research, with the aim of encouraging more inclusive and equitable banking systems for all communities regardless of income levels.

Low-Income Versus Higher-Income Communities

Understanding the characteristics of communities requires an examination of their income levels (Chetty et al., 2014). Studies indicate that community income levels correlate strongly with various critical variables across disciplines such as health, crime, and social and economic infrastructure (Cunningham, 2006; Stuart, 2016; Desmond & Western, 2018). This

section provides an overview of low-income and higher-income communities by exploring various definitions in the literature and highlighting contrasts in the services commonly needed by these communities across social science disciplines.

Communities are typically classified on a socioeconomic spectrum, with higher-income communities at one end and low-income communities at the other (Kneebone et al., n.d.). Low-income communities are often referred to using terms such as low socioeconomic status (SES), underserved, poor, and socioeconomically disadvantaged communities. Regardless of the terminology, there is a consensus that these communities face social and economic disadvantages and have a high need for resources and social support. Like most social constructs, there is no universally accepted definition for low-income and higher-income communities in the literature. This section reviews the definitions found in various articles and studies across different fields.

Low-Income Communities

Ross and Mirowsky (2008) defined *socioeconomic status* (SES) as the combination of a person's available resources, level of education, and subjective status (Ross & Mirowsky, 2008). Based on their definition, an individual's SES can be determined from objective information such as family income, education, and occupation, as well as the individual's subjective sense of status. Farwaha and Obhi (2020) classify SES into three categories: high SES at the top, middle SES at the center, and low SES at the bottom.

Benzow et al. (2020) define a *low-income community* as one located in a census tract with a poverty rate of at least 20% or a median family income of 80% or less than the area it is benchmarked against (i.e., Metropolitan Areas for metropolitan tracts, State for rural tracts). Similarly, Kowalski (2019) studied children in low-income community school districts and defined an underserved community as one where most of the population lives below the poverty

line. Members of these communities' struggle to access quality-of-life factors such as affordable housing, food, job opportunities, education, and financial services typically provided by conventional banks. Extending this discussion, Kneebone et al. (n.d.) examined the widening income gap between neighborhoods, defining low-income communities as those where most household incomes fall below 80 percent of the average median income.

Low-income communities, due to their limited financial resources, struggle to access essential services, including healthcare, education, recreational facilities, and financial resources. These communities need access to conventional banking services available to those in higher-income communities to avoid resorting to less affordable alternative options. For example, Squires and O'Conner (1998) studied the rapid growth of fringe banking in low-income communities in Milwaukee's inner city. *Fringe banking* refers to non-conventional financial outlets that provide higher-than-average-cost alternative banking services to individuals who may have limited access to, or not qualify for, conventional banking services due to factors like poor credit. Typical examples include pawn shops, payday loan shops, buy-here-pay-here dealerships, and check-cashing businesses. They found that community members utilized check-cashing businesses rather than conventional banking, despite the higher costs, due to the convenience of hours, accessibility, and perceived better service (Squires & O'Conner, 1998).

Research has highlighted a lack of trust in conventional banking in low-SES communities. Standard practices such as unnecessary bank fees, minimum investment requirements, and the use of credit scoring tools not only as a measure of credit risk but also as a means to disqualify individuals from opening basic checking accounts discourage low-income communities from supporting conventional banks (Robin, 2007, p. 38).

For this study, I focus on urban (as opposed to regional) communities. An *urban community* is defined as a neighborhood with a high-density residential population that includes commercial and industrial zones. I define *low-income individuals* as residents in NW Ohio earning a household annual income of less than \$30,000 (Social Security Administration, 2017). This definition is suitable for the study as it provides a simple, measurable distinction between the two groups of interest: low-income individuals residing in low-income communities versus higher-income individuals residing in higher-income communities.

Higher-Income Communities

The literature refers to higher-income communities using terms such as affluent, high socioeconomic status, rich, privileged, or wealthy. Reardon and Bischoff (2011) conducted a study examining the relationship between income inequality and income segregation across communities in the United States. They define higher-income households as those in the top 10% of earners in a given metropolitan area. Consequently, higher-income communities consist of households in the top 10th percentile of income levels.

Galt et al. (2017) investigated community-supported agriculture in California, focusing on how income levels of households relate to these practices. They define higher-income households as those earning \$50,000 or more annually. Similarly, Kneebone et al. (n.d.) examined neighborhoods and the impact of widening income gaps in the US, defining higher-income communities as those where most households have incomes exceeding 120% of the median income in a given geography. Likewise, Galster et al. (2008) studied income diversity in 100 large U.S. neighborhoods and classified higher-income households as those earning more than 120% of the area's median income.

For this study, I define higher-income individuals as residents in NW Ohio earning a household income of \$100,000 or greater annually in urban communities (Social Security Administration, 2017). This definition provides simple, measurable, and practical characteristics that sharply distinguish low-income from higher-income communities.

Services in Low Versus Higher-Income Communities

The need for services across communities spans various disciplines in literature. Due to the socioeconomic challenges faced by low-income communities, members encounter unique difficulties in accessing essential services. Banking services are one of the critical needs in these communities. To better understand experiences with banking services, it is crucial to review the standard services required in low-income versus higher-income communities. This section explores studies addressing these issues.

Quality Healthcare

Quality healthcare is a universal need, yet low-income communities face significant challenges in accessing it. Limited hospital options and a higher proportion of uninsured individuals hinder these communities' access to quality and affordable healthcare solutions. Common medical service needs include preventative care, mental health care, and medical counseling (Cunningham, 2006; Braveman & Gottlieb, 2014).

Education and Youth Services

Access to education and youth services, such as early childhood programs, after-school activities, and adult literacy programs, is more readily available in higher-income communities. In contrast, low-income communities struggle to obtain these essential services, which are crucial for supporting children's and adults' development (Beloin & Peterson, 2000; Duncan & Magnuson, 2013).

Affordable Housing

Affordable housing is not typically a concern in higher-income communities. However, low-income communities face an increased need for affordable housing, as families are more likely to experience homelessness due to limited resources. Housing-related services, such as homeownership assistance programs and low-income housing initiatives, are necessary to educate and advise community members toward homeownership (Shinn et al., 1998; Desmond & Western, 2018).

Nutrition and Healthy Food

All communities require access to healthy nutrition options. However, low-income communities need assistance with nutrition due to limited financial resources. Affordable, simple, and healthy meals are essential for children in school programs and adults in food banks and other distribution programs. Nutrition education is also necessary to help families make healthier food choices (Gundersen et al., 2011; Braveman & Gottlieb, 2014).

Employment and Job Training

Employment and job training programs are vital for building a strong community workforce. While higher-income communities generally have better access to these programs, low-income communities face significant barriers. These communities often experience higher rates of unemployment or underemployment due to limited suitable job opportunities and a lack of skill training (Puerta, 2012).

Childcare and Family Support

Childcare and family support services are critical in low-income communities, where the high cost of childcare and limited financial resources exacerbate the need (Huston et al., 2002). These services include affordable childcare, parenting education, and family counseling, all of

which contribute to the well-being and development of children. Enhanced access to these services can help alleviate financial burdens on families and improve overall family dynamics, promoting long-term socio-economic stability.

Community Safety and Policing

All communities need effective community safety and policing to help reduce crime and keep their members safe. There is a need for policing initiatives that promote trust while providing a reasonable way to resolve conflicts before they escalate. (Stuart, 2016). In low-income communities, such initiatives are particularly crucial for fostering a sense of security and stability.

Financial Services and Banking

While higher-income communities have convenient access to financial services, particularly conventional banking, this is not the case in low-income communities, which are usually underserved and have fewer conventional banking and financial service options than more affluent areas.

Squires and O'Connor (1998) asserted that due to the growing presence of fringe banking outlets like check cashing businesses, which were filling the gap left by departing conventional banks, members of low-income communities tend to rely on fringe banking outlets that charge relatively higher fees and have limited options to provide reasonable financial advice to the community members. (Squires & O'Connor, 1998).

Thus far, I have defined and differentiated low-income and higher-income communities and identified some essential financial services needed to support these community members. In the following section, I will discuss the banking services that are available to low and higher-income communities.

Banking Services in Low Versus Higher-Income Communities

In this section, I review studies that examine the disparity in banking services between low-income and higher-income communities. As previously discussed, community characteristics play a crucial role in explaining the disparity between these two communities. Understanding the human aspect of banking interactions is essential to understanding how banking services are perceived and utilized in low-income communities.

The literature predominantly approaches banking services from a technical (technology and process) point of view as they explore areas like *accessibility to banks* (Squires & O'Connor, 1998), *types of bank products available* (Gramlich, 2006), *banking services utilization* (Rhine & Greene, 2013), and *banking technology, and infrastructures* (Dharma et al., 2010).

In their study of fringe banking in Milwaukee, Squires & O'Connor (1998) report that the quality and type of banking services (such as eligible account options and account features) differ between low-income and higher-income communities. This assessment is supported by the two community differences across economic, financial, and infrastructure factors (Squires & O'Connor, 1998; Bryl et al., 2009). They also suggest access to traditional banking as one area of disparity in both communities (Squires and O'Connor, 1998).

Higher-income communities often have more convenient access to traditional banking due to the more significant presence of banking financial institutions. These banks provide cost-effective banking solutions, including checking accounts, savings accounts, financial advice, and credit products. By contrast, low-income communities lack sufficient access to traditional banks and financial institutions because of their limited presence and often unfavorable hours of operation. These challenges push low-income residents to rely more heavily on alternative banking solutions, which are more costly and less favorable (Squires & O'Connor, 1998).

Dharma et al. (2010) considers technological advancement and infrastructure to be another set of factors that account for the disparity in banking services. High-income communities experience a faster adoption of banking technologies and use helpful banking tools such as digital payment solutions and mobile banking applications. In contrast, low-income communities lag due to financial constraints and limited access to necessary technological resources (Dharma et al., 2010).

In their 2013 article, Rhine and Greene compared the percentage of underbanked individuals in low-income versus higher-income communities. *Underbanked* measures the percentage of eligible individuals in the given community who have a checking or savings account with a traditional bank but rely on alternative outlets such as pay-day loans and cash advance businesses for additional products or services even though these are offered in the traditional banking system. They suggested that low-income communities tend to have a higher rate of underbanked individuals than higher-income communities due to existing qualifying requirements like credit scores and income, which are usually unfavorable for low-income individuals (Rhine & Greene, 2013).

Gramlich (2006) examines the disparity in available financial products between these community types, highlighting how higher-income communities benefit from a wider array of specialized products, such as those tailored to wealth management and retirement planning. In comparison, low-income communities face challenges accessing such products due to stringent eligibility requirements based on creditworthiness and income levels.

While these studies provide an overview of banking service delivery from a technical lens, there need for more studies that delve the social (human interaction) aspects of banking interactions within communities. The STS framework offers a comprehensive approach that

integrates both social and technical dimensions, addressing current gaps in research. In the following section, I explore the evolution of STS and its application in organizational development contexts.

Socio-Technical Systems

Socio-Technical Systems (STS) provides a lens to examine the gap between low and higher-income communities' banking experiences. In this section, I provide an overview of STS, including an explanation of how the concept has evolved over the years. Then, I discuss STS applied to banking in low versus higher-income communities.

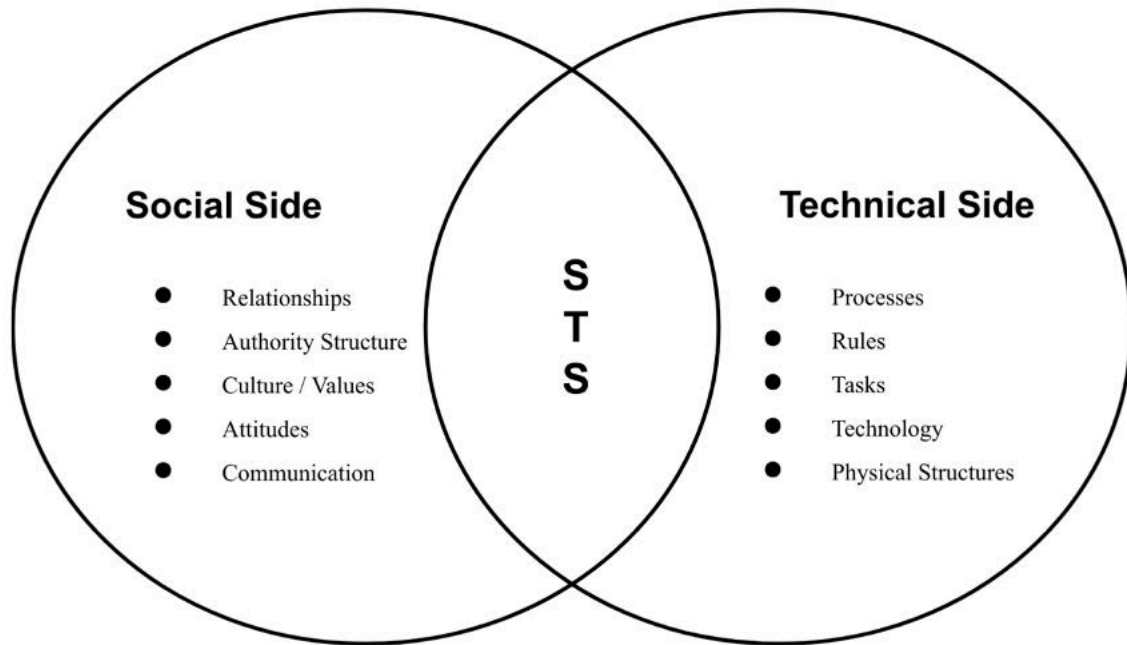
Overview of Socio-Technical Systems

STS emerged in the 1950s guided by Action Research principles, initially studying the social dynamics of work groups during the Industrial Revolution and later adapting to mechanization in industries such as coal mining (Trist, 1981). The framework emphasizes the interaction between an organization's social and technical elements. STS integrates human needs (socio) with an organization's requirement for technical efficiency (technical) (Daft, 2015). The human, or social needs system includes relationships between employees, team members, and supervisors, as well as these player's values, communication, and motivation. The technical system encompasses not only technology but also skills, knowledge, processes, procedures, and tools used for job performance. STS considers both components concurrently as part of one system. According to Trist (1981), optimal organizational functioning occurs when social and technical systems align to meet mutual demands and environmental requirements. This alignment ensures that both social and technical aspects contribute effectively to organizational goals.

Researchers have applied the STS framework to analyze various aspects of banking operations. For example, in their case study of a retail bank, Bryl, Giorgini, and Mylopoulos (2009) used STS to analyze the loan delivery process. Their study suggested that customers prefer in-person communication over the phone or email for sensitive private information discussions. These findings demonstrate consumers' need for human interactions (social interactions) in their experiences when dealing with banks (Bryl et al., 2009). In a similar study, Durkin, Mulholland, and McCartan (2015) used the STS lens to explore social media communities that have emerged with technological advancements and how they impact customer-bank relationships for e-banking users. Their study demonstrates how increased use of technology in social media can enhance the bank's communication and product promotion to specific groups, such as low-income communities.

Components of Socio-Technical Systems

Understanding the components of STS is crucial for its application as the present study's research lens. STS primarily analyzes the social and technical dimensions of a system. While the literature varies in defining specific components, it consistently distinguishes the social aspects involving human elements and the technical aspects encompassing technology and processes. Figure 1 outlines these components based on the reviewed literature, tailored to the scope of this study (Trist, 1981; Bryl et al., 2009; Durkin et al., 2015; Kaminski, 2022).

Figure 1*Components of Social-Technical Systems*

Social components play crucial roles in shaping the functioning and effectiveness of an STS (Trist, 1981; Kaminski, 2022). Firstly, relationships among individuals and groups within the system influence collaboration and cooperation (Kaminski, 2022). The authority structure establishes the hierarchy and distribution of power, impacting decision-making during interactions (Trist, 1981). Culture and values within the system shape norms and beliefs, determining what is considered acceptable or unacceptable in interactions (Vatrapu, 2010). Individuals' attitudes toward their work and the system as a whole influence their engagement. Effective communication channels and strategies can significantly impact how information and knowledge are shared within the system (Kaminski, 2022).

The technical components encompass a diverse range of elements crucial for the effective functioning of an STS (Durkin et al., 2015; Kaminski, 2022). Processes guide the sequence of

actions and operations within the system, ensuring efficient interaction (Trist, 1981). Rules establish guidelines that govern interactions and behaviors within the system, providing structure. Tasks represent the specific activities and responsibilities assigned to individuals or groups within the system (Bryl et al., 2009). Technology comprises the tools, machinery, and software utilized to support and enhance various functions within the system. Physical structures refer to the tangible infrastructure and facilities that house the system's operations, providing the necessary environment for interaction (Dharma et al., 2010).

In the context of banking, specific social and technical components are crucial for understanding customer experiences. These components form the basis for designing interview questions and analyzing this study. Typically, interactions between bank employees and customers follow a sequence: customers visit the bank at a physical structure and request a service, and bank employees attempt to fulfill that request within the boundaries of the bank's processes and technology. To comprehensively capture these experiences, this study will focus on two key aspects:

- The social aspect, which encompasses *relationships*, *cultures/values*, and *communication*.
- The technical aspect, which includes processes, *technology*, and *physical structures*.

By examining these social and technical components, this study aims to gain a deeper understanding of customer experiences with the bank.

In conclusion, social and technical components play important roles in shaping the functioning and effectiveness of an STS. Social components, including relationships among individuals and groups, authority structures, culture and values, attitudes, and communication, influence the system's collaboration, decision-making, norms, engagement, and information

sharing. On the other hand, technical components such as processes, rules, tasks, technology, and physical structures contribute to the efficiency, structure, support, and environment necessary for interaction within the STS.

Socio-Technical Systems Applied to Banking in Low Versus Higher-Income Communities

Based on the literature review, I have identified a gap in the existing research regarding STS in low versus higher-income communities, as well as in the application of STS to banking within these community contexts. While I found articles applying STS to examine banking processes in delivering loan products and services to customers (Bryl et al., 2009; Durkin et al., 2015), none specifically addressed the differences between low and higher-income communities in this regard. This gap underscores the need for further investigation into how socio-technical systems operate differently or similarly across diverse socioeconomic settings, particularly within the banking sector.

Banks play a crucial role in all communities, often promoting their mission to reinvest locally. However, as previously discussed, investments tend to favor higher-income communities over their lower-income counterparts. The unique needs and disadvantaged position of low-income communities necessitate that banking institutions intentionally design, deliver, and implement inclusive products and services. These may include consumer car loans, checking and savings accounts, micro business loans, money management advice, and everyday banking solutions. There is a significant opportunity for traditional banks to utilize STS to reach a broader customer base, thereby fostering community prosperity while expanding their clientele.

There are many studies that address the growing needs of low-income communities, as well as studies that explore the role of STS in organizational operations, product delivery, and processes (Trist, 1981; Bryl et al., 2009; Durkin et al., 2015; Fuenfschilling & Truffer, 2016;

Castro et al., 2020). Researchers have studied banking services in low versus higher-income communities from a technical perspective, i.e. accessibility to banks (Squires & O'Connor, 1998), types of available bank products (Gramlich, 2006), banking services utilization (Rhine & Greene, 2013), and banking technology and infrastructures (Dharma et al., 2010). However, the literature review reveals a gap in research that examines banking experiences in low versus higher-income communities from an STS perspective. Addressing this gap could significantly contribute to advancing community development. Firstly, there is potential for improvement by encouraging low-income communities to reconsider their relationships with traditional banks. This shift may occur as community members increasingly choose traditional banks for their primary banking needs over alternative outlets, thereby potentially reducing financial stress. Secondly, insights gained from such research could inform traditional banks on how to enhance service delivery across all communities, with a specific focus on improving services in low-income communities.

Research Question

Based on the literature reviewed, my central research interest is to better understand the differences in experiences between low-income and higher-income communities in receiving banking services from an STS perspective. Therefore, in this study, I address the following research question:

What are the banking experiences of low-income individuals living in low-income communities compared with those of higher-income individuals living in higher-income communities?

Summary

Banking services play a vital role in the economic success of all communities. However, members of low-income communities often resort to higher-cost alternative outlets for services that traditional banks offer at more affordable rates. The banking industry relies heavily on technical advancements for service delivery, including ATMs, lending processes, checking account features, internet banking, electronic money movement, and automated banking solutions. Exploring customer experiences through an STS lens, which integrates human aspects, could provide valuable insights for banks to effectively deliver services not only to all communities but specifically to low-income communities. This approach not only promotes community development but also expands the bank's customer base by addressing diverse customer needs more comprehensively.

CHAPTER 3. METHODS AND PROCEDURE

In the previous chapter, I highlighted the significance of effective and affordable banking services for low—and higher-income communities and Socio-Technical Systems (STS) emerging as a prominent tool to drive organizational efficiency. Existing literature lacks a comprehensive STS-based exploration of the holistic experiences of individuals across low — and higher-income communities.

Therefore, I designed a qualitative research study to address this gap in the literature. To represent the two study groups, lower-income and higher-income communities, I selected participants within an urban in Ohio, using US Census data to identify low versus higher-income tracts. Each participant engaged in interviews aimed to uncover the profound significance of their banking experiences (Chambers et al., 2011; Merriam & Tisdell, 2016; Lindsay, 2019). My study design was informed by the STS lens, and I engaged a Comparative Deductive Thematic Approach (CDTA) to address the following research question:

What are the banking experiences of low-income individuals living in low-income communities compared with those of higher-income individuals living in higher-income communities?

Research Design

This qualitative study employed a Comparative Deductive Thematic Analysis (CDTA) approach, guided by the Socio-Technical Systems (STS) lens, to explore and understand banking experiences among individuals from varying income levels. CDTA facilitated a comparative examination of emerging themes, emphasizing similarities and differences between low-income and higher-income communities (Chambers et al., 2011; Merriam & Tisdell, 2016; Lindsay, 2019). The STS framework provided a structured lens through which social dimensions

(relationships, culture/values, communication) and technical dimensions (processes, technology, physical structures) of banking interactions were analyzed. This methodological approach was chosen for its ability to uncover nuanced insights into the socio-technical dynamics shaping banking experiences, aligning with the study's aim to provide a comprehensive understanding across income disparities.

Researcher Positionality

To enhance trustworthiness in qualitative research, it is essential to acknowledge and address researcher bias through reflexivity or positionality (Creswell & Poth, 2018, p. 261). This involves disclosing personal experiences, beliefs, and values that may influence the research. As such, I would like to share my positionality regarding this topic.

Growing up in a small community town in Cameroon, Africa, I was instilled with values of supporting those in need. My 18-year career in retail and business banking, spanning six traditional banking institutions, has exposed me to disparities in customer treatment based on income levels. Additionally, my close relationships with family and friends from low-income communities have given me insight into their struggles with accessing basic banking products and the potential positive impact these could have on their lives.

As a former low-income individual now residing in a higher-income community, I believe traditional banks can play a vital role in developing communities and improving financial well-being for low-income families. My personal experiences and beliefs have shaped my interest in this topic. I am a 41-year-old black male, currently residing in a higher-income community, and I acknowledge the potential biases and perspectives I bring to this research.

Ethical Considerations

With this study's focus on financial and personal aspects of participants' lives, it was especially important to consider the ethics of my research (Merriam & Tisdell, 2016), doing everything possible to protect and empower my participants.

To ensure participant data remained confidential, I clarified in the informed consent form that participants' names and personal identifying information would be excluded, focusing solely on their responses. This approach protected their confidentiality and encouraged honest and open communication. In addition, all participant data were anonymized during analysis to maintain confidentiality.

Additionally, I maintained respect for participants and ensured they did not feel less important. I made intentional efforts to relate to the participants to mitigate the power imbalance. For example, I scheduled interviews to take place at whatever public location the participant chose and positioned myself in a respectful manner, carefully answering any questions participants had prior to the interview. I treated every question with empathy.

Lastly, I approached the interviews with the understanding that participants might have sensitive experiences related to finance and personal topics. I exhibited strong emotional awareness and treated participants with respect.

Incentives

I clearly stated the incentive options in the invitation flyer and informed consent form and outlined the procedures for financial incentive distribution, offering participants a choice between a \$20 Visa gift card or a \$20 donation to a charity of their choosing. Gift cards were handed to participants at the end of face-to-face interviews or emailed immediately after Zoom interviews. For participants who chose the charity donation option, I processed the donations at

the end of the interview, providing a confirmation receipt upon request. Additionally, I offered to share the final research findings with participants.

Participants

The study included an equal number of participants from each study group, with nine interviewees from both the low-income and higher-income groups. All participants resided in an Ohio urban county, identified by the researcher using US Census tract data as either low-income or higher-income. Participants met the following criteria: (a) 18 years of age or older, (b) Household annual income of less than \$30,000 for low-income and more than \$100,000 for higher-income, (c) An in-person interaction with a bank employee at a traditional bank, and (D) The ability to recall and articulate their experience interacting with the bank employee. I determined the number of interview participants based on several factors, including the assessment of saturation, when no new themes emerged from the transcripts.

Recruitment

Recruitment for this study involved the selection of participants from two distinct study groups within an urban county in Ohio. Utilizing publicly available US Census data, I identified geographical areas categorized as low-income and higher-income tracts. This method ensured a systematic approach to participant recruitment, aligning with the study's objective to compare banking experiences across different socioeconomic backgrounds within a specific community context. I initially emailed the recruitment flyer to my list of convenient sample contacts within my network and invited them to share the flyer with anyone they may know. Some potential participants reached out directly to me after seeing the flyer and invitation letters were sent to those who were eligible.

Sampling Strategy

I utilized publicly available US Census tract data to identify suitable low-income and higher-income communities within the selected Ohio urban county. Convenient sampling was initially applied, where participants were selected based on their responses to the invitation flyer, and each received a copy of the full invitation letter (see Appendix C). to expand the participant pool, snowball sampling was employed, allowing initial participants to recommend others who might be eligible to join the study. This non-probability sampling technique, commonly used in qualitative research (Merriam & Tisdell, 2016), involves selecting initial participants and then asking them to recruit additional participants from their social network, who in turn recruit others. This approach is similar to the method used by Chambers et al. (2011) in their comparative qualitative study on patients' adherence to stroke medication, where initial participants were asked to refer others from their social network, creating a snowball effect that helped identify additional participants.

Data Collection

A total of 18 semi-structured interviews were conducted either face-to-face or via Zoom, depending on participant preference and logistical considerations. The interview questions were arranged in a deductive manner beginning with a general question to capture reasons why participants typically visit a traditional bank and moving on to questions that captured participant's experiences within each of the 6 deductive sub-themes (Appendix D). The total number was representative of 9 interviews for each group which lasted approximately 24 minutes on average. Interview questions were designed to elicit detailed responses regarding participants' interactions with banks, focusing on both social aspects (relationships,

culture/values, communication) and technical aspects (processes, technology, physical structures) guided by the Socio-Technical Systems (STS) framework.

Data Analysis

Utilizing Comparative Deductive Thematic Analysis (CDTA), I employed the Socio-Technical Systems (STS) framework to analyze participants' experiences with traditional banking services across low and higher-income communities (Chambers et al., 2011; Lindsay, 2019; Nagel, 2021). The STS framework facilitated a comparative exploration of social dimensions (relationships, culture/values, communication) and technical dimensions (processes, technology, physical structures), alongside subthemes within each dimension.

Interview recordings conducted via Zoom were transcribed using Rev.com's automated transcription service, followed by manual review to ensure accuracy with the original recordings. Participants were offered the opportunity to review transcripts for validation purposes, thereby enhancing data accuracy and participant engagement. Transcripts were then uploaded into Dedoose for systematic analysis.

This study identified 677 quotes from interview transcripts. At the first level, quotes were organized into four overarching themes: *Socio*, *Technical*, *Socio-Technical*, and *Other*. The quotes in all four categories were further coded into eight sub-themes. The socio sub-themes were deducted from the earlier proposed STS model, which were *relationships*, *communications*, and *culture/values*. A similar process was used for the technical sub-themes, which included *Technology*, *processes*, and *physical structures*. Quotes in the socio-technical themes were coded into combinations of all six sub-themes with a minimum of at least one socio, and one technical sub-theme. The quotes in the other category were coded into two sub-themes, which were *the reason for the Bank visit* and *the Time of the visit*. In the final phase of the analysis, I took a

closer look at all the quotes within each sub-theme in a comparative manner to make meaning of them. In this phase, I classified the sub-themes into low-income and higher-income groups. Next, I reviewed quotes in each of the 8 sub-themes (Relationships, communication, cultures/values, technology, processes, physical structures, reason for visit, and time of visit) to make sense of similarities and differences for each group within each sub-theme.

The thematic analysis involved categorizing quotes to uncover deeper insights into the social and technical dimensions influencing banking interactions across the two income groups. Utilizing the Socio-Technical Systems (STS) framework, I systematically examined how relationships, cultural values, communication, processes, technological and infrastructures shape these interactions. Additionally, an analysis diary and memoing were used to facilitate the identification of common characteristics and emergent themes among both low and higher-income groups (Smith et al., 2009; Chambers et al., 2011; Merriam & Tisdell, 2016 ; Bryman, 2016).

Rigor

To maintain rigor throughout this study, I conducted member-check with participants by emailing the transcripts from the recorded interviews to them and providing the opportunity to review for accuracy. I also believe that using Comparative Deductive Thematic Analysis (CDTA) enhanced the study's rigor as it required me to maintain flexibility in adapting to emergent findings during data collection and analysis. I also created an audit trail for each stage, affording transparency and accountability to my decision-making processes (Merriam & Tisdell, 2016).

Biases

Throughout the research process, I remained aware of several potential biases that could impact the integrity of the findings. Researcher bias could inadvertently shape the study's design and outcomes due to my own experiences, beliefs, and perspectives. To mitigate this bias, I made conscious efforts to approach the study with an impartial mindset, avoiding assumptions based on personal experiences (Roulston, 2015). Selection bias was also a potential issue, particularly in how participants from low versus higher-income communities were recruited. Variations in willingness and ability to participate based on socio-economic status could lead to a non-representative sample, potentially skewing the study's findings. I took measures to acknowledge and address these disparities in recruitment methods, aiming for a balanced representation across demographic groups (Roulston, 2015).

I also reflected on how cultural bias could influence data collection and interpretation. It was important for me to have awareness of potential cultural misunderstandings, while also adhering to the protocols outlined in the informed consent process to ensure reliability and validity (Simpson, 1974). Lastly, I took precautions to mitigate confirmation bias, that I did not unintentionally emphasize information that supports preconceived notions about differences in banking experiences between low and high-income communities. Throughout the study, I actively sought out contradictory evidence to remain objective and prevent this bias from influencing the research findings (Roulston, 2015).

Summary

This qualitative study engaged a Comparative Deductive Thematic Analysis (CDTA) approach guided by the Socio-Technical Systems (STS) framework. These methods provided a

strong foundation for exploring and better-understanding banking experiences across income levels. The following chapter reports the results of this study.

CHAPTER 4. RESULTS

This qualitative study applies socio-technical systems (STS) principles and uses comparative deductive thematic analysis to explore the banking experiences of low-income versus higher-income individuals in their communities. The study provided some unexpected results and, therefore, contributed to the existing body of knowledge in the community banking field. Prior to commencing recruitment and data collection, this study obtained Institutional Review Board (IRB) approval from Bowling Green State University IRB. Participants who responded to the study invitation were provided with an informed consent document detailing the study's purpose, interview procedures, participation criteria, and definitions of key terms. A total of 25 participants were either volunteers or identified through convenience and snowball sampling methods. Initially, 20 interviews were scheduled, out of which 18 were successfully conducted. Specifically, 9 interviews were conducted with individuals from the low-income group and 9 from the higher-income group. The final 2 scheduled interviews were not conducted due to scheduling conflicts with participants. Detailed participation criteria are presented in Table 1.

The average interview length was approximately 24 minutes with the shortest being 15.2 minutes and the longest being 39.5 minutes. While the short length of interviews could be concerning, the deductive design of the interviews as well as the general nature of banking interactions provided some context as to why participants' conversations did not last as long (Bryman, 2016). This issue will be further addressed as a limitation in this study. The total number of words transcribed from the interviews was 53,898. See Table 2 for a breakdown of interview times and number of words transcribed per interview.

Table 1*Research Participation Criteria*

Criteria	Criteria Description
1	Must be an adult, 18 years of age or older
2	Must reside in NW Ohio
3	Must meet annual household income of either <\$30,000 or > \$100,000
4	Must have had an in-person interaction with a bank employee at a traditional bank
5	Must recall the experience interacting with the bank employee and be able to articulate that experience.

Table 2*Interview Length and Words Transcribed Per Interview*

Participant	Interview Length (hh:mm:ss)	Total Words Transcribed
1	00:20:32	2,184
2	00:21:25	2,833
3	00:15:52	2,071
4	00:15:15	1,769
5	00:19:48	2,547
6	00:39:48	5,084
7	00:37:14	4,904
8	00:19:45	2,520
9	00:22:11	2,939
10	00:26:10	3,241
11	00:19:32	2,402
12	00:24:22	2,949
13	00:23:42	2,747
14	00:19:14	2,553
15	00:33:09	3,557
16	00:28:11	3,891
17	00:19:34	2,614
18	00:27:34	3,093
Total	07:15:30	53,898

Demographics

Demographic information was collected from all participants at the conclusion of the interviews to provide insights into the study results (see Table 3, 4 and 5). The study included a total of 18 participants, evenly split between low-income ($n_1=9$) and higher-income ($n_2=9$) individuals. Participants were recruited using convenience sampling ($n=10$) and snowball sampling ($n=8$). Among these, the low-income group comprised 4 participants from convenience sampling and 5 from snowball sampling, while the higher-income group consisted of 6 participants from convenience sampling and 3 from snowball sampling. In terms of race or ethnicity, the majority of participants identified as White ($n=10$), with equal representation from low-income and higher-income groups ($n_1=5$, $n_2=5$). Participants who identified as Two or More Races totaled 5, with 3 from the low-income group and 2 from the higher-income group. Additionally, 2 participants identified as Black/African American, evenly distributed between the two income groups ($n_1=1$, $n_2=1$), and 1 participant from the higher-income group identified as Asian.

Table 3*Participant Race/Ethnicity Distribution*

Race	Number of Participants
White	10
Black/African American	2
Asian	1
Two or More Races	5
Other	0
Total	18

Table 4*Participant Race/Ethnicity Distribution from Low-Income Group*

Race	Number of Participants
White	5
Black/African American	1
Asian	0
Two or More Races	3
Other	0
Total	9

Table 5*Participant Race/Ethnicity Distribution from Higher-Income Group*

Race	Number of Participants
White	5
Black/African American	1
Asian	1
Two or More Races	2
Other	0
Total	9

In terms of gender distribution among participants, there were 11 female participants, with 6 from the low-income group and 5 from the higher-income group ($n=11$, $n_1=6$, $n_2=5$).

Additionally, there were 7 male participants, comprising 3 from the low-income group and 4 from the higher-income group ($n=7$, $n_1=3$, $n_2=4$).

Table 6*Participant Gender Distribution*

Gender	Number of Participants
Male	7
Female	11
Other	0
Total	18

Table 7*Participant Gender Distribution from Low-Income Group*

Gender	Number of Participants
Male	3
Female	6
Other	0
Total	9

Table 8*Participant Gender Distribution from Higher-Income Group*

Gender	Number of Participants
Male	4
Female	5
Other	0
Total	9

Participants in the study had completed varying levels of education (see Table 9,10, and 11). The majority had completed high school, with all 6 belonging to the low-income group ($n=6$, $n1=6$, $n2=0$). Following this, 4 participants, all from the higher-income group, had attained a bachelor's degree ($n=4$, $n1=0$, $n2=4$). Three participants, all from the higher-income group as well, held a Doctoral Degree ($n=3$, $n1=0$, $n2=3$). Additionally, 2 participants from the higher-income group had obtained a master's degree ($n=2$, $n1=0$, $n2=2$). Two participants from the low-income group had completed some college ($n=2$, $n1=2$, $n2=0$), while 1 participant from the low-income group had some high school education ($n=1$, $n1=1$, $n2=0$).

Table 9*Education Level Distribution*

Education Level	Number of Participants
Some High School	1
High School Diploma	6
Some College	2
Bachelor's Degree	4
Master's Degree	2
Doctoral Degree	3
Total	18

Table 10*Education Level Distribution from Low-Income Group*

Education Level	Number of Participants
Some High School	1
High School Diploma	6
Some College	2
Bachelor's Degree	0
Master's Degree	0
Doctoral Degree	0
Total	9

Table 11*Education Level Distribution from Higher-Income Group*

Education Level	Number of Participants
Some High School	0
High School Diploma	0
Some College	0
Bachelor's Degree	4
Master's Degree	2
Doctoral Degree	3
Total	9

Most participants in the study were employed at the time of data collection, totaling 16 individuals. Among these, 7 were from the low-income group and 9 from the higher-income group ($n=16$, $n_1=7$, $n_2=9$). There were also 2 participants who indicated they were unemployed, both belonging to the low-income group ($n=2$, $n_1=2$, $n_2=0$). The participants represented a wide range of ages, as shown in Table 12. All participants were required to be at least 18 years old.

Table 12*Participant Age*

Age Range	Number of Participants
18-29	2
30-39	5
40-49	6
50-59	2
60-69	3
70 and over	0
Prefer not to answer	0
Total	18

Credibility of Emergent Themes

All interviews were conducted utilizing either Zoom audio for face-to-face or Zoom video and audio for virtual. All interviews were recorded to the cloud. Audio recordings were then uploaded to Rev to produce a transcript file that was then provided to the participant to review for accuracy. This process of providing transcripts to participants is called member checking and is common practice in qualitative research (Goldblatt et al., 2011). All transcripts were then edited for accuracy by listening to the audio recordings and making all required corrections to the automated transcription. Transcriptions were only edited for redundant words, removal of extraneous noises or for minor grammar corrections to ensure that the participant's voice in the story was not changed. Memoing was used during the interviews to note ideas or themes that emerged throughout the interviews (Creswell & Poth, 2018, p. 84). Saturation,

signifying data adequacy, was reached after the ninth interview in each group, when no new themes emerged, thereby concluding data collection.

Deductive Themes

The interview transcripts underwent coding based on a pre-established STS model tailored specifically for banking themes. Drawing from thematic elements identified by Trist (1981), Bryl et al. (2009), Durkin et al. (2015), and Kaminski (2022), the model encompassed themes most pertinent to banking experiences. A total of 677 quotes extracted from the transcripts were categorized into four main thematic categories: Socio, Technical, Socio-Technical, and Other. Each primary theme included predetermined sub-themes that facilitated structured analysis and interpretation of the data.

Table 13*Number and Percentage of Quotes Coded Within Each Group in Each Category*

Categories	Low-Income Group (Low-I)	Higher-Income Group (High-I)
Socio		
Communication	90 (55%)	74 (45%)
Culture/Values	65 (46%)	75 (54%)
Relationships	57 (35%)	109 (65%)
Total	110 (45%)	137 (55%)
Technical		
Physical Structures	18 (26%)	51 (74%)
Processes	90 (53%)	81 (47%)
Technology	30 (46%)	36 (54%)
Total	55 (43%)	75 (57%)
Other		
Reasons for Bank Visit	33 (53%)	29 (47%)
Time of Visit	8 (47%)	9 (53%)
Total	44 (52%)	41 (48%)

Socio Thematic Category

The socio category focused on quotes representing the human and social dimensions of participants' experiences (Bryl et al., 2009; Kaminski, 2022). These quotes were classified into three categories: *communication*, *culture/values*, and *relationships*. Examples illustrating the socio theme included statements such as, “I thought to myself, at least answer my question or

point me to somebody there. I mean, I'm already here. I like to have all my questions answered so I'm satisfied, but I kind of felt like I was brushed off" (Participant 1), "She did apologize for not being able to cash it. She sure did. They're nice people at my bank. Very nice. They know me pretty well" (Participant 5), and "I would like to be able to go in and leave, feeling satisfied, like, oh, that was easy. As opposed to this is going to be a headache" (Participant 14).

Technical Thematic Category

The technical category focused on quotes that addressed the non-social elements of participants' experiences, including technology, processes, and physical structures (Durkin et al., 2015; Kaminski, 2022). This section encompassed three categories of sub-themes: Physical structure, Technology, and Processes. Observations within the technical theme included statements such as, "They wouldn't do a business account online. I did my personal account because I set up my personal account online and they wouldn't do my business account online." (Participant 1), "If you're going to have to wait for somebody, it is much nicer to wait in a nice, carpeted lounge area with free coffee and magazines on the tables than it is going to someplace that has linoleum floors with steel chairs." (Participant 7), and "Their process was very straight to the point, very easy. The income verification, they went straight to the direct deposits that are coming into your account" (Participant 17).

Socio-Technical Thematic Category

The socio-technical category incorporated quotes that encompassed both socio and technical elements of participants' experiences (Kaminski, 2022). This theme included quotes that addressed at least one sub-category within both socio and technical areas. All quotes within the socio-technical category were further coded into combinations of the predetermined sub-themes within the socio and technical categories. Examples of quotes within this category

included statements such as, “I don't know why they would want it 10 days. Some of them do three days. I know a bank does sometimes, oh, it's for three days in the account to make sure it clears. I've had that experience also back in the day.” (Participant 5), “I have a private banker through this same bank. And so, at this point, I say to her, is this something that I could have done with my private banker over the phone? And she said, no, unfortunately, this has to be done in person” (Participant 12), and “I walked in and told them my name and why I was here, and they were not aware of it, even though the customer service online had informed me that they would reach out to the bank, give them the paperwork, and all I have to do is go in and sign” (Participant 18).

Other Thematic Category

The Other thematic category encompassed contextual elements crucial for understanding participants' experiences that did not explicitly fit into the first three categories. This section included two sub-categories: *Reason for Bank Visit* and *Time of the Visit*. Examples within this category included statements such as, “The weekend usually the time that I do go to the bank only because all week I'm working and before I had a second shift schedule, so as you know about second shift, you don't usually have a lot of time to yourself.” (Participant 8), “I feel like going to a bank to have more security or you have questions or any issues with your account, it's easier to deal with to go inside and deal with the person, to talk with the person” (Participant 11), and “It happened to be a Friday afternoon. We were both off work that day, so it was convenient for us to go” (Participant 12). Table 13 shows the number of quotes coded into each category and the percentages per category for each group.

Comparative Analysis

The findings of this study were mostly supported by the literature reviewed in Chapter 2 that addressed Socio-Technical Systems (STS), low versus higher-income communities, and traditional banking delivered to these communities. I present these findings in the sections below.

The comparative analysis conducted in this study offers insights into the similarities and differences in banking experiences between the two participant groups (Chambers et al., 2011; Lindsay, 2019). Initially categorized into four broad themes—Socio, Technical, Socio-technical, and Other—the experiences were further delineated through sub-themes derived from participant quotes. The Socio theme encompassed Relationships, Communication, and Cultures/values. Technical themes included Technology, Physical Structures, and processes. Socio-technical themes combined elements from both socio and technical dimensions. Lastly, the Other theme explored Reason for Bank Visit and Time of Visit.

Socio Category

The socio category addressed aspects of both groups' banking experiences impacted by the human or social side of the proposed STS, categorized by themes of communication, relationships, and culture/values between the traditional bank and the participants. A total of 247 experts were coded into the socio category. These comprised 110 (45%) Low-I and 137(55%) High-I. Table 14 illustrates the comparison of themes in the socio category.

Table 14

Low-I Versus High-I for Socio Sub-Themes

Socio Category	Low-I	High- I
Relationships		
166 quotes	57 quotes (35%)	109 quotes (65%)
	<ul style="list-style-type: none"> • Important and valued by the Participants (32/57%). • Less valued by the bank (23/40%). 	<ul style="list-style-type: none"> • Important and valued by the Participants (55/ 54%). • More valued by the Bank (42/38%).
Communication		
164 quotes	90 quotes (55%)	74 quotes (45%)
	<ul style="list-style-type: none"> • Less thorough explanation and clarification by the bank when questions were asked (36/40%). • No follow-up communications from the banker (11/12%). 	<ul style="list-style-type: none"> • More thorough explanations and clarifications by the bank when questions are asked (22/31%). • Follow-up communications from the banker (10/14%).
Culture/Values		
140 quotes	65 quotes (46%)	75 quotes (54%)
	<ul style="list-style-type: none"> • Participants used the bank only when necessary (16/25%). • Participants had modest requests and low expectations of getting approved for services (21/32%). 	<ul style="list-style-type: none"> • Participants used the bank as a regular resource (12/16%). • Participants had higher requests and high expectations of getting approved for services (19/25%).

Relationships Quotes for Low-I Versus High-I. All 18 participants discussed aspects of relationships during their banking experiences. There were 57 (35%) quotes from Low-I and 109 (65%) quotes from High-I. Both groups described their visits to a traditional bank near their residences, and participants who had banked in the same location for a long time knew some local employees over time.

Some quotes from both groups around relationships included Participant 2 (Low-I), who stated, "... when I go to the teller line, it's the same girls all the time...I have never been there and the ladies don't ask, how was your day?" However, the quotes from both groups indicated that banks valued relationships for low-I less than for high-I. For example, when discussing their relationship with the bank, Participant 5 from Low-I stated, "I was frustrated because I have an account there, so why would I have to go cash my check somewhere else?" On the other hand, Participant 12 from High-I stated, "I think that from having accounts with them, they contacted me, and it's supposed to be concierge service for things that I need."

Communication Quotes for Low-I Versus High-I. Differences in communication between bank employees and participants emerged between the two groups. There were 90 (55%) quotes from Low-I and 74(45%) from High-I. Participants in the Low-I group indicated a lack of thorough explanations by employees when participants asked questions during interactions.

Some quotes from participants in both groups around communications included Participant 3 (Low-I) recounted a situation where she did not receive a satisfactory explanation after questioning a bank employee about a transaction: "I don't think she really explained herself either. She just told me you can't deposit it; she didn't really explain at all. She didn't tell me this

is just a lot of money, are you sure this is your bank account?" Similarly, Participant 10 (Low-I) stated, "I never got an explanation when I asked why they stopped doing that."

In contrast, the High-I group reported Participant 17 (High-I) described his experience with a bank employee: "Very straight to the point, very detailed. She explained everything line by line even for anybody who doesn't have any knowledge about any type of loan modification or refinance or anything like that, she took her time to explain it." Additionally, Participant 13 (High-I) noted, "They definitely were on and answering all my questions. Very helpful, maybe a little too chatty, which that's okay. Everybody's personality is different."

Culture and Values Quotes for Low-I Versus High-I. Differences in themes around culture and values emerged between the two groups when discussing their banking experiences. There were 65 (46%) quotes from Low-I and 75(54%) quotes from High-I.

Some quotes from participants in this area included Participant 1 (Low-I) reflected on his experience: "Sad to say, but I was expecting to get turned down at the time my credit score wasn't up where I thought it should have been and what I was always told it needed to be." Similarly, Participant 8 (Low-I) expressed, "I do not like banks for real. I never really liked them, I never dealt with them. So, I'm always against the banks and they are stealing my money and this is just how I was raised."

In contrast, High-I participants often had higher expectations and standards for their bankers. For instance, Participant 12 (High-I) stated, "Once my part was done, why did I have to stay? She ended up letting us go, well, and I was thinking, you could have let us go right when you started to call them... I just want people who are competent, who get right down to business and do what needs to be done." Additionally, Participant 13 (High-I) noted, "I would expect the

office to be clean. I would expect them to, since they are working to capture my business, cater to me. Probably sounds sort of entitled, but that's what I would expect.”

Technical Category

The technical category addressed aspects of the experience for each group that addressed themes around technology, physical structures, and processes as perceived by the participant. A total of 130 experts were coded into the technical category. These were made up of 55(43%) Low-I and 75(57%) High-I. Table 15 illustrates the comparison of themes in the technical category.

Table 15*Low-I Versus High-I for Technical Sub-Themes*

Technical Category	Low-I	High- I
Technology		
66 quotes	30 quotes (46%)	36 quotes (54%)
	<ul style="list-style-type: none"> Participants viewed and preferred using mobile apps/ATMs for banking because of their convenience (18/60%). 9 (100%) of participants preferred to meet face-to-face. None (0%) wanted to meet via Zoom for the interviews in this study. 	<ul style="list-style-type: none"> Participants viewed and preferred using mobile apps/ATMs for banking because of their convenience (18/60%). 1(11%) of participants preferred to meet face to face, while 8 (89%) preferred Zoom for the interview in this study.
Physical Structures		
69 quotes	18 quotes (26%)	51 quotes (74%)
	<ul style="list-style-type: none"> 9 (100%) of Participants visited a location in the in the neighborhood. The bank internally was poorly maintained in terms of its physical appearance (6/33%). 	<ul style="list-style-type: none"> 9 (100%) of Participants visited a location in the neighborhood. The bank internally was well-maintained in terms of its physical appearance (14/27%).
Processes		
171 quotes	90 quotes (53%)	81 quotes (47%)
	<ul style="list-style-type: none"> Participants used the bank only when necessary (16/25%). Participants had modest requests and low expectations of getting approved for services (21/32%). 	<ul style="list-style-type: none"> Participants used the bank as a regular resource (12/16%). Participants had higher requests and high expectations of getting approved for services (19/25%).

Technology Quotes for Low-I Versus High-I. The technology themes aspects of the banking experience were similar for both groups. Participants from both groups primarily mentioned the use of mobile applications, online banking, and ATMs as a means of convenience

for accessing banking services. There were 30 (46%) quotes from Low-I and 36(54%) quotes from High-I.

Some quotes in this category included Participant 2 (Low-I) stating, "I prefer using online banking because I really don't have to deal with too much of anything. I do all my bills and stuff online." Similarly, when discussing his experience with online banking technology, Participant 8 (Low-I) noted, "Before, it got to be like, okay, well you going to have to wait until I get off of work, baby. Now, I'll be like, okay, well give me a minute and I'll pull over to the side of the road and get hit my little app and send her however much money I need to send her right there on the spot."

Participants in High-I similarly shared this perception. For example, Participant 14 (High-I) stated, "I do ATM electronically. That's all I do. If anything, I'm going to deposit stuff via the ATM, I'm going to do withdrawals via the ATM, and that's it." Participant 15 (High-I) also remarked, "Some people don't really visit banks that much. I think I would say 90% of my banking is done digitally now."

Physical Structure Quotes for Low-I Versus High-I. The two groups responded differently to the physical structure of banks. There were 18(26%) quotes from Low-I and 51(74%) quotes from High-I.

Some quotes that discussed physical structures from both groups include Participant 3 (Low-I), who described their experience: "There's just a little door over here, and it's just a little box, like a glass room. It's all open, and there were just two chairs in there, and that's where the security guard was sitting, and they had pulled me over into there." Additionally, Participant 10 (Low-I) stated, "It's just very poorly set up inside of the building. And I think they would have probably molded better business if they presented themselves with the money they probably

make." On the other hand, participants from High-I generally expressed positive sentiments about the physical structures of their banks. For instance, Participant 12 (High-I) remarked, "It's very nice. I mean, they put a wall up to block off where the teller line used to be, but it's very nice, neat and clean and fresh and new, and everything's very well branded. They're good at that." Similarly, Participant 16 (High-I) noted, "They have these nice fancy comfortable places where you can sit down, there's a desk if you have work to do, you can do work, have drinks and snacks."

Processes Quotes for Low-I Versus High-I. The parts of participants' experiences that centered around processes were generally similar for both groups when viewing processes as rules that guide how banks do business. There, however, was a difference in the information about banking product options presented by the employees in Low-I and High-I. There were 90 (53%) quotes from Low-I and 81(47%) from High-I.

Some examples of quotes that discussed processes from both groups included Participant 5 (Low-I) described their experience when trying to cash a check: "They were going to hold it for 10 days. I had an account, so I thought for sure I could drop it in my account. But since they want to wait that long of a period, I said, nah, can't wait that long." Additionally, Participant 11 (Low-I) noted, "They said, well, the money is already taken out, there's nothing that we can do about it. You have to take that up with the people who withdrew the money out of your account...and they wouldn't put a stop to it. They told me I had to take care of it". On the other hand, some quotes shared by High-I included Participant 7 (High-I) stating, "So there were all these new rules and that further kind of enforced the fact that we should have made an appointment for this kind of transaction." Another High-I participant described their experience after they had an issue with a transaction at the bank: "...she gave me a workaround if I wanted

to do it differently for my other daughter, so if I have to do it again, I am telling my private banker " (Participant 12, High-I).

Other Category

The Other category addressed aspects of each group's experience that provided some context in understanding their experiences but did not fall into the three major categories. These themes were further classified and coded into the subcategories of Reasons for Visiting the Bank and Time of Visit. 85 quotes were coded into the other category (see Table 16). These comprised 44 (52%) Low-I and 41(48%) High-I. Table 16 illustrates the comparison of themes in the other category.

Table 16*Low-I Versus High-I for Other Sub-Themes Discussion*

Other Category	Low-I	High- I
Technology		
62 quotes	33 quotes (53%)	29 quotes (47%)
	<ul style="list-style-type: none"> Participants mentioned that they visited the banks for something that had to be addressed in person (14/43%). 89% of participants visited the bank for basic banking issues (open checking account, cash check, withdraw cash). 	<ul style="list-style-type: none"> Participants mentioned that they visited the banks for something that had to be addressed in person (13/45%). 67% of participants visited for more complex issues. (Convert foreign currency, set up safety deposit box, obtain a mortgage, cash savings bonds).
Time of Visit		
17 quotes	8 quotes (47%)	9 quotes (53%)
	<ul style="list-style-type: none"> Participants visit during weekends and late hours (5/62%). Participants mentioned they had challenges setting appointments during the work week (4/50%). 	<ul style="list-style-type: none"> Participants visit during weekday lunch hours (5/56%). Participants mentioned that visiting the bank was based on a flexible schedule and mostly walk-in (5/56%).

Reason for Visit Quotes for Low-I Versus High-I. Both groups' reasons for visiting the bank were generally similar, in that they went in for transactions that had to be done in person. The difference was noted in that most low-I mostly visited the bank for basic services, while high-I visited the bank for more complex banking services. There were 33 (53%) quotes from Low-I and 29 (47%) from High-I.

Some quotes from both groups include Participant 1 (Low-I) explained, "I had already set up my personal account online, and my business account is what I was there to set up at that particular moment; they can't do it online." This sentiment was echoed by Participant 2 (Low-I), who mentioned, "The only time I actually need to go inside the bank is if I need to withdraw cash, honestly, because you can only draw a certain amount in a day." Similarly, Participant 6 (High-I) highlighted the obligatory nature of bank visits, stating, "If I have to go to a bank, it would be because I have zero choice; what I need to do only can happen in person and not at the actual branch." To describe more specific reasons, Participant 7 (High-I) noted, "Mostly I would go to a bank if I needed to get money out for a vacation; that would be pretty much my only reason." Participant 13 (High-I) added, "The only reason I would go inside would be to get a safety deposit box, talk to someone about a loan, maybe a home or car loan."

Time of Visit Quotes for Low-I Versus High-I. There was a noted difference in the preferred times for visiting the bank between the Low-I and High-I income groups. There were 8 (47%) quotes from Low-I and 9 (53%) quotes from High-I. Generally, Low-I participants preferred to visit the bank during weekends or scheduled appointments at specific times during the day when they could find the opportunity.

Some quotes from participants in both groups that addressed the time of their visit included Participant 1 (Low-I) described their experience: "I made it in, it was a Saturday, about

three weeks later because my schedule was crazy, so I kept forgetting the call every time. I think the call was past business hours." Participant 8 (Low-I) also highlighted their weekend preference, stating, "The weekend is usually the time that I do go to the bank only because all week I'm working and before I had a second shift schedule, so as you know about second shift, you don't usually have time." In contrast, High-I individuals generally visited the bank during lunch hours of the workday and often did not make appointments due to the flexibility in their schedules. Participant 7 (High-I) mentioned: "We didn't make an appointment or anything, we just kind of showed up at the bank when it was convenient for us." Participant 15 (High-I) explained, "So while I technically work for one company, but really flexible schedule. So I try to go either late morning or early afternoon so there's no lines or I can go in and out." Participant 17 (High-I) recalled a specific visit time: "I usually go mostly right around lunch, but this one was at 3:00 PM I remember very well because I had to work and we had to meet at the branch at 3:00 PM."

Same Participant, Same Bank, Different Experience

Participant 15 (High-I) shared an intriguing experience that encapsulates the differences in how Low-I and High-I individuals perceive their interactions with the bank. Having transitioned from a Low-I status to a High-I status due to sudden life-changing events, Participant 15 noted a stark change in their interaction with the same bank they had used for many years. They shared: "I essentially doubled my income within a month. Right. Additionally, there was a situation in which we won a house. So, the house I'm in now, we won this for a hundred dollars ticket," Participant 15 explained. Reflecting on their recent visit to the bank after consolidating their finances there, Participant 15 recalled, "I walk in after we consolidate all our money there; I think I'm just trying to deposit some money, and the bank teller says, oh, hold on

a second, Mr. Participant 15, you have to meet our preferred account manager. And so basically, they're offering me a beverage. They're sitting me in. You could tell that there was a difference in how I was treated just because I had a little bit more money."

Participant 15 continued, emphasizing the shift in treatment: "Then the next time I was in there, it just felt a lot different. I felt like I was a lot more valued. My time was more valuable than before... and to this day, if I go into that branch, this guy will come out of his office and take me in there." Summarizing the contrast, Participant 15 remarked, "Long story short, I do feel as though there's a lot more customer service given to me, whereas before I didn't get that. If I had walked in 10 savings bonds before, the person who had to type in all the little numbers on the savings bonds was kind of annoyed. They seemed annoyed that they had to do it, but I feel like if I did that today, it'll just feel like a different experience. There are more products available to me from the bank. They're talking to me about investments. Whereas before, they didn't want to talk to me about investments."

Summary

The data collection and analysis stage resulted in 677 quotes, which were categorized into four primary categories and classified into eight sub-themes. These results provide a better understanding from a socio-technical lens for understanding participant's experiences interacting with traditional banks. In the following chapter, I discuss the findings of this study in the context of existing literature on community banking experiences and explore implications, limitations, and opportunities for future research in this area.

CHAPTER 5. DISCUSSION

This study addressed a significant gap in the literature by providing a thorough understanding of how individuals in low and higher-income communities experience banking through a socio-technical lens. The data collected in this study allowed for an analysis of these experiences from a comparative perspective across both groups. By utilizing the Socio-Technical Systems (STS) lens to shape the interview questions, this study captured the holistic views of participants, encompassing both social and technical aspects from their perspectives. The Comparative Deductive Thematic Analysis (CDTA) approach employed in analyzing the data provided insights into both the similarities and differences in banking experiences between the two groups, framed within the conceptual framework of STS.

The STS framework used for this study proposed three *socio* and three *technical* sub-themes. The socio sub-themes included *relationships, communications, and culture/values*. Conversely, the technical sub-themes included *technology, processes, and physical structures*. During the analysis, a new category was added called *other*, and two additional sub-themes emerged. The two sub-themes in the other category were *the reason for bank visit* and the *time of visit*. In the following section, I interpret the findings from this study more fully while providing comparative insights about the themes and sub-themes as they appear in quotes from each group. I will also discuss some of the findings and their implications in this section.

Research Question

When I initiated this study, my goal was to understand the banking experiences of individuals in low-income communities and ensure they receive fair and equitable services and products compared to their higher-income counterparts. I employed the socio-technical lens to comprehensively understand these experiences, recognizing its two essential components—

social and technical—that provide a complete picture. The STS model was developed in the 1950s to help struggling miners and people in challenging situations have more productivity at work and get a better life. The model was developed on the principle that the technical side of the system needed the social elements to provide the optimal environment for productive work. (Trist, 1981; Bryl et al., 2009; Durkin et al., 2015). By applying the STS lens, I demonstrated its ongoing relevance in understanding banking experiences and serving low-income communities.

My research question was: *“What are the banking experiences of low-income individuals living in low-income communities compared with those of higher-income individuals living in higher-income communities?”* This study answered that question, revealing differences in banking experiences between the two groups and shedding light on the specific disparities. This research aims to inform the development of better banking products and services for these communities.

Demographics

The demographic characteristics of both groups, in terms of race and gender, were remarkably similar (Tables 4, 5, 7, and 8). Although not intentionally designed, this balance may be attributed to the convenience and snowball sampling methods, as my initial outreach was shared within my diverse network of contacts representing various races and genders. Notably, however, the education levels differed significantly between the low- and higher-income groups (Tables 10 and 11), a finding consistent with the literature review, which highlights the strong correlation between education and income levels (Ross & Mirowsky, 2008).

The similarities in race and gender across both groups provide additional credibility to the design, given that income levels were the main driver for participant selection. The sharp difference in education levels shows that low-income communities need more educational

support to help narrow some of the existing income gaps. Next, I will discuss the findings within each category.

Socio Category

The social aspect is crucial in my study because it highlights the human element in face-to-face interactions. People play a significant role in shaping customer experiences, and their actions can greatly influence the outcome. I believe that, regardless of technological advancements, processes, and physical structures, individuals have the power to choose how they interact with customers. By making better choices, both the bank and the customer can benefit. The proposed STS model and sub-themes helped me organize the data effectively, uncovering important themes in the social category that might have otherwise gone unnoticed (see Table 14). The comparisons of these sub-themes are discussed below.

Relationships for Low-I Versus High-I

Research by Bryl et al. (2009) and Durkin et al. (2015) highlights the importance of relationships in all interactions, and participants from both income groups emphasized the value they place on relationships. However, a contrast emerged in how participants perceived their banking relationships were valued by the bank. This disparity in perceived value could contribute to the low utilization of banking products among low-income individuals.

For instance, a participant with an account was refused check-cashing services, forcing them to search for alternative check-cashing businesses on a Saturday, incurring financial and emotional costs. This experience may have discouraged them from using other banking services, which may have been prevented if the bank had prioritized the relationship and found alternative solutions to meet their needs. Participant 5 (Low-I) shared her experience with attempting to cash a check at her bank:

"They said they couldn't cash it because I had to wait for 10 days for it to be cashed, 10 days. That's a long time to wait for your money. So, I just traveled around and had a hard time cashing it. So, I finally went to a place out in Central, and they cashed it, but it cost me 80 bucks. That was a lot. I didn't know it was going to cost me that much, but there was the only place that was going to cash it."

This case illustrates how low-income individuals might face significant hurdles when their banking relationships do not meet their needs, which could ultimately drive them away from using traditional banking services.

Communication for Low-I Versus High-I

In contrast to the higher-income group, participants in the low-income group reported that bank employees often failed to provide clear and thorough explanations when asked questions during interactions. Effective communication is crucial to help customers understand the features and benefits of banking products and services, as emphasized by Durkin et al. (2015) and Gilchrist and Taylor (2020). If bank employees are consistently patient and thorough in explaining products and answering customer questions, it could significantly improve the experience.

The bank can enhance the experience of low-income participants by providing clearer and more thorough communication when questions are asked. The socio side of STS emphasizes the human aspects of the interaction. Even in unsatisfactory situations, a simple follow-up phone call to check on issue resolution demonstrates care and concern, potentially improving the outcome. This additional step shows empathy, provides valuable insights for product development, and helps the bank design better products while improving participants' perceptions of their experience.

An example quote that addressed this lack of communication is shown when Participant 5 (Low-I) wasn't clear on why the bank would not cash their check and stated:

"I don't know. I asked and I don't know why they would want to hold it for 10 days.

Some of them do three days. I know a bank does sometimes hold it for three days in the account to make sure it clears. I've had that experience also back in the day. I guess they just want to see if it's fraudulent, but 10 days, I thought that was an excessive time. 10 days, that's quite a bit. That's almost two weeks, but people got to wait for their money."

This case illustrates the confusion and frustration that can arise from poor communication. By addressing these issues and improving how they communicate with low-income customers, banks can build stronger relationships and encourage greater utilization of their services.

Culture and Values for Low-I Versus High-I

The quotes from low-income participants revealed that cultural influences shape their perceptions of traditional banks, consistent with Squires and O'Connor's (1998) findings that low-income households often form their views on banking based on community and family experiences. The cultural values of both groups provide a valuable perspective (Vatrapu, 2010). Low-income communities and banks can build a mutually beneficial relationship by understanding and addressing these cultural influences. The underutilization of banking services is partly due to the restrictive services and qualification criteria set by banks. For instance, some low-income participants believed they would be rejected for a simple business checking account, delaying their business ventures and potential income. This missed opportunity also means the bank loses a potential customer, as the business could grow and require additional banking services.

In the socio category, participants discussed the importance of relationships, communication, and culture/values in their interactions with traditional banks. Both groups emphasized the significance of personal relationships with bank employees. Low-I participants often desired more personal engagement, such as casual conversation and acknowledgment beyond transactional interactions. For instance, Participant 1 (Low-I) noted the absence of personal inquiries during interactions, whereas Participant 14 (High-I) highlighted the value of knowing and having access to a specific banker for resolving issues.

Technical Category

The technical aspect is crucial in my study because it encompasses the non-human elements that significantly impact face-to-face interactions. Technology, processes, and physical structures are vital in shaping customer experiences. I believe that when the bank implements these technical systems, it can do so with the customer experience in mind, acknowledging the potential challenges that these systems may pose for low-income communities (Ford, 2019). The proposed STS model and sub-themes helped me effectively organize the data, uncovering important themes in the technical category that might have otherwise gone unnoticed (see Table 15). The comparisons of these sub-themes are discussed below.

Technology for Low-I Versus High-I

The convenience of mobile banking apps and digital banking was a significant advantage, showcasing technology's potential to increase access to banking services. This aligns with Dharma et al.'s (2010) research on technology adoption in low-income communities. Given the ease of access to mobile apps via smartphones, both groups found it convenient. However, a notable difference emerged: all 9 low-income participants preferred face-to-face interviews, while only 1 higher-income participant requested one. This suggests that low-income

communities are less familiar with virtual meeting tools like Zoom, which are commonplace in higher-income communities. While online banking is preferred, especially in low-income communities with limited bank hours and conflicting work schedules, Ford (2019) found that providing smartphones and mobile data through federal programs has improved access to simple mobile apps. Nevertheless, this improvement is insufficient to address the underlying issue of limited technology access in low-income communities.

Physical Structure for Low-I Versus High-I

Participants' banking experiences varied due to differences in physical bank structures in their nearby locations. Research by Dharma et al. (2010) emphasizes the crucial role of infrastructure in facilitating access to services in low-income communities. Low-income participants expressed more negative sentiments regarding the bank's interior than higher-income participants. The physical bank structure is a socio-technical interface where social and technical aspects converge. A well-designed structure can significantly enhance customer experiences and perceptions, particularly in low-income areas. This underscores the importance of considering social and technical factors to create inclusive and equitable bank branches, highlighting the need for consistency across all branches, rather than prioritizing those in higher-income areas.

Processes for Low-I Versus High-I

Trist (1981) and Kaminski (2022) emphasized the importance of processes in ensuring the effective functioning of a system. Both low-income and higher-income groups understood processes as rules guiding bank operations. However, bank employees often shared more information about additional products and services with higher income customers than low-income customers, likely due to limitations of qualification criteria. Banks should design products and services tailored to their specific needs to better serve low-income communities,

such as credit-building and savings products. This would enable employees to offer relevant options, as current products may only cater to higher-income individuals. Banks should also adopt a community-centric approach when developing operational processes, fostering inclusivity and addressing the unique needs of diverse communities, just like they would in product development

In summary, in contrast to Low-I, High-I generally had direct individual contacts within the bank whom they could contact to discuss any issues or concerns. Additionally, participants expressed that their bankers proactively contacted them to check in, providing opportunities to learn about new solutions or address any questions. This was not the case for the low-income group, who generally had to deal with different individuals and sometimes felt their issues could have been handled more seriously.

Other Category

The Other Category was important for me to capture more context surrounding each group's experience. The two sub-themes in this category are discussed below.

Reason for Visit for Low-I Versus High-I

Participants from both income groups consistently stated that they visited the bank out of necessity rather than choice. While the underlying sentiment was similar, the specific reasons for visits varied based on individual needs and circumstances, including eligibility criteria for banking products. The disparity in banking habits between low-income and higher-income individuals is largely due to the available products and services. Low-income participants only visited the bank when necessary, limiting their transactions to basic needs, as they were either unaware of or felt ineligible for more comprehensive services. To address this gap, low-income communities require financial education on the range of banking services, and banks must design

products and services tailored to their specific needs. By doing so, banks can encourage low-income communities to utilize their services as frequently as higher-income communities.

Time of Visit for Low-I Versus High-I

Low-income participants typically visited the bank on weekends or scheduled appointments at specific times, aligning with the findings of Squires and O'Connor (1998) on the rise of check-cashing businesses in low-income communities. While Low-I participants often visited the bank during non-traditional hours. These findings highlight the interplay between limited access to traditional banking services, physical presence of the bank, and the social dynamics of financial exclusion. This was more visible in low-income participants visiting banks during weekends and often relying on non-traditional hours due to socio-economic constraints. High-I participants tended to visit during weekday lunch hours, leveraging their flexible schedules for convenience. To better serve low-income communities, banks should reconsider their operating hours, extending them to include late evenings and longer weekend hours. This would provide residents with more opportunities to access banking services at a time that suits their needs, increasing accessibility and convenience.

Limitations

This study offered a comparative understanding of the banking experiences among individuals in low-income and higher-income communities within the NW Ohio geographic region. One significant limitation was the challenge of transferring findings to other settings or groups, as noted in prior research (Stenfors et al., 2020). While demographic data was collected to offer context, the noticeable disparity in educational attainment between groups—where participants in the low-income category typically had some college experience or less, while

those in the higher-income group generally held at least a bachelor's degree—likely influenced their perspectives on their banking experiences (Ross & Mirowsky, 2008).

Another limitation was the exclusive focus on participants' viewpoints as bank customers without exploring the perspectives of traditional bank employees. Future research is recommended to address this gap, aiming to provide a more comprehensive understanding of banking interaction from both sides.

Standard qualitative practices recommend independent coding by multiple researchers to enhance reliability. However, due to being the sole researcher for this study, thematic coding was conducted independently, with member cross-checking employed to ensure the consistency and accuracy of participant narratives (Butterfield, 2009). Nevertheless, the absence of multiple coders remains a limitation.

Finally, the average interview length for this study was 24 minutes, which is shorter than the recommended duration for qualitative research. According to Creswell and Poth (2018), interviews in qualitative research should typically last between 30 minutes to 1 hour to allow for in-depth exploration of the topic without overwhelming participants. The shorter interview lengths in this study were attributed to two main factors. First, the study's design played a role, as it was a deductive study with a pre-existing framework of interview questions focused on specific themes. In some cases, deductive interviews tend to be shorter in qualitative research due to being bound by the applied framework (Bryman, 2016; Guest, 2018). Additionally, the context of the interviews influenced their length, as some participants from low-income communities had brief banking interactions and were hesitant to discuss sensitive financial details, resulting in shorter interviews than intended.

Despite these limitations, the study uncovered significant thematic insights into banking experiences that align with the STS framework. This framework offers a valuable perspective on the dynamics of banking service delivery within communities. The comparative analysis highlighted similarities and differences in how individuals from varying income levels perceive their banking interactions, providing insights beneficial to traditional banks and community stakeholders. Subsequent sections of this chapter detail further exploration of these implications and practical applications.

Practical Implications

This research on comparative banking experiences among people of different income levels in communities and its findings provide valuable insights that can be practically applied to various aspects of banking and community development. This section outlines how various stakeholders can leverage these insights to improve community banking service delivery.

Implications for Traditional Banking Operations

The findings of this study offer practical implications that can significantly enhance the operational strategies of banks and financial institutions. First, banks can strategically locate branches and ATMs in residential areas, particularly neighborhoods with lower-income populations. This approach could improve accessibility and convenience for customers facing transportation challenges or limited mobility. Extending weekend hours at these locations can further accommodate the unique scheduling constraints of these communities, ensuring that banking services are accessible when needed most.

Additionally, investment in mobile banking applications is another critical initiative. Mobile banking is more readily accessible to everyone regardless of income level. Banks can extend their reach beyond physical branches by developing user-friendly mobile apps and

educating customers about their functionality and benefits. This technological approach is vital in areas where physical infrastructure may be sparse or inadequate.

By implementing these strategies, traditional banks can better serve low-income communities, fostering stronger relationships and improving financial inclusion. These changes not only address the immediate needs of underserved populations but also enhance overall customer satisfaction and loyalty.

Implications for Training and Talent Development

To enhance the banking experience for low-income individuals, banks can implement specific training and talent development programs. Providing ongoing training for employees on effective communication, empathy, and cultural competence is essential. Employees should be encouraged to take the time necessary to thoroughly explain products and answer questions, ensuring customers understand the information. Establishing a follow-up protocol for unresolved issues, demonstrated through simple actions like phone calls, shows care and concern. By utilizing customer feedback and insights to inform product development, banks can design more inclusive financial services. By prioritizing the human aspects of the interaction, as emphasized by the socio-technical systems perspective, banks can create a more supportive and inclusive environment, leading to improved experiences, increased satisfaction, and better financial outcomes for low-income individuals.

Implications for Community Relationships

Banks can foster stronger community relationships by establishing community outreach programs, building connections with local organizations, businesses, and residents, and promoting financial inclusion. Through partnerships with community organizations, banks can implement financial inclusion initiatives, such as low-cost banking services, financial

counseling, and access to credit-building products, to address the specific needs of low-income communities. By taking these steps, banks can demonstrate their commitment to community development and financial inclusion, ultimately contributing to the economic well-being of the communities they serve.

Implications for Product Design and Financial Education Initiatives

Banks can bridge the financial knowledge gap in low-income communities by educating customers about additional services like investment opportunities and wealth management, promoting financial literacy and empowerment. Banks should also design products tailored to the income levels of their communities and educate customers about these products. For example, they can develop products that encourage savings, financial education, and credit building in low-income communities and train local employees to discuss and educate customers about these offerings. By providing tailored services and promoting financial inclusion, banks can play a vital role in enhancing the overall financial well-being of their customers.

Summary

This research offers valuable insights banks can use to enhance banking services, foster community relationships, and promote financial inclusion. By implementing strategic branch locations, extended hours, mobile banking applications, personalized services, and tailored product design, banks can better serve low-income communities. Additionally, financial education initiatives and community outreach programs can empower individuals and promote economic growth. By adopting these practical implications, stakeholders can work together to create a more inclusive and supportive banking system that benefits marginalized communities and enhances overall financial well-being.

Future Research

The study provided a thorough understanding of the banking experiences of individuals in low-income and higher-income communities. However, the findings suggest several avenues for future research, which this section addresses.

Research on the Perspectives of Bank Employees

Future research could explore bank employees' perspectives to provide a more comprehensive understanding of banking experiences from a socio-technical lens. This additional angle would provide a more complete analysis of how customers and employees perceive and interact with each other.

Research That Expands on the Socio-Technical Frameworks Sub-Themes

Further research could explore the themes identified through the socio-technical framework, particularly those that emerge as more common within each group. For instance, investigating the relative importance of communication, relationships, culture/values, technology, and physical structure and process in shaping banking experiences could inform areas where the bank could prioritize improving inclusivity strategies.

Research That Includes Middle-Income Households

This study concentrated on low-income and higher-income households, omitting a significant segment of traditional bank customers who fall within the middle-income category. A potential avenue for future research would be to apply a similar approach to explore the banking experiences of middle-income earners, comparing their experiences to those of low-income and higher-income communities. This focus would build upon the findings of this study and offering a more comprehensive understanding of the banking experiences across diverse income groups.

Research That Expands on Same Individual, Same Bank, and Different Experience

Future case studies of individuals who have had unique circumstances like Participant 15, which qualified them for both income groups over a short period of time, could provide valuable contributions to the field of understanding the lived banking experiences across low—and higher-income communities.

Quantitative Research

A future study with a larger sample size and quantitative methodology could provide a better understanding of the relationships between the variables examined in this study. By comparing the interrelationships between variables across different groups, such a study could reveal how much they overlap or differ. This would significantly enhance the current study's findings, offering a more detailed understanding of the complex dynamics at play.

Future studies can build upon this work by examining bank employees' perspectives, expanding on socio-technical frameworks, and investigating individuals with unique circumstances. Quantitative research with larger sample sizes can also provide a more comprehensive understanding of the relationships between variables. By pursuing these research directions, we can deepen our understanding of banking experiences and inform strategies to improve financial inclusion and well-being for individuals across diverse income communities. Ultimately, this research aims to contribute to a more equitable and supportive banking system that acknowledges and addresses all individuals' unique needs and experiences.

CHAPTER 6. CONCLUSION

This study explored the banking experiences of low-income individuals in low-income communities compared to those of higher-income individuals in higher-income communities. The findings offer valuable insights into these experiences and highlight key areas for further exploration to enhance and improve banking services.

Reflections

Through this research, I developed a deeper understanding of banking institutions' critical role in supporting communities, particularly those underserved. The socio-technical lens employed in this study offered a comprehensive understanding of banking interactions, revealing subtle aspects that may have otherwise been overlooked. The framework encouraged participants to share their experiences and reflect more deeply on their interactions, showing that banking experiences extend beyond individual interactions and are influenced by past experiences and external factors.

The study also found that the increased accessibility of technology and digital banking platforms has led to a shift towards online banking, with physical branch visits largely reserved for necessary transactions. Therefore, I recommend banks to prioritize personalized service for *all* individuals who visit their physical locations.

Final Thoughts

The findings of this study contribute to the existing body of knowledge by providing a better understanding of the similarities and differences in banking experiences across socio-economic communities. The results lay the foundation for future research in specific areas, such as banking services and community development. The practical implications of this study can inform immediate steps toward improving bank-community relationships, promoting financial

literacy, enhancing community engagement, and increasing banking service utilization, particularly in low-income communities.

REFERENCES

- Beloin, K., & Peterson, M. (2000). For richer or poorer: Building inclusive schools in poor urban and rural communities. *International Journal of Disability, Development and Education*, 47(1), 15–24.
- Benzow, A., Fikri, K., & Newman, D. (2020). Meet the low-income communities eligible for powerful new small business relief in the Rubio-Collins Phase IV Proposal. Economic Innovation Group. Retrieved November 6, 2022.
- Braveman, P., & Gottlieb, L. (2014). The social determinants of health: It's time to consider the causes of the causes. *Public Health Reports*, 129(1_suppl2), 19-31.
- Bryl, V., Giorgini, P., & Mylopoulos, J. (2009). Designing socio-technical systems: From stakeholder goals to social networks. *Requirements Engineering*, 14, 47–70.
- Bryman, A. (2016). *Social research methods*. Oxford University Press.
- Butterfield, L. D., Borgen, W. A., Amundson, N. E., & Maglio, A. S. T. (2005). Fifty years of the critical incident technique: 1954-2004 and beyond. *Qualitative Research*, 5(4), 475–497.
- Butterfield, L. D., Borgen, W. A., Maglio, A.-S. T., & Amundson, N. E. (2009). Using the Enhanced Critical Incident Technique in counselling psychology research. *Canadian Journal of Counselling*, 43(4). 265282.
- Carlson, S., & Neuberger, Z. (2021). WIC works: Addressing the nutrition and health needs of low-income families for more than four decades. Center on Budget and Policy Priorities. <https://www.cbpp.org/research/food-assistance/wic-works-addressing-the-nutrition-and-health-needs-of-low-income-families>

- Castro, P., Rodrigues, J. P., & Teixeira, J. G. (2020). Understanding FinTech ecosystem evolution through service innovation and socio-technical system perspective. In *Exploring Service Science: 10th International Conference, IESS 2020, Porto, Portugal, February 5–7, 2020, Proceedings* (pp. 187-201). Springer International Publishing.
- Chambers, J. A., O'Carroll, R. E., Hamilton, B., Whittaker, J., Johnston, M., Sudlow, C., & Dennis, M. (2011). Adherence to medication in stroke survivors: A qualitative comparison of low and high adherers. *British Journal of Health Psychology*, *16*(3), 592-609.
- Chetty, R., Hendren, N., Kline, P., Saez, E., & Turner, N. (2014). Is the United States still a land of opportunity? Recent trends in intergenerational mobility. *American Economic Review*, *104*(5), 141-147.
- Climent, F. (2018). Ethical versus conventional banking: A case study. *Sustainability*, *10*(7), 2152.
- Cunningham, P. J. (2006). What accounts for differences in the use of hospital emergency departments across US communities? Reducing ED use defies simple solutions such as expanding insurance coverage or restricting access for noncitizens. *Health Affairs*, *25*(11), W324-W336.
- Daft, R. L. (2015). *Organization theory and design* (12th ed.). Cengage Learning, Inc.
- Desmond, M., & Western, B. (2018). Poverty in America: New directions and debates. *Annual Review of Sociology*, *44*, 305-318.
- Dharma, D., Amelia, B., Powell, A., Joe, K., & Jaewon, C. (2010). Broadband adoption in low-income communities. Social Science Research Counsel. <https://www.ssrc.org/publications/broadband-adoption-in-low-income-communities/>

- Dixon, M., Freeman, K., & Toman, N. (2010). Stop trying to delight your customers. *Harvard Business Review*, 88(7/8), 116–122.
- Duncan, G. J., & Magnuson, K. (2013). Investing in preschool programs. *Journal of Economic Perspectives*, 27(2), 109–132.
- Durkin, M., Mulholland, G., & McCartan, A. (2015). A socio-technical perspective on social media adoption: A case from retail banking. *International Journal of Bank Marketing*, 33(7), 944-962.
- Farwaha, S., & Obhi, S. S. (2020). Socioeconomic status and self–other processing: Socioeconomic status predicts interference in the automatic imitation task. *Experimental Brain Research*, 238, 833-841.
- Flanagan, J. C. (1954). The critical incident technique. *Psychological Bulletin*, 51(4), 327–358.
<https://doi.org/10.1037/h0061470>
- Ford, George S. (2019). A fresh look at the Lifeline program. <http://dx.doi.org/10.2139/ssrn.3608426>
- Fuenfschilling, L., & Truffer, B. (2016). The interplay of institutions, actors and technologies in socio-technical systems—An analysis of transformations in the Australian urban water sector. *Technological Forecasting and Social Change*, 103, 298-312.
- Galster, G. C., Booza, J. C., & Cutsinger, J. M. (2008). Income diversity within neighborhoods and very low-income families. *Cityscape*, 257–300.

- Galt, R. E., Bradley, K., Christensen, L., Fake, C., Munden-Dixon, K., Simpson, N., & Van Soelen Kim, J. (2017). What difference does income make for community supported agriculture (CSA) members in California? Comparing lower-income and higher-income households. *Agriculture and Human Values*, 34, 435–452.
- Guest, G. (2018). *Fieldwork: A practical guide to doing qualitative research*. Sage Publications.
- Nagel, M. A. (2021). Utilizing digital technology to address loneliness and isolation in older adults through a community-based connection model: Responding to a pandemic (Doctor of Nursing Practice project, University of San Francisco). <https://repository.usfca.edu/dnp/264>
- Gilchrist, A., & Taylor, M. (2016). *The short guide to community development*. Policy Press.
- Gramlich, E. (2006). *Building assets, building credit: Creating wealth in low-income communities*. Brookings Institution Press.
- Gundersen, C., Kreider, B., & Pepper, J. (2011). The economics of food insecurity in the United States. *Applied Economic Perspectives and Policy*, 33(3), 281-303.
- Huston, A. C., Chang, Y. E., & Gennetian, L. (2002). Family and individual predictors of child care use by low-income families in different policy contexts. *Early Childhood Research Quarterly*, 17(4), 441–469.
- Kaminski, J. (2022). Editorial. Theory applied to informatics: Socio-technical theory. *Canadian Journal of Nursing Informatics*, 17(3-4).
- Kowalsky, M. (2019). *Envisioning change and extending library reach for impact in underserved school communities*. In S. Wisdom, L. Leavitt, & C. Bice (Eds.), *The handbook of research on social inequality and education* (pp. 202–219). IGI Global.

- Kneebone, E., Reid, C., & Holmes, N. (n.d.). *Spatial context: The geography of mixed-income neighborhoods*. Case Western Reserve University.
- Lindsay, S. (2019). Five approaches to qualitative comparison groups in health research: A scoping review. *Qualitative Health Research*, 29(3), 455-468.
- Liu, B. (2022). *Sentiment analysis and opinion mining*. Springer Nature.
- McNeill, W. H. (2009). *The rise of the West: A history of the human community*. University of Chicago Press.
- Merriam, S. B., & Tisdell, E. J. (2016). *Qualitative research: A guide to design and implementation* (4th ed.). John Wiley & Sons/Jossey Bass.
- Otto, A. S., Szymanski, D. M., & Varadarajan, R. (2020). Customer satisfaction and firm performance: Insights from over a quarter century of empirical research. *Journal of the Academy of Marketing Science*, 48, 543-564.
- Puerta, M. L. S. (2012). Training programs for the unemployed, low-income, and low-skilled workers. *The Right Skills for the Job?: Rethinking Training Policies for Workers*, 133.
- Putnam, R. D. (2000). *Bowling alone: The collapse and revival of American community*. Simon and Schuster.
- Reardon, S. F., & Bischoff, K. (2011). Income inequality and income segregation. *American Journal of Sociology*, 116(4), 1092-1153.
- Reichheld, F. F. (2003). The one number you need to grow. *Harvard Business Review*, 81(12), 46-55.
- Rhine, S. L., & Greene, W. H. (2013). Factors that contribute to becoming unbanked. *Journal of Consumer Affairs*, 47(1), 27-45.

- Ross, C. E., & Mirowsky, J. (2008). Neighborhood socioeconomic status and health: Context or composition? *City & Community*, 7(2), 163-179.
- Roulston, K., & Shelton, S. A. (2015). Reconceptualizing bias in teaching qualitative research methods. *Qualitative Inquiry*, 21(4), 332-342.
- Rubin, J. S. (Ed.). (2007). Financing low-income communities. Russell Sage Foundation.
- Shaw, C. (2019). Promoter or detractor? Why you need to know the answer to this question. Beyond Philosophy. <https://beyondphilosophy.com/promoter-or-detractor-why-you-need-know-answer-question>
- Shinn, M., Weitzman, B. C., Stojanovic, D., Knickman, J. R., Jimenez, L., Duchon, L., & Krantz, D. H. (1998). Predictors of homelessness among families in New York City: From shelter request to housing stability. *American Journal of Public Health*, 88(11), 1651-1657.
- Simpson, E. L. (1974). Moral development research: A case study of scientific cultural bias. *Human Development*, 17(2), 81-106.
- Tindall, L. (2009). J.A. Smith, P. Flower and M. Larkin (2009), *Interpretative Phenomenological Analysis: Theory, Method and Research*.: London: Sage. *Qualitative Research in Psychology*, 6(4), 346–347. <https://doi.org/10.1080/14780880903340091>
- Social Security Administration. (2014). Population profile: Middle class beneficiaries. Social Security Administration. <https://www.ssa.gov/policy/docs/population-profiles/middle-class-beneficiaries.html>
- Squires, G. D., & O'Connor, S. (1998). Fringe banking in Milwaukee: The rise of check-cashing businesses and the emergence of a two-tiered banking system. *Urban Affairs Review*, 34(1), 126–149.

Stenfors, T., Kajamaa, A., & Bennett, D. (2020). How to... assess the quality of qualitative research. *The Clinical Teacher*, 17(6), 596-599.

Stuart, F. (2016). *Down, out, and under arrest: Policing and everyday life in skid row*. University of Chicago Press.

Trist, E. L. (1981). *The evolution of socio-technical systems* (Vol. 2). Ontario Quality of Working Life Centre.

ZipRecruiter. (2023, March 17). Upper class annual salary in Ohio. ZipRecruiter. <https://www.ziprecruiter.com/Salaries/Upper-Class-Salary--in-Ohio>

Vatrapu, R. (2010). Explaining culture: An outline of a theory of socio-technical interactions. International Conference on Intelligent Computing.

APPENDIX A. INITIAL OUTREACH TO POTENTIAL PARTICIPANTS

Hi

[NAME]

I hope all is well. As you may know, I am pursuing a Doctorate in Organization Development and Change at Bowling Green State University. I've made it to the dissertation phase, where I will explore individual experiences with traditional banks. The attached flyer provides some initial information about my planned study. Please let me know if you are interested in learning more or participating in this study, and I will provide additional information.

Thank you in advance for your consideration.

Val A. Kaba

BGSU Doctoral Candidate

Principal Investigator

vkaba@bgsu.edu

419-290-6898

APPENDIX B. RECRUITMENT FLYER



HELP ME MAKE A DIFFERENCE BY PARTICIPATING IN MY RESEARCH STUDY.

Seeking Individual Participants . **\$20** Visa Gift Card or Charitable Donation as incentive for approximately 1 hour of your time (In Person or Zoom).

The study aims to shed light on your experience with Traditional Banks and Inform Potential Community Relationship Initiatives.

Eligibility

- 18 years of age or older
- Reside in NW Ohio
- Annual Household Income of either <\$30K or >\$100K
- Had an in-person interaction at a Bank

For more information or interest to participate, please email vkaba@bgsu.edu or call 419-290-6898. <https://www.linkedin.com/in/val-kaba-05758a41/>



APPENDIX C. INVITATION LETTER

Hi,

[NAME]

My name is Val Kaba, and I am a Bowling Green State University (BGSU) student working on a Doctorate in Organization Development and Change. I am currently engaged in a research study titled “The Socio-Technical Divide: A Comparative Qualitative Analysis of Banking Experiences in Low-income and Higher-Income Communities.” I would greatly appreciate your willingness to participate in an interview for my research. The only requirements for participation are that you must be A) 18 years of age or older, B) Reside in a NW Ohio Census tract, C) Meet annual household income level criteria of <\$30,000 for low-income and >\$100,000 for higher-income, D) Have an in-person interaction with a bank employee at a traditional Bank, and E) Must recall an experience interacting with the bank employee and be able to articulate that experience.

What is involved?

Your involvement would entail an approximately 60-minute recorded in-person or Zoom session in which you tell the story of your interaction with the bank. You will be contacted via email for a follow-up response with general themes gleaned from your interview and be asked to reply within 7 days with your verification or any changes and additions. This follow-up option is voluntary and will not affect any incentives. The interview will be recorded (audio and video) via Zoom.

Importance of this research

There is a lack of understanding of the distinct experiences of individuals of opposite income levels with traditional banks, and there is a larger emphasis on the *technical components* in studies

about traditional banking, which often misses the importance of social components. This study will shed light on the holistic banking experience that includes the technical and social components of opposite income levels. The findings from this research have two positive implications. Firstly, understanding these experiences could inform future research that further explores how banking relates to community needs such as entrepreneurship, job creation, and overall community well-being. This could inform strategies for targeted investment and development initiatives. Secondly, banks can use findings to inform their community relationship initiatives, product designs, and service delivery in low-income communities by building stronger partnerships with local organizations and nonprofits.

Voluntary Participation

Your participation in this research must be voluntary. Individuals who feel obliged, coerced, manipulated, or influenced to participate are asked not to participate or can withdraw at any time. The researcher's colleagues, friends, or acquaintances are asked not to let this relationship influence their decision to participate.

Incentives

You will be compensated for your time in participating in this study by selecting either a \$20 Visa Gift Card or a \$20 contribution to a Charity of your choice. You will receive this following the interview.

Research Contacts:

- *The researcher, Val Kaba, vkaba@bgsu.edu or 419.290.6898*
- *The research supervisor, Steven Cady, Ph.D., scady@bgsu.edu or 419.343.8803*
- *Institutional Review Board (IRB): irb@bgsu.edu or 419.372.7716*

If you know someone in your community who may be eligible, please forward this invitation and ask them to contact me if they are interested in participating in this study.

Thank you for your consideration.

Val Kaba

APPENDIX D. INTERVIEW PROTOCOL

After the participant has had time to review all pertinent information about this study, all questions have been answered, and informed consent has been provided, the interview will be scheduled at a convenient time for both the participant and the interviewer.

Overview

1. The conducted interview will require approximately 60 minutes.
2. The interviews with the participants will be face-to-face or via Zoom
3. Participants will be asked to find a quiet public location where they will not be interrupted during the interview.
4. Audio, video, and interview transcripts will be recorded using secure transcribing software. They will then be audited for accuracy and edited to reflect actual comments where correction is needed.
5. The interview format will be semi-structured, allowing the interviewee to tell their story in their own words.
6. The researcher will take notes during each interview to capture nonverbal cues and important face-to-face reactions or via Zoom.
 - a. Non-verbal
 - b. Comments
 - c. Time of day
 - d. Environment of interviewee

If, at any point, the interviewee is not comfortable continuing, the interview will be stopped immediately.

Agenda

The interview protocol below is consistent with the Comparative Thematic Analysis techniques used by Chambers et al. (2011). The participants must be allowed to tell their stories and feel heard and understood using empathy and active listening skills. After the participants tell their stories as guided by the interview questions, clarifying and follow-up questions may be asked.

Step 1. Welcome the participant and thank them for their time and willingness to participate in the study. Next, confirm their recent experience interacting with a traditional bank employee and recall that experience.

Step 2. Read the informed consent and ask permission to record the session's audio and take notes. If permission is not given, the interview cannot be conducted. Recording audio and notes is important for the researcher to be able to take notes about the visual cues and behavior not captured by audio-only recordings.

Step 3. Opening—Framing the experience: Consider a recent interaction with an employee at a traditional bank. If you have more than one, consider the one you recall the most vividly. Put yourself in that moment and remember why you visited the bank, our interactions, how you felt, what you thought, the environment, and what discussions were happening. When you're ready to talk about that, let me know.

Step 4. Questions – Semi-Structured prompts: Start with an open-ended question that allows the participant to tell the story in their own words. Do not interrupt them during their story. Capture notes of clarifying questions you may need to ask after the story is told.

Tell me about your experience requesting and/or obtaining service at the bank.

Once the story has been shared, and only when the participant is completely done sharing it, ask any of the questions below that may be needed to understand the experience fully.

Relationships:

- How did you feel about the bank employee you talked to?
- How would you describe the way the bank employee treated you?

Cultures/Values:

- Describe actions by the bank (if any) that made you feel welcome (or unwelcome).
- How do you feel the bank's approach to your situation aligns with your personal beliefs?

Communication:

- How well do you think you and the bank employee understood each other?
- To what extent do you think the bank employee ensured you were understood?

Processes:

- Can you explain what happened step by step when you first got to the bank?
- Can you think of anything during your visit to the bank that made your experience either easy or hard?

Technology:

- Did computers or other gadgets play a part when you talked to the bank employee?
- Did you have any trouble using the computers or machines at the bank?

Physical Structures:

- What was the bank like inside when you were there?
- Did the way the bank looked affect how you felt?

Is there anything else you would like to share about your experience with the bank?

Step 5. Follow-Up: Additional follow-up questions may be needed to gather the appropriate details. These questions will typically be in the form of follow-up questions in the CDTA interviewing process. Follow-up questions focus on finding (Merriam & Tisdell, 2016).

Potential follow-up questions, if needed:

- What happened?
- What led up to...?
- What was the outcome?
- What was meaningful about this interaction?
- What did you learn about your Bank from this interaction?
- Do you have a designated personal banker at your bank?

Step 6. Participants will be asked to provide the following demographics,

- Address: (Street Name, City, State, Zip Code)
- Household Income (0-\$30,000, \$100,000+)
- Age (18-29, 30-39, 40-49, 50-59, 60-69, 70+, prefer not to answer)
- Gender (Male, Female, Non-binary, Other, prefer not to answer)

- Race: (American Indian or Alaska Native, Asian, Black or African American, Hispanic/Latino, Native Hawaiian or Other Pacific Islander, White, Two or More Races, Other, prefer not to answer)
- Education level (Some High School, HS Diploma/GED, Some College, Bachelor's, Master's, Doctoral, Trade School, Other, prefer not to answer.
- Employment Status (Employed, Unemployed, Retired, prefer not to answer)
- Individual Income (\$0-\$15,000, \$15,000-\$30,000, \$30,000-\$60,000, \$60,000-\$120,000, \$120,000+, prefer not to answer)

APPENDIX E. INFORMED CONSENT FORM

“The Socio-Technical Divide: A Comparative Qualitative Analysis of Banking Experiences in Low-income and Higher-Income Communities”

Name of Principal Researcher: Val A. Kaba

Phone Number & email of Principal Researcher: 419.290.6898; vkaba@bgsu.edu

Name of Doctoral Advisor: Dr. Steven H. Cady

Phone Number & email of Doctoral Advisor: 419.343.8803; scady@bgsu.edu

I invite you to participate in the study entitled “The Socio-Technical Divide: A Comparative Qualitative Analysis of Banking Experiences in Low-income and Higher-Income Communities” by Val A. Kaba, a Doctoral Candidate at the Schmidthorst College of Business at Bowling Green State University. As a graduate student, I am required to conduct research as part of the requirements for a doctorate. This study requires that you be at least 18 years old to participate. This research is being conducted under the supervision of Dr. Steven Cady.

A. Purpose and Objectives

This study/research aims to examine the banking experience of low-income individuals living in low-income communities and compare those of higher-income individuals living in their respective communities from a socio-technical lens. The objective is to identify the differences and similarities in experiences for the two groups during in-person banking interactions. There is a lack of understanding of the distinct experiences of individuals of varied income levels receiving traditional banking services. Firstly, understanding these experiences could inform future research that further explores how banking relates to community needs such as entrepreneurship, job

creation, and overall community well-being. This could inform strategies for targeted investment and development initiatives. Secondly, banks can use findings to inform their community relationship initiatives, product designs, and service delivery in low-income communities by building stronger partnerships with local organizations and non-profits.

B. Procedure

The interview will require approximately 60 minutes and will be conducted in person or via Zoom. Please find a quiet public location with minimum distractions, and if possible, it would be best if the interview could be conducted without interruptions. If, at any point, you are not comfortable continuing, the interview will be stopped immediately. You will be contacted via email for a follow-up response with general themes gleaned from your initial interview and be asked to reply within 7 days with your verification or any changes and additions. This follow-up option is voluntary and will not affect your compensation. The interview consists of semi-structured questions to allow you to tell your story in your own words. The researcher's observations will be documented during each interview. Please find a quiet public location with minimum distractions for the interview. You will be contacted after the interview is transcribed to verify the accuracy of the interview, and you will have seven days to provide feedback on the transcription.

C. Benefits

Participating in this research allows you to share your experiences, which can influence future studies in various communities. Your involvement can help generate research findings about your interactions with traditional banks, potentially improving how these banks engage with communities. This could ultimately result in the development of low-cost banking solutions and reduced financial stress within communities.

D. Voluntary Participation

Your participation is entirely voluntary. You are free to withdraw at any time without explanation or penalty. Your decision to participate will not affect your relationship with Bowling Green State University. The researcher's colleagues, friends, or acquaintances are asked not to let this relationship influence their participation decision. You will be compensated for participation with a \$20 Visa gift card or a \$20 charitable donation. If you choose the gift card option, you will be handed a \$20 Visa gift card at the end of your initial interview. If you choose the charitable donation option, the researcher will process the donation on the same date as your initial interview and provide you a receipt via email if you request one. You can refuse to discuss any aspect of your banking experience. If you decide to leave during the study, their interviews and notes will be deleted.

Participation Criteria: A) 18 years or older, B) Reside in a qualified census tract in NW Ohio (either low-income or higher-income). C) Meet annual Household income level criteria of <\$30,000 for low-income and >\$100,000 for higher-income, C) Have a recent in-person interaction with a bank employee at a traditional Bank, and D) Must recall the experience interacting with the bank employee and be able to articulate that experience

E. Definitions:

Banking Experience: Any interaction with the bank employee involves either requesting a new service, obtaining a new one or maintaining your existing services.

Traditional Bank: A for-profit retail banking system where the banks accept deposits from the public and provide loans and other everyday banking services such as check-cashing, bill payments, investment advice, and money management to customers.

Low-income census tract: Census tracts where 50 percent of households have incomes below 60 percent of the Area Median Gross Income (AMGI) or have a poverty rate of 25 percent or more.

Higher-income census tract: Census tracts that do not qualify as low-income.

F. Confidentiality

Interviews will be digitally recorded and then transcribed. The transcribed text will be kept for up to ten years in secure cloud storage that only the researcher can access for future conferences and papers. Only the primary researcher, Val Kaba, will know the participant's identity. Your personal information will be stored in a separate spreadsheet in a separate file from the data you have collected. At no time will actual identities be used to disseminate the results of this dissertation research or future research publications utilizing this material.

You will be asked to notify other you believe are suitable for this research about the study. This request is optional. You will not know if your recommended acquaintance participated in the study. Upon reading the research, it may be possible to identify your acquaintance through the choice of language in the quotes or other identifying information (e.g., your neighborhood). Likewise, your acquaintances will know you participated in the study and might be able to identify your quotes. This means there is a slight limit to confidentiality if people accurately guess who their acquaintance is in the study.

G. Dissemination of Results

The results of this study are anticipated to be shared in the following ways: directly with participants, published peer-reviewed articles, dissertations, university libraries, presentations at conferences or to the public and scholarly meetings, and possibly in the media (e.g., magazines, journals, radio, TV).

H. Disposal of Data

Digital interview recordings will be deleted after being transcribed. However, transcripts will be kept for up to ten years in a secure password-protected cloud storage location that only the

researcher can access for future reference and research. This data will be destroyed after ten years.

I. Risks of Participation

There could be a slight risk that participants may experience emotional stress or discomfort while recounting and telling stories of their banking experience. Banking experiences are sometimes challenging as they could involve discussing financial matters which could be sensitive. By recounting the interaction, a participant might feel sad, embarrassed, or ashamed while recounting the events with the bank. If this occurs during an interview and the participant is unwilling or unable to continue, the interview will be stopped, and the interviewee will be referred to the appropriate resources for dealing with any emotional discomfort that was caused. Initially, the participant will be referred to the Wood County Crisis Line (available 24 hours/7 days a week) at 419-502-4673 as a crisis resource.

J. Questions

If you have any questions about the study, please contact the Principal Researcher or Doctoral Advisor at the phone numbers or email address below. You can also contact the Institutional Review Board with questions about your rights as a research participant or research-related concerns. Please take as much time as needed to review this material and get all questions answered before giving informed consent to participate.

K. Contact Information:

- *The Principal Researcher, Val A. Kaba, vkaba@bgsu.edu or 419.290.6898*
- *The Doctoral Advisor, Steven H. Cady Ph.D., scady@bgsu.edu or 419.343.8803*
- *Institutional Review Board (IRB): irb@bgsu.edu or 419.372.7716*

Thank you for your time and commitment to my education and for supporting my research.

CONSENT:

I have been informed of this study's purposes, procedures, risks, and benefits. I have had the opportunity to have all my questions answered, and I have been informed that my participation is completely voluntary, and I agree to participate in this research. By signing this form, I verify that the definitions of *banking experience* above fit my experience. I have been informed of this study's purposes, procedures, risks, and benefits. I have had the opportunity to have all my questions answered, and I have been informed that my participation is completely voluntary, and I agree to participate in this research.

Name of Participant (printed): _____

Signature: _____

Date: _____

Please provide your email address and phone number for use in future communications:

Email: _____

Please circle, initial, and date all the sections below:

I consent to be contacted to validate the results:

Initials: _____

I consent to the use of my data in future research:

Initials: _____

I consent to be contacted if my data is requested for future research.

Initials: _____

APPENDIX F. POST-INTERVIEW FOLLOW-UP MESSAGE

Hello (name),

Thank you for taking the time to share your experience interacting with a traditional bank. If interested, you can review and provide feedback on the initial transcript. Additional details are forthcoming.

Finally, if you have anyone in your community who meet the eligibility criteria and may be interested in participating in this study, please ask them to contact me using the information below.

Thank you,

Val A. Kaba

vkaba@bgsu.edu

419-290-6898