DEEPENING THE DIVIDE: A BASIC QUALITATIVE STUDY ON THE COLLEGE-GOING PROCESS OF LOWER-SES, COLLEGE-INTENDING, BLACK STUDENTS DURING THE ONSET OF THE COVID-19 GLOBAL PANDEMIC

by

JUAWN ANTONIO JACKSON

(Under the Direction of Krystal L. Williams)

ABSTRACT

To ensure the future success of Lower-SES, college-intending, Black students, there is a need to understand the factors that lead to their resilience, which is the heightened likelihood of success in school and other aspects of life, despite environmental adversities, such as the COVID-19 pandemic. This study sought to elevate the lived experiences of those who have succeeded against the odds to obtain college enrollment despite challenges related to their access to technology.

Upon review of the literature related to the digital divide and the college-going process, it became evident that more research is needed on the challenge of technology maintenance-related disparities. This basic qualitative study explores socioeconomic achievement gaps in college access.

The research was designed to provide insights into the experiences of individuals within one urban school district to understand the impact of having limited access to technology. This dissertation was informed by college choice theory to shed light on how students with limited access to technology underwent the college-going process.

Despite the COVID-19 pandemic, this study found that students' persistence in achieving college attainment did not waver despite their limited access to technology. Data collection included completing questionnaires and interviews with 12 participants. Upon analysis, three themes emerged. The first theme, Unforeseen Ramifications Arising from Initiating the College Planning Journey in the Final Year of High School, discusses the impact of waiting until late to complete the college-going process. The second theme, The Fulfillment of the FAFSA as a Pivotal Determinant in the College Enrollment Journey, explores the role of FAFSA completion on students from this population. The final theme, Unwavering Continuation of College Enrollment Amidst the COVID-19 Pandemic, Coupled with Challenges Exacerbated by the Crisis, depicts the path the participants traveled towards their first year in college.

Some key findings from this study include 1) the importance of college-going programming for students seeking to develop college knowledge and complete the college application process, 2) how critical obtaining financial aid is for Lower-SES, college-intending, Black students, and 3) the pandemic exacerbated or created substantial barriers to college access, with many students reporting a lack of resources.

INDEX WORDS: college access, college knowledge, COVID-19, digital divide, digital infrastructure, financial aid, postsecondary access, socio-digital inequalities, technology maintenance

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A Dissertation Submitted to the Graduate Faculty of The University of Georgia in Partial Fulfillment of the Requirements for the Degree

DOCTOR OF EDUCATION

ATHENS, GEORGIA

2023

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December 2023

DEDICATION

First, I give honor to my Lord and Savior for guiding me through this entire process. He reminds us in Matthew 17:20-21 that if we have faith the size of a mustard seed, we can tell any mountain to 'Move from here to there,' and it will move, and nothing will be impossible.

I dedicate this dissertation to one of my study's participants, a young Black man whose time on this earth was too short. Thank you for your contributions to my study and the lasting impression that you will forever hold on to my heart.

I also dedicate this dissertation to the memory of the late Elizabeth Howard Searcy, my "big-ma." There is not a day that passes that I do not think of you. I know that your cool, calm, and collected spirit was right beside me every time I picked up my laptop to write.

ACKNOWLEDGEMENTS

It is with sincere gratitude that I acknowledge the contributions of others to my success:

Dr. Andy Lewter
Dr. Ansley Booker
Dr. Craig Lockhart
Dr. James Bridgeforth
Dr. Jenay Willis
Dr. Learty Shaw
Dr. Leslie Gordon
Dr. Maurice Mathis
Dr. Nancy Forde
Dr. Sundra Woodford
Austin Rayford
Darius Maynard
Deion Jamison
Dominique Nichols
Senovia Williams
Zykerious Crawford

Additionally, I want to acknowledge three groups that I serve as either president or chairman of for their unwavering and unyielding support through this momentous milestone in my life:

- Bibb County Board of Education and staff
- Georgia Association of Special Programs Personnel
- Ebenezer Missionary Baptist Church Board of Trustees and church family

Finally, I am grateful for the guidance of Dr. Krystal Williams and Dr. George Spencer throughout this journey.

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CHAPTER 1

INTRODUCTION

Access to technology remains an issue that has led to significant casualties as students "fell through the cracks" of the high school-to-college pipeline during the COVID-19 (global) pandemic, particularly students from racially minoritized populations and lower socioeconomic (Lower-SES) backgrounds like Lower-SES, Black students (Azionya & Nhedzi, 2021). The COVID-19 global pandemic highlighted the clear, significant, preexisting, and continuing challenges of the Digital Divide (de los Santos & Rosser, 2021). van Dijk (2017) defined the digital divide as "the gap between people who do and do not have access to forms of information and communication technology; these forms are primarily computers and the Internet" (p. 1). The three types of digital divides include access to technology, digital competency, and aptitude and motivation toward technologies. The pandemic, combined with the digital divide, sheds light that our schools are more segregated now than at any time in the last 50 years (Rothstein, 2020) through policies that require students to attend a school within a specific zip code, therefore leading to many LSECI Black students to be in underresourced schools (Reza, 2020). Because of the digital divide, the pandemic exacerbated or created substantial barriers to college access, with many students reporting a lack of resources, exceptionally reliable computer usage, or the Internet (Cooper et al., 2020; Reed et al., 2022).

The digital divide is especially relevant to the process of college planning. Indeed, there is an interconnectedness between technology and college access, especially concerning attaining college knowledge (Berry, 2021; de los Santos & Rosser, 2021).

Roderick et al. (2009) defined college knowledge as "the ability to search for and apply to college effectively" (p. 185). College knowledge includes awareness of college admissions, financial aid, enrollment processes, and college norms and culture (Berry, 2021; Roderick et al., 2009). Major components of the college-going process, such as completing financial aid applications like the Free Application for Federal Student Aid (FAFSA), have moved to a paperless process (Hoxby & Turner, 2015; Venegas, 2006). Additionally, many colleges and universities require that students complete an electronic application for admission (Hoxby & Turner, 2015; Venegas, 2006). Therefore, an individual who desires college access must understand technology to succeed in the college-going process.

Although Black people have some of the highest educational aspirations (Mustaffa & Dawson, 2021), how they undergo college planning depends on their level of college knowledge. Students, particularly Black students, and those from Lower-SES backgrounds, primarily obtain college knowledge through school agents like professional school counselors and college access programs like TRIO, AVID (Advancement Via Individual Determination), and GEAR UP (Gaining Early Awareness and Readiness for Undergraduate Programs) (Belasco, 2013; Bell et al., 2009). However, many Black students experienced COVID-related disruptions in their college planning (Berry, 2021). The pandemic tested the readiness of school agents and college access interventionists to provide continued services and support to all students, especially regarding the college-going process. The pandemic disrupted education systems, shifting to virtual environments. The sudden shift from traditional schooling to a virtual environment occurred as approximately 1.6 billion students in 190 countries transitioned without a

viable, reliable, and easily distributed vaccine (Sosa Diaz, 2021). However, school agents needed more time for decision-making to plan for this switch or receive adequate guidelines from the government or agencies related to health or education (Istenic, 2021; Pincus et al., 2021; Sosa Diaz, 2021). A set of guidelines that would have been critical to the success of Black students during the pandemic would have been policies related to race-conscious decision-making. This would have been especially important because not all students had equitable access to technology, Internet connectivity, or a conducive learning environment at home. Jones et al. categorize race-conscious policies as "policies that explicitly address race in the design and provide higher education access, opportunity, or support to students of color and their colleges and universities serving them" (p.3). Race-conscious policies could have directed resources toward closing this digital divide and ensuring that Black students had the tools and support needed for virtual instructional learning. The lack thereof should give us pause as we examine how the COVID-19 pandemic created or exacerbated barriers that impact students, particularly Black students. The transition to virtual instructional learning began a new basic need for students: technology and connectivity (Reed et al., 2022). Subsequently, many Lower-SES, college-intending, Black students, depending on the timeframe leading to the summer following graduation to complete essential tasks to finalize college plans (Castleman & Page, 2014), may have seen their college ambition falter during the pandemic (Howell et al., 2021; Wells, 2022).

Within our society, information is a vital, primary good that must be shared for capital enhancements, such as receiving a college degree (Robinson & Schulz, 2013). The digital divide reminds us of the inequalities regarding access to education – mainly

digital inequalities. The inability of Black students from highly segregated, under-resourced schools to access technology and develop college knowledge has significant negative implications on their academic performance and ability to keep pace with their peers in receiving capital enhancements (Nienhusser & Ives, 2020; Robinson & Schulz, 2013).

Purpose and Research Question

This qualitative study aimed to identify the challenges Lower-SES, college-intending (LSECI) Black students with limited access to technology faced while navigating the college-going process during the onset of the COVID-19 pandemic. In this effort, I examined how and to what extent students experienced barriers to college access related to the accessibility of technology that COVID-related disruptions had either exacerbated or created. The COVID-19 pandemic allows education leaders and lawmakers to reimagine how education is viewed while exposing vulnerabilities such as limited access to technology in the system today. Failing to bridge the digital divide underscores the necessity of proactive preparation to cater to the distinct requirements of every student (Grant, 2020; Sosa Diaz, 2021).

Specifically, this study examined the importance of adequate access to technology in the college-going process during the onset of the COVID-19 global pandemic to better understand the challenges of technology maintenance and students' ability to achieve college access (Gonzales et al., 2020). In describing the technology maintenance construct, Gonzales (2016) argued that “although most of the U.S. poor now use digital technology, access is unstable and characterized by frequent periods of disconnection.” The technology maintenance construct suggests that the digital divide impacts Lower-

SES individuals in their ability to maintain the same level of access to technology as others due to unstable access (Gonzales, 2014a; Gonzales, 2014b; Gonzales, 2016). As the COVID-19 pandemic persisted from Spring 2020 to Fall 2020, college enrollment dropped significantly, impacting many Black students, particularly those from racially marginalized communities (Wells, 2022). This study uncovered the challenges encountered by LSECI Black students during their college application journey, with a particular focus on issues related to technology maintenance.

With the abrupt switch to a virtual environment, students and families needed more time to ensure their home environment was adequately equipped for digital needs. Some school districts responded and took unprecedented steps to transform the learning environment into one-to-one laptop schools (Gonzales & Jackson, 2020). Gonzales Jackson (2020) defined a one-to-one laptop school as a school where every student uses a laptop for the curriculum and teachers provide technology-enhanced instruction. However, only some school districts were prepared to give each student a device, and some families had to share. Reza (2020) detailed a school district in Pennsylvania that did not have laptops for their students, therefore having to delay virtual instructional learning for more than 40 days, falling several weeks behind other school systems. This study sought to understand how LSECI Black students managed their level of access to technology for their college pursuits.

LSECI Black students need adequate access to technology through broadband/high-speed Internet and reliable devices such as laptops. They are digitally literate to succeed in the college-going process. Students, especially those from Lower-SES backgrounds, usually have adequate access to technology in the traditional school

environment (Goode, 2010b). Additionally, if they face difficulties with achieving or maintaining that access, they are surrounded by resources to help them overcome those challenges. However, what happens when students unexpectedly lack the traditional school environment and access to school-based resources? This made understanding the importance of access to adequate digital infrastructure and how to utilize it critical in this study. Digital infrastructure of access needs to be addressed more in the discussion about the digital divide. However, this study sought to display its role in LSECI Black students undergoing the college-going process during the onset of the COVID-19 pandemic.

This research helps us better understand digital inequalities related to access to technology, how it is connected to college access, and why there is still a digital divide even as technology is more affordable and accessible. To expand college access, technology through access and competency must be increased. Previous research on technology maintenance provided a limited focus on cellphone access rather than on more preferred technologies needed for the college application process, like laptops (Gonzales, 2016).

As many aspects of the college-going process have gone primarily electronic, there is a particular dependency on laptops to complete various requirements. For example, during the completion of the FAFSA, students can electronically access their personal and their parents' tax information. The ability of a student to achieve such a task on a cellphone may be more challenging than on a laptop. The digital divide becomes one more barrier for Black individuals, who are financially literate but do not have equal financial options (Mustaffa & Dawson, 2021), thus making their ability to navigate the

FAFSA even more important. This study examined laptop access and the type of devices students had during the onset of the COVID-19 pandemic.

Given the dearth of knowledge regarding COVID's impact on students' experiences, the following research question guides this research: How did Lower-SES, college-intending, Black students with limited access to technology experience the college-going process during the onset of the COVID-19 global pandemic?

Methods

This basic qualitative study aimed to investigate the obstacles faced by LSECI Black students with limited access to technology during the onset of the COVID-19 pandemic as they navigated the college application process. The study drew upon Perna's (2006) college access and choice model and Gonzales' (2014a) technology maintenance concept as theoretical frameworks to understand the disparities in technology access based on socioeconomic status and race. The study employed a basic qualitative study methodology, which was chosen to explore college knowledge among LSECI Black students and examine their unique circumstances during the COVID-19 pandemic. The research purposefully selected participants from the Bibb County School District in Macon-Bibb County, Georgia. This district had a significant percentage of students from lower socioeconomic households.

This basic qualitative study relied on data gathered from one-on-one, semi-structured interviews and an initial eligibility questionnaire. Interview questions, as outlined in Appendix C, provided each participant's general introduction and background, and focused on high school experience, the college-going process, and college experience. Participants responded to the same key questions but were asked follow-up

questions and allowed to diverge during the interviews. All interviews were recorded (with participant permission) and transcribed using Trint, a computer-assisted qualitative analysis software. After transcription, each interview was coded for themes that emerged during the data collection and analysis. Interviews provided rich and detailed descriptions of the experience of LSECI Black students. Interview participants spoke candidly and mostly vividly about their experiences during the onset of the COVID-19 global pandemic.

The basic qualitative approach allowed interview participants to characterize their own experiences and to describe them in detail. Merriam and Tisdell (2016) wrote, "The product of a qualitative inquiry is richly descriptive. Words and pictures rather than numbers convey what the researcher has learned about a phenomenon" (p.17). This is particularly important as we seek to understand more about the little-known phenomenon, COVID-19, that altered our reality during a consequential time of these participants. Qualitative research provides information about multiple real-world experiences during this challenging period (Marshall et al., 2016). Hence, this study sought to understand how data from LSECI Black students in Spring 2020 came together to help us better understand the impact of COVID-19 and access to technology on college access.

According to Denzin and Lincoln (2008), qualitative research crosscuts disciplines, fields, and subject matters. This is critical in examining the interconnectedness of college access, access to technology, and COVID-19. Merriam and Tisdell (2016) asserted that researchers who utilize the basic qualitative approach can draw on multiple methods that respect the humanity of the participants in the study.

Marshall et al. (2016) wrote, "Qualitative researchers are intrigued by the complexity of social interactions expressed in daily life and by the meanings the participants themselves attribute to these interactions." Thus, a basic qualitative study is an appropriate approach to examine LSECI Black students' college-going process during the onset of the COVID-19 pandemic.

Significance

During the onset of the COVID-19 pandemic, there was a heightened awareness of the ongoing issue of technology maintenance because of the extent to which students were experiencing it. The circumstances of the COVID-19 pandemic have revealed inequalities in access to education caused by access to technology (Istenic, 2021). To learn from the pandemic, the individual needs of all students must be the central focus. Ensuring that students have adequate technology will be critical as stakeholders seek to educate them in a new normal, wondering if future variants of this virus will force us back into a virtual environment.

As access to technology and information becomes more accessible and expansive, socio-digital inequalities persist (Gonzales et al., 2020; Sosa Diaz, 2021). Sosa Diaz (2021) described socio-digital inequalities as disparities in access to digital resources and competencies among different social groups. These inequalities can be influenced by factors such as socioeconomic status, geographic location, and previous training in digital skills. Achieving digital democracy and equality for everyone remains challenging in the 21st century as technology advances and changes rapidly (Sosa Diaz, 2021; de Los Santos & Rosser, 2021). van Selm (2001) described digital democracy as "the use of information and communication technology in all kinds of media to enhance the

participation of citizens in democratic communication." Before the COVID-19 pandemic, many believed the United States had reached digital democracy, but the digital divide still proves prevalent. As a result, it is difficult to explain the most critical policy directions for this new social problem, particularly concerning the digital divide.

This study is significant as America continues to trend toward becoming a majority-minority country (Gonzales et al., 2020). The new majority will face challenges around technology even as access has expanded tremendously, which has economic implications (Gonzales et al., 2020). A recent Georgetown University Center on Education and the Workforce report highlighted postsecondary credentials' necessity. During the pandemic, as some jobs transitioned remotely, many individuals without postsecondary credentials could not work from home (Carnevale & Gulish, 2020). In their report, Carnevale and Gulish (2020) found that 51% of individuals without some postsecondary credentials experienced a loss of employment during the onset of the COVID-19 pandemic alone. As we continue to see digital democracy come to fruition, we must now explore the significant impact that limited access to technology will have on our workforce today and in the future. Additionally, access to technology must be provided to a workforce that is proficient in its utilization.

Chapter Summary

The COVID-19 pandemic exposed a critical issue: the digital divide, particularly for LSECI Black students. As these students tried to navigate the high school-to-college transition, they faced significant challenges due to limited access to technology. The pandemic exacerbated existing disparities in technology access, emphasizing that our educational system remains highly segregated. Policies tying school attendance to

specific zip codes perpetuated underresourced schools, further disadvantaging LSECI Black students.

Access to technology is intricately linked to the college planning process, where digital literacy plays a crucial role. College knowledge, encompassing awareness of admissions, financial aid, and enrollment processes, has gone predominantly digital. Completing essential tasks like the Free Application for Federal Student Aid (FAFSA) and college applications now relies heavily on technology. However, many Black students depend on school agents like counselors and access programs for college knowledge, and the pandemic disrupted these crucial support systems.

The sudden shift to virtual learning highlighted the importance of technology infrastructure. While some schools quickly adapted to provide students with devices, others struggled. This shift emphasized the significance of reliable technology access, particularly for college-bound students. This study aimed to understand how LSECI Black students with limited technology access experienced the college-going process during the pandemic. It examined the challenges they faced and the impact on their college aspirations.

Overall, this research underscores the urgent need to bridge the digital divide, especially in the context of college access. It highlights the role of technology in today's education landscape and its implications for students, particularly those from lower socioeconomic backgrounds. As technology continues to shape our world, addressing these disparities is crucial to ensure equitable opportunities for all students. This research aimed to provide insight from the literature on the role of technology in the college-going process and help inform K-12, college, and university administrators interested in

understanding the barriers impacting Black students by examining college-intending, TRIO participants in the Macon-Bibb County community.

CHAPTER 2

LITERATURE REVIEW AND THEORY

A review of the empirical literature on postsecondary access and enrollment is provided in this chapter to understand the interconnectedness between technology and the college-going process. This chapter reviews the literature related to digital literacy and skill, cost, socio-digital inequalities, and the COVID-19 pandemic. Then, research on the college-going process is organized as follows: (a) the college application process, (b) the role of professional school counselors, and (c) Black students. Next, insight into college choice theories and technology maintenance construct and how they inform this research are explored. After that, the chapter outlines gaps in the literature. Finally, the chapter concludes with the theoretical framework.

The Digital Divide and Disparities in Access to Technology

Challenges of Under-Connected Students and the Broad Socioeconomic Implications in Modern Education

The digital divide still exists through digital limitations in hardware and broadband access for students and their families, making them "under-connected" (Gonzales et al., 2020; Rideout & Katz, 2016; de los Santos & Rosser, 2021; van Dijk, 2006). Students and families are becoming under-connected due to resource-driven challenges like periodic disconnection issues, sharing access, etc. The under-connectedness results from the persistence of technology-related inequalities even as access to information and communication technologies has expanded over time (Gonzales et al., 2020; Rideout & Katz, 2016). Educational institutions, both secondary

and postsecondary institutions, have provided laptops for students; however, access to broadband remains an issue. Specifically, many are faced with affordability and availability barriers, particularly in rural areas, in achieving broadband access (van Dijk, 2006). Gonzales et al. (2020) added that these additional barriers lead to inequalities in students' overall academic experience. Hargittai (2010) further suggested that students have real and negative consequences and are therefore vulnerable because of these barriers when technology usage is so widespread. Those concerns are supported by research from Rideout and Katz (2016), who reported on how dependent hardware and broadband access are for students' success in school and their regular use for school-related purposes. The reports found that among young adults, 97% of respondents highlighted their dependency on Internet use, and 98% owned a cellphone. With a high reliance on technology, it reemphasized the importance of reliability. As Gonzales et al. (2020) described, technology ownership only goes so far if individuals cannot rely on it for their desired use.

The inability of users to maintain access to technology leads to socioeconomic hardships (Gonzales, 2016; Gonzales et al., 2016; Gonzales et al., 2020). This is true as technology has become so essential to daily life, which is why issues related to digital inequalities require just as much attention as other inequalities, educationally and economically, can be prompted. Students from racially minoritized and Lower-SES populations are impacted the most when these inequalities intersect. Gonzales (2016) categorized the intersection as a cycle of dependable instability, encompassing handling broken, borrowed, or dependably unstable devices. These students must rely on poorly functioning laptops and other outdated hardware, which leads to routine disconnection

issues. Disconnection issues and other digital disparities are also shown to contribute to other inequalities in Rideout and Katz's (2016) research that pointed to several alarming results facing students and families from Lower-SES backgrounds. For example, children without home Internet access are less likely to look up information about things they are interested in. This is happening even as Rideout and Katz (2016) reported that 77% of individuals from Lower-SES backgrounds report usage despite repeated disconnection issues.

Capacity Building, Digital Literacy, and College Access in the Information Age

Capacity building through technology is vital to students' pursuit of college knowledge (Berry, 2021). Berry (2021) defined college knowledge as effectively searching for and applying to college. Building capacity through technology to develop college knowledge is foundationally vital to navigating the college-going process and being efficient in the college application process. Capacity requires being digitally literate.

Castano-Munoz (2010) defined digital literacy as the different skills for Internet use. Parents of Lower-SES households occasionally have the skills to pass on to their children to become more digitally literate. The difference in skill attainment between socioeconomic groups is referred to as the second level of the digital divide, which explores how people use technology (Goode, 2010b) or, as Kim and Schneider (2005) described, a "usage gap." This gap can be exasperated as varying complexity levels and hardware and software options change (Kim & Schneider, 2005).

Prior research has found that students need more opportunities to develop digital literacy skills in school (Berry, 2021; Goode, 2010a; Venegas, 2006). In under-resourced

schools, Margolis et al. (2017) and Berry (2021) referred to the lack of opportunities for digital literacy as "virtual segregation." In their research, Margolis et al. (2017) found that under-resourced schools serving primarily Black students, such as the school of focus in Los Angeles, only had access to introductory computer science classes and not advanced courses like better-resourced schools. Earlier research by Goode (2010a) found that the students who are least likely to encounter technology in schools also face digital challenges at home. This finding further complicates the foundational knowledge students need to obtain college knowledge, particularly in the dismal 31% of Black households with broadband access (Goode, 2010a; Horrigan, 2006). The lack of computer skills prevents students from obtaining the necessary digital literacy skills to navigate the Internet to learn about the college-going process. Not only do they deny students, but students who attempt to understand the college-going process need help to make sense of what they find online. As a result, it makes students more dependent on other sources to translate the college information they are reviewing (Berry, 2021).

Economic Disparities in Under-Connected Communities

Mustaffa and Dawson (2021) described the typical college-intending, Black student as “a non-traditional student with an independent status, coming from a family with almost no wealth.” Because digital devices and the Internet have become essential, digital inequality can also exacerbate educational and economic inequality, especially for individuals with limited to no income (Rideout & Katz, 2016). The cost of being disconnected from digital devices and the Internet is more inequalities, leading to inconveniences. For example, individuals without access at home or limited access must travel to community access points like the local library and coffee shops or rely on

connectivity at school to overcome disconnection challenges. However, those connections are only temporary as users become beholden to the operational hours of those access locations, which may need to be more convenient, limiting positive educational and economic gains.

Affordability remains challenging for LSECI Black students to obtain reliable devices and maintain reliable broadband (Gonzales, 2016; Gonzales et al., 2020). Therefore, the lack of affordability leads LSECI Black students and their families to become "under-connected." This is typically a result of breaks in service due to periodic unpaid monthly bills, having hardware that may be slow and broken, and having shared access. Additionally, it becomes evident that individuals face instability due to cost. Freeman (1997) and Conwell and Quadlin (2022) found that LSECI Black students were uncertain about their ability to pay for college and did not understand the long-term economic benefits of college. The uncertainty is primarily fueled by the student's lack of financial resources, resources that impact their level of connectivity, types of devices owned, etc. Hardware that may be slow and broken is indeed unstable due to the age of the device and can be potentially plagued with viruses that make it inoperable. Rideout and Katz (2016) shared in their research that many Lower-SES families try to make the most of whatever connectivity they can afford, understanding that access to technology is resource-intensive (Reza, 2020).

Bridging Socio-Digital Divides to Ensure Adequate Technology Access for Academic Success

Students must have adequate technology to positively impact academic performance in a virtual environment (Castano-Munoz, 2010; Gonzales et al., 2020; de

Los Santos & Rosser, 2021). Adequate digital resources could help students overcome socio-digital inequalities, particularly related to repeated disconnection (Gonzales, 2016; Tierney et al., 2018; Berry, 2021). de los Santos (2021) and Berry (2021) highlighted the disparities within the digital divide itself. Access to technology cannot be defined simply by access but requires equitable access. Hardware and broadband access vary by race and socioeconomic status (Berry, 2021). For example, smartphones are readily accessible to most teens of all racial populations and socioeconomic backgrounds, as Berry (2021) shared that 94% of Black teens have them. Still, the limited functionality of smartphones makes accessing the Internet difficult, especially if a student's total reliance is on this sole device. For example, cellphones may allow users to write or draft notes; however, completing extensive writing for a college entrance writing prompt or completing the FAFSA may take time and effort. Access also involves the need for a stable home Internet connection. Berry (2021) also pointed out that 21% of Black youth rely on public Wi-Fi to complete assignments and matters requiring Internet access. The reliance on public spaces for Wi-Fi can pose serious challenges, especially regarding safety (Berry, 2021), when Black youth must remain cautious of their public interactions to limit possible negative encounters with the police (Jindal et al., 2022).

The COVID-19 Pandemic's Wake-Up Call: Uncovering Digital Literacy Gaps and the Need for Educational Restructuring

Scientists discovered SARS-Co V-2, most known as COVID-19 (a coronavirus), in November 2019. By March 2020, the strength of the virus affected most of the global society. The virus became a global pandemic as the susceptibility proved to impact everyone. COVID-19 is still a new phenomenon; leaders from all sectors are still learning

its impact. However, the unpreparedness of society to handle the COVID-19 virus led to the abrupt closing of educational institutions (Gonzales, 2016; Sosa Diaz, 2021). The closing of educational institutions required educators to shift from the traditional (face-to-face model) environment to a virtual (remote) setting without sufficient time. With little to no time adjusting to the transition, the closing of these educational institutions also uncovered that digital literacy is an issue among students and educators (Oyedotun, 2020; Sosa Diaz, 2021). A study conducted by Kruczek et al. (2022) of 381 school agents, including professional school counselors, found frustration with technology during the pandemic. Although the study found that counselors thought they had a decent grasp of technology, additional support, and resources would have benefited them in their pursuit of helping students during the pandemic.

Furthermore, the under-preparedness of society showed how difficult it was for many students to have the appropriate digital infrastructure. During the pandemic, devices such as laptops were primarily provided by educational institutions; however, hotspot devices were not, limiting the pathway to connectivity for those without Internet at home. de los Santos and Rosser (2021) and Sosa Diaz (2021) suggested that COVID-related disruption allows individuals to evaluate what is considered normal, especially regarding the educational system, and restructure them with a lens of digital equity and access. A restructuring that happens after the realization that there is more work to get us closer to digital democracy is evident that preexisting challenges loom, such as the availability of educational institutions to deliver high-quality, virtual instructional learning.

College-Going Process

Unlocking the Path to College: The Role of College Knowledge and Access to Resources in the Application Process

The college search and application phase is a significant milestone of the overall college-going process (Holland, 2020) and is an unavoidable step toward college enrollment (Holzman et al., 2020). Holland (2014) described “college application” as a long and drawn-out phase within the college-going process. Black students and students from Lower-SES households are less likely to complete these steps than other students (Holzman et al., 2020). A 2019 American Council on Education report, utilizing data from the U.S. Department of Education’s National Postsecondary Student Aid Study, reported that Blacks made up 15.2% of undergraduate enrollment compared to 52% of Whites. To successfully navigate the college application process, students must possess college knowledge to achieve college enrollment (Holzman et al., 2020).

Jayakumar et al. (2013) defined college-going culture as “a set of values, norms, beliefs, expectations, and structural supports within an organization that socializes students towards matriculation to college” (p. 553–554). College-going programming/encouragement activities impact this culture through interactions with their counselors and overall college knowledge development (Jayakumar et al., 2013; McDonough, 1997; Nienhusser & Ives, 2020). College-going programming is integral to a student's attainment of college knowledge to complete the college application. Substantial research shows that sources of college information vary based on the student's grade level (Bell et al., 2009; Holland, 2020; Hossler et al., 1989). Family members and peers become the primary source of college information for their high school students.

During this time, students may hear about college in passing but must gain adequate information-gathering to garner substantial interest. However, college-going programming ramps up during the upperclassmen years of high school (Bell et al., 2009). The information students receive expands as school agents and college materials are more widely available. As a significant source of college information, school agents and college access interventionists become knowledgeable translators. Brown et al. (2016) coined the term "knowledgeable translators" (p. 110) to describe the individuals that students need to make sense of the college information they receive to apply to college (e.g., financial aid). Applying for financial aid programs such as Pell Grants, federal loans, and other need-based programs is particularly critical to LSECI Black students (Holzman et al., 2020). Mustaffa and Dawson (2021) found that students will contend with a total cost of attendance of nearly $12,040 yearly at community colleges and $20,790 at public four-year colleges. Holland (2014) described financial aid as essential to the college search and application process.

The dissemination of accurate college information and widespread college-encouragement activities by college preparation programs and school agents are needed earlier in a student's high school career to propel them toward college attainment (Belasco, 2013; Bell et al., 2009). Students with more college information and guidance during their first- and second years of high school increase their chances of enrolling. Although not widely utilized, students, especially LSECI Black students, may take advantage of college preparation programs like TRIO and AVID and experience college-encouragement activities such as attending college fairs and tours earlier in their academic careers. These programs provide extensive college information to students to

increase their college knowledge. However, the pandemic forced these programs to shift their programming. Therefore, the dissemination of college information and implementation of college-encouragement activities, like college tours, were either limited or nonexistent (Case et al., 2022).

The lack of college knowledge is prevalent and is obtained late, especially as it relates to financial aid (and the completion of the FAFSA), which is critical for LSECI Black students to enroll in college (Bell et al., 2009; Hoxby & Turner, 2015; Berry, 2021). Kofoed (2017) reported that a lack of information regarding financial aid can reduce college-going. Financial aid is integral to the college-going process and is critical for LSECI Black students to access resources. A lack of knowledge of the federal financial aid programs deprives students of the resources to succeed in college. Thus, the pandemic limited individuals from capital-enhancing activities like completing financial aid during college applications (Robinson & Schulz, 2013). Venegas (2006) and Bell et al. (2009) reminded us that more than having access to technology alone is required to undergo capital-enhancing activities; one must also be digitally literate. Before the pandemic, students could have received assistance from school agents. However, that assistance was no longer accessible during the COVID-19 pandemic.

The Crucial Role of Professional School Counselors in Advancing College Knowledge and Access for Racially Minoritized Students

Professional school counselors have a primary role in helping students obtain college knowledge, mainly racially minoritized populations, and Lower-SES students (Vargas, 2004; McDonough, 2005; Bell et al., 2009; Belasco, 2013; Holland, 2020; Berry, 2021). Students view professional school counselors as having vital information

about the college-going (Bell et al., 2009; Brown et al., 2016; Hoxby & Turner, 2015; McDonough, 2005). Additionally, Holland (2014) found that college knowledge varies significantly by race and socioeconomic status. A study by the American School Counselor Association and the Education Trust found that school counselors readily available to students and disseminated postsecondary information were more likely to apply and enroll in college (Cholewa et al., 2015). The study sampled 16,520 students nationally and found that Black students were 1.85 times more likely than white students to point to their school counselor as having a significant impact on their postsecondary plans. Additionally, first-generation college students were 2.48 times more likely than other students to report the same (Cholewa et al., 2015). Moreover, Kim and Schneider (2005), Belasco (2013), and Castleman and Page (2014) shared that students from Lower-SES backgrounds learn more about the college-going process from a school counselor, thus making reliance on them a significant factor in whether they enroll in postsecondary education.

High schools in Lower-resource school districts need more resources (Belasco, 2013; Bell et al., 2009) and consistent support systems to adequately disseminate information to students needing it. As a result, students in these schools (predominantly Black, Lower-SES households) are most likely to undermatch and must choose a college near their hometown (Hoxby & Turner, 2015; Venezia & Jaeger, 2013). "Undermatching" is described by Venezia and Jaeger (2013) as the result of "a student who meets the admissions criteria for high-ranking colleges and universities, based on test scores, rigorous courses taken, and grades, but instead go to a less selective college (p. 121-122)." The lack of proper systems and resources can lead to lower educational

attainment for LSECI Black students (Holland, 2014; Perna, 2004) or direct them to search for alternative strategies to be successful in the college-going process (Wolniak et al., 2016). Some better-resourced schools may have a designated college counselor to assist students through the college-going process. Including this position as a resource within a school helps students gain the necessary college knowledge to make college access attainable.

Professional school counselors need more time and resources to adequately aid students through the college-going process (Belasco, 2013; Holland, 2020). Venezia and Kirst (2005), Belasco (2013), and Pincus et al. (2021) revealed that most of a counselor's time involves meeting the emotional needs of students and addressing administrative matters. Professional school counselors do not spend much time on college advisement (Bryan et al., 2022); McDonough (2005) estimated that the average professional school counselor spends less than 40 minutes per year providing college-going advisement per student. Venezia and Jaeger (2013) reported that only 44% of Black Freshmen attend a school where the primary goal of the professional school counselor is to provide college assistance. High-performing students receive more resources in their pursuit of college access. The various responsibilities of school counselors make inadequate time available as counselors seek to serve their students, which could include a high student-to-counselor ratio, especially in Lower-resourced (Belasco, 2013; Bridgeland & Bruce, 2011). Research by Pincus et al. (2021) showed a disconnect between school counselors and administrators regarding counselors' roles, training, and qualifications, which leads to the assignment of non-counseling responsibilities. The limited time and resources lead school counselors to focus on providing general college information instead of the

devoted interaction needed with students during the college search and application process (Holland, 2020).

The Struggle of LSECI Black Students in Pursuit of Higher Education

Education has always been important to Black families and critical for racial uplift, and they have long fought through barriers that seek to diminish their college opportunities (Jayakumar et al., 2013). Black individuals have a long history of suppression as their educational opportunities face systematic, political, and social barriers (Reza, 2020). Black youth are underrepresented in U.S. higher education (Holzman et al., 2020) and less likely to enroll in college than other races (Perna et al., 2008; Berry, 2021). The National Center for Education Statistics (2020) reported that in 2018, 37% of Black people aged 18- to 24-year-olds were enrolled in college. The National Center for Education Statistics (2020) also found that Black enrollment is outpaced by 59% of Hispanics and 42% of their White counterparts that attend college.

Additionally, socioeconomic status further stratifies college access, with LSECI Black students as one of the subgroups facing enrollment challenges (Holland, 2014; Perna et al., 2008; Thomas & Perna, 2004). Systematic and structural barriers prevent LSECI Black students from obtaining college access, and the COVID-19 global pandemic has been added to the list. Limited resources for Black students are among the biggest causes of educational disparities (Reza, 2020). Many Black students must overcome Lower-SES challenges in their pursuit of college access. The unfamiliarity with college-going norms may negatively impact the aspiration of Black students from Lower-SES backgrounds to go to college and lead to their isolation from the overall college-going process (Lamont & Lareau, 1988; Belasco, 2013; Hoxby & Turner, 2015;

Holland, 2014). The lack of information and support leads to insufficient social capital to encourage students from this population to seek college enrollment (Holzman et al., 2020; Lamont & Lareau, 1988; McDonough, 2005; Roderick et al., 2009; Tierney & Venegas, 2009).

Many obstacles come from the quality of education received, especially among the disproportionately high students who attended highly segregated, under-resourced schools (Nienhusser & Ives, 2020). Hoxby and Turner (2015) and Berry (2021) pointed out that obstacles such as difficulties with developing college knowledge are problematic for this demographic. King (1996) and Belasco (2013) also suggested that Lower-SES students who frequently met with their professional school counselor about the college-going process were more likely to attend college. However, Vargas (2004) and Holland (2014) revealed that students with limited information about the college-going process are less likely to attend college. Students may need more information to plan financially and find the right fit with proper college knowledge. Additionally, students from under-resourced schools also negatively impact a student's ability to obtain college access (McDonough, 1997; Wolniak et al., 2016). Technology is a significant resource found in schools. A 2018 report from the Pullias Center for Higher Education described that the inability of Black students from under-served and under-resourced communities to access technology has significant negative implications on their ability to maintain standard academic progress with their peers while achieving college readiness. Venezia and Jaeger (2013) defined college readiness as "the level of preparation a student needs to enroll and succeed in a college program without requiring remediation" (p. 118). Academic college preparation is integral to the college-going process (Holzman et al., 2020).

Parents serve as a critical source of college information to LSECI Black students, especially in their first year of high school (Bell et al., 2009). They are vital in helping LSECI Black students build college and cultural knowledge (Holland, 2020). Although these parents may lack college and cultural knowledge, they are still supportive in the effort to help their students achieve college access. Cultural knowledge about college directly results from parental education, so students whose parents have limited or no experience with the college-going process face challenges supporting their children (Holland, 2020). Parents' educational attainment level impacts the college enrollment rates of Black students from Lower-SES backgrounds (Bell et al., 2009; Holland, 2020). Substantial research shows that college enrollment rates are lower for Lower-SES, Black students whose parents have not attended college (McDonough, 1997; Wolniak et al., 2016).

Competing priorities or socioeconomic positions become a significant challenge for Lower-SES families impacted by the digital divide (Gonzales, 2016; Berry, 2021). A college degree is widely regarded as crucial for both social and economic progress within society. Berry (2021) and Castleman and Page (2014) pointed out that individuals with a college degree have more consistent employment and are financially better than those without degrees. This makes the assistance critical that LSECI Black students receive from school agents, parents, and other essential sources in their upward mobility (Kim & Schneider, 2005; Belasco, 2013; Hoxby & Turner, 2015; Holland, 2014). Consequently, Castleman and Page (2014) pointed out that Lower-SES students enroll in and complete college disproportionally lower than students from higher-earning households, thus not realizing the benefits of college attainment.

Gaps in the Literature

Technology plays a significant role in developing college knowledge in a student's pursuit of college access. The digital divide remains a foundational barrier, creating socio-digital inequalities derived from other challenges. Specifically, more research is needed on the challenge of technology maintenance-related disparities. The persistence of technology-related disruptions like inconsistent Internet access or challenges with outdated mobile devices such as cellphones and laptops are expected to worsen over time. More research on access to technology is needed to help us understand its impact on the college-going process of LSECI Black students. My study could further explain socioeconomic achievement gaps in college access through a qualitative approach.

Theoretical Framework

To frame this study, I employed Perna's college access and choice model (2006), which builds on our knowledge of the college-going process. For this study, Perna's college choice model, which combines social and economic approaches, fits perfectly in the broader context of the digital divide as the role of technologies is considered in the college-going process. Gonzales' (2014a) technology maintenance construct builds upon Perna's (2006) framework. It considers economic and sociological approaches to help understand why access to technology remains stratified by socioeconomic status and race.

Perna's College Choice Model

The theoretical underpinning for this basic qualitative study is built on the college choice model by Perna (2006). The model builds on previous work by Hossler et al. (1989) and Paulsen (1990), which has served as a foundation for early research on

college access and success. Hossler et al. (1989) described college choice as a complex phenomenon that, for most individuals, starts very early. The college choice process is defined as a three-stage process: the predisposition stage, the search stage, and finally, the choice stage. During the predisposition stage of the process, students contemplate whether to go to college. Hossler et al. (1989) suggested that individuals look at several factors influencing a student's decision to attend college, such as socioeconomic status, parental encouragement, school quality, and encouragement from high school counselors. Next, the search stage involves students considering the attributes and values necessary to make the right postsecondary decision when choosing a college. Hossler et al. (1989) described a student's junior year as "eventful" (p. 263) as they begin the search process, with most students having a clear understanding of their predispositions. Finally, the choice stage is when a student decides which institution to attend. A decision is made while considering variables like socioeconomic status, parental encouragement that students encounter during the predisposition phase, and institutional characteristics. Those characteristics include nonfinancial attributes, such as location and the perceived quality of the institutions, and financial attributes, such as tuition costs and financial aid.

Paulsen (1990) focused on the importance of college choice behavior for enrollment planning, student marketing, and recruitment. Additionally, Paulsen's work looks at environmental, institutional, and student characteristics and examines how they affect an individual’s choices about going to college. Environmental factors have an important impact on enrollment behavior. However, Paulsen (1990) recognized the difficulty in devising meaningful measures of environmental factors since they vary across individuals. In describing the influence of institutional factors, Paulsen (1990)

indicated that their influence may be limited with respect to some students' behavior due to the pervasive influence of socioeconomic and academic background factors on college aspiration formation and the search and application phases of the college choice process. Regarding student characteristics, Paulsen (2020) synthesized previous research to categorize the type of student that would (a) be more likely to apply and attend an institution located a greater distance from home, (b) be more likely to apply to and attend a private institution rather than a public institution, and (c) be more likely to apply to and attend a four-year institution. In all three categories, Paulsen (2020) found that a student from a higher socioeconomic household with parents who went to college and have personal, educational aspirations is most likely to determine factors in an individual's college choice. Paulsen's (1990) work follows concerns raised in the 1970s that pointed to the traditional college aid population (18 to 21-year-olds) shifting, leading to administrators having to deal with reduced enrollments, budget deficits, and institutional closings, which led to an intentional focus on enrollment maintenance.

Perna (2006) combined economic and sociological approaches, recognizing that college choice was multilayered. Perna (2006) indicated that there are four layers of influence on an individual's college choice, including (a) individual habitus, (b) school and community context, (c) higher education context, and (d) the broader social, economic, and policy context. Figure 1 depicts just how complex the college choice process is for individuals in both secondary and postsecondary schools. Perna's (2006) college choice model builds on the foundational framework described by Hossler et al. (1989) and Paulsen (1990) by intertwining the social and economic demographics into

four easily relatable layers that consider an individual's "situated context" (Perna, 2006, p. 114).

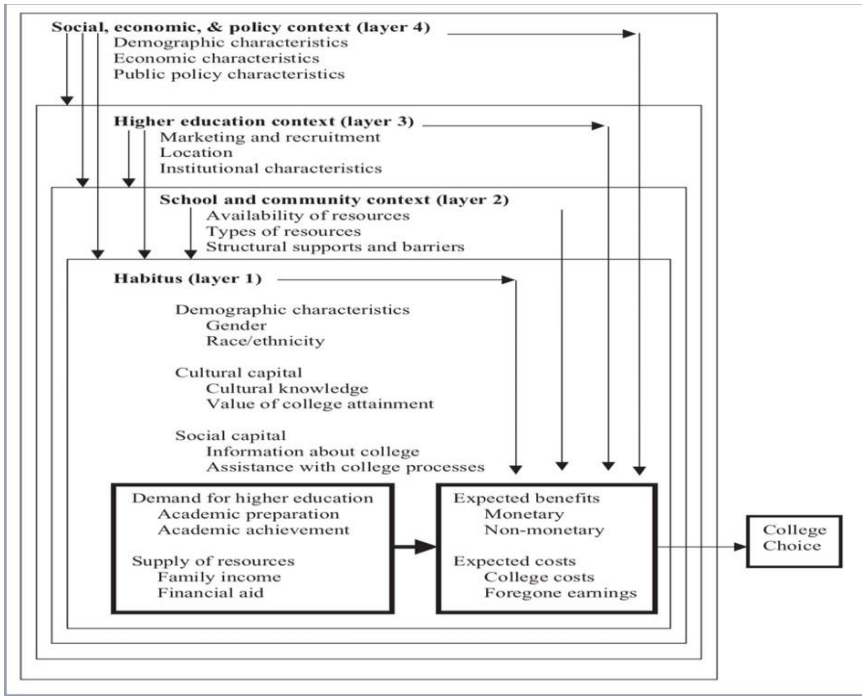


Figure 1. Conceptual model of college choice (Source: Adapted Perna (2006))

Individual habitus is the first layer of Perna's model. Individual habitus is defined as "an individual's demographic characteristics, such as gender, race, and socioeconomic status, in how they view their postsecondary college options and make decisions they are most comfortable with" (Moore & Williams, 2022, p. 11). Considering these demographics and knowledge attainment levels is essential as students and their families determine the "stability of their aspirations," as Kao and Tienda (1998, p. 379) described. The individual habitus also impacts students' access to college options (Moore & Williams, 2022). For example, Perna and Ruiz (2016) shared that Lower-SES students cannot afford selective, nonlocal colleges; their college options are limited by location. For this study, I focused on race (Black) and socioeconomic status (Lower-SES) and

asked participants to provide insight into their college planning process. Most participants aimed to explore various college options to have choices and opportunities. They looked at factors like affordability, location, and programs offered while determining the "stability of their aspirations" (Perna & Ruiz, 2016).

The second layer of this model is the school and community context. This layer involves the structural availability and barriers of sources of college knowledge from professional school counselors and teachers. McDonough (1997) described the school and community context as an organizational habitus, viewing how social structures and resources facilitate or impede student college choice. Organizational habitus is defined as "class-based dispositions, perceptions, and appreciations transmitted to individuals in a common organizational culture" (Diamond et al., 2004, p. 76). A synthesis of research in this study focuses on the structural characteristics and the school-based resources available as students consider the college-going process. One example is described in research by Stanton-Salazar (1997) that pointed to Lower-SES Black students having difficulties developing solid relationships with school agents. Those relationships are essential in this layer as the development of college knowledge is gained primarily with these school agents. From a situated context, this study examined the barrier that COVID-19 placed between participants and the facilitation of resources, particularly by school agents. Participants had varied experiences with their high school counselors regarding the impact on their post-secondary plans, with 50% describing limited to no impact on their plans as the pandemic took over.

The third layer of this model is the higher education context. It recognizes colleges and universities' distinct role in influencing a student's college choice decision.

As with the second layer, sources of college knowledge are also crucial to this layer; however, institutions are that source here. This layer considers the distinct characteristics of institutions and how colleges and universities go about marketing and recruiting (Perna, 2006). Additionally, this layer considers attributes and characteristics of higher education institutions and how they impact students' college choices. Nora (2004) found that students prefer to attend institutions with characteristics consistent with their personal and social identities.

Finally, the fourth layer encompasses the broader social, economic, and policy context. This layer considers the economic and social demographics caused by changes in social forces, economic conditions, and public policies in how college choice is impacted (Bergerson, 2009; Perna, 2006). This layer acknowledges that there are both implicit and explicit connections between policies and students' college choices. In prior research by Perna and Titus (2004), the researchers examined college enrollment patterns of high school graduates in 1992. They found that their college choice was impacted by four types of state public policies: direct appropriations to higher education institutions, tuition, financial aid to students, and secondary education. In utilizing this model, I considered the technology maintenance construct, which has previously led to evidence of frequent short-term cellphone disconnection (Gonzales, 2014b) and dependable instability of Internet access (Gonzales, 2016) among Lower-SES individuals. Now, through a lens of technology maintenance, these findings help us to situate socio-digital inequalities related to college access.

Gonzales' Technology Maintenance Construct

Technology maintenance is a construct developed by Amy Gonzales based on a review and synthesis of prior research. The technology maintenance construct proposes that as access to information and communication technology increases, the digital divide is further impacted by the inability to maintain access (Gonzales, 2014a). The technology maintenance construct refers to the ongoing effort required to ensure stable access to technology, even after initial access has been acquired (Gonzales, 2014a). This includes the challenges of maintaining devices, software, and internet connectivity and the need for ongoing technical support and troubleshooting. The technology maintenance construct is important because it highlights the persistent digital inequalities that exist despite the widespread use of technology, particularly for Lower-SES students who may face more significant challenges in maintaining access to technology (Gonzales, 2014a).

In one study, Gonzales (2014a) examined the relationship between technology problems and student achievement gaps. Gonzales (2014a) conducted three focus groups with college students to explore their challenges in maintaining access to technology and how they affected their academic performance. The study found that Lower-SES students are more likely to experience technology problems, such as limited access to devices and software, which can negatively impact their grades and overall academic success. The study also found that Lower-SES students are less likely to own laptops and tablets, while cellphones are nearly ubiquitous across all socioeconomic groups. Gonzales (2014a) suggested several potential solutions to address the technology maintenance construct and reduce the digital divide, including providing more resources and support for Lower-SES

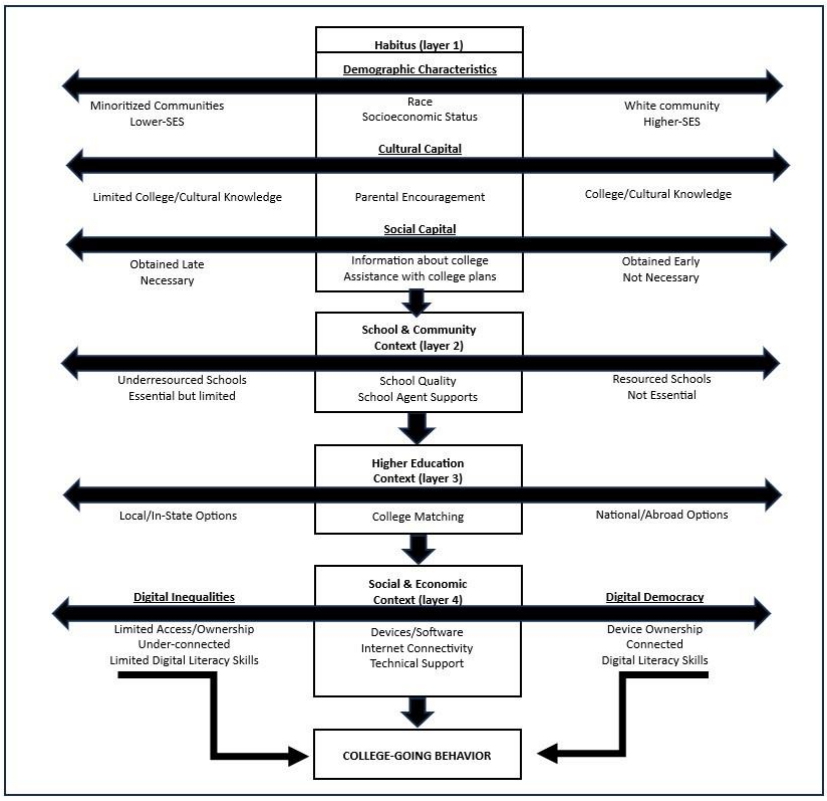
students, increasing awareness of free campus technology resources, and developing more user-friendly technology.

The technology maintenance construct has also been used in other studies. Read et al. (2021) explored the relationship between stable cellphone access and health outcomes for individuals experiencing poverty. Read et al. (2021) used the technology maintenance construct to investigate the impact of dependable instability of cellphone access on health and well-being outcomes. The research found that stable cellphone access is associated with better health outcomes, including improved mental health, reduced stress, and better access to healthcare resources. Read et al. (2021) also suggested that social support can moderate the relationship between cellphone access and health outcomes. The findings highlighted the importance of reliable cellphone access for individuals living in poverty and suggested opportunities for intervention to improve health outcomes in this population. Read et al. (2021) also extended the technology maintenance construct by examining the moderating role of social support in this relationship.

Farshchian et al. (2017) also used the technology maintenance construct to discuss the importance of well-functioning technology and clearly defined maintenance roles as major success factors for telecare. Farshchian et al. (2017) presented a case study of a call center for supporting independent living. They explored how call centers can be used to provide remote health services and telemedicine for seniors living independently. Farshchian et al. (2017) emphasized the importance of well-functioning technology and clearly defined technology maintenance roles and continuous operation of the technical infrastructure for telecare. Call center operators are responsible for the continuous

operation of the technical infrastructure and are the first to be made aware of any technical problems. They play a part in testing and maintenance activities, and a central-coordinating role for call center operators is seen in the future. Farshchian et al. (2017) also mentioned a dashboard tool that had some support for technical maintenance tasks, which is aligned with other research that seeks to address technology maintenance issues by developing more user-friendly technology.

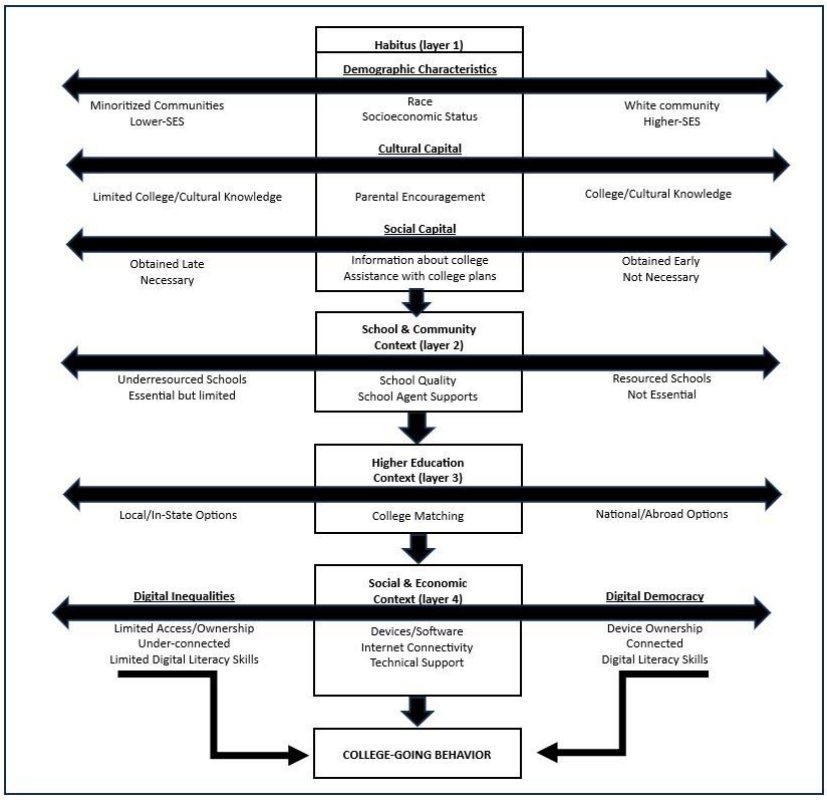
Prior research underscored the significance of technology maintenance in addressing digital inequalities, improving academic outcomes, enhancing health and well-being, and supporting remote healthcare services for vulnerable populations, all while advocating for user-friendly technology solutions. This study highlighted the need



for continued efforts to address digital inequalities and ensure that all students have equal access to technology and the resources they need to succeed in the college-going process. In the context of Perna's (2006) college choice model, Amy Gonzales' (2014a)

technology maintenance construct plays a crucial role in understanding the multifaceted dynamics of college access and choice, especially concerning the digital divide. The breadth of issues addressed in Perna's (2006) college choice model provides several benefits on the role of technology in the college-going process of LSECI Black students, which is the focus of this study. Perna's (2006) college choice model combined social and economic approaches and provided a comprehensive framework for examining the factors influencing college choices (McDonough, 1997; Conwell & Quadlin, 2022). Gonzales' (2014a) technology maintenance construct extends this framework by shedding light on the role of technology access and maintenance in this process.

In the context of Perna's (2006) college choice model, Amy Gonzales' (2014a) technology maintenance construct plays a crucial role in understanding the multifaceted dynamics of college access and choice, especially concerning the digital divide. The



breadth of issues addressed in Perna's (2006) college choice model provides several benefits on the role of technology in the college-going process of LSECI Black students, which is the focus of this study. Perna's (2006) college choice model combined social and economic approaches and provided a comprehensive framework for examining the factors influencing college choices (McDonough, 1997; Conwell & Quadlin, 2022). Gonzales' (2014a) technology maintenance construct extends this framework by shedding light on the role of technology access and maintenance in this process.

Figure 2. Conceptual model of technology-enabled college access

Perna's (2006) college choice model, based on the work of Hossler et al. (1989) and Paulsen (1990), highlighted the various stages of college choice, from predisposition to search and, finally, choice. These stages are influenced by various factors, including socioeconomic status, parental encouragement, school quality, and institutional characteristics. It recognizes the complexity of the college-going process and the importance of these factors. Perna's (2006) college choice model can be used in connection with the issues regarding the digital divide, specifically in this study, technology maintenance, through its assumption that college enrollment decisions reflect an individual's situated context (Moore & Williams, 2022; Perna, 2006). Perna's model can be used to situate LSECI Black students amidst the COVID-19 pandemic and to determine how their social and economic challenges regarding access to technology impact each layer of college choice.

Gonzales' (2014a) technology maintenance construct intersects with Perna's (2006) college choice model, as shown in Figure 2, by emphasizing the persistence of digital inequalities, as a critical social and economic factor, particularly for Lower-SES

students. Alongside Perna's (2006) college choice model, the technology maintenance construct considers the economic (e.g., ability to pay monthly service fees) and social factors (e.g., device sharing) that may impact LSECI Black students' college-going decisions (Auxier & Anderson, 2020; Berry, 2021). Despite substantial investment in bridging the digital divide, not only by the federal government but also by state governments, colleges, universities, and other entities, access to technology remains stratified by socioeconomic status and race. The technology maintenance construct underscores the ongoing effort required to maintain stable access to technology, even after initial access is obtained. This includes addressing challenges related to devices, software, internet connectivity, and technical support.

Moreover, Gonzales' research revealed that Lower-SES students are more likely to face technology problems, such as limited access to devices and software, which can negatively impact their college attainment efforts. This aligns with Perna's model, which considers how socioeconomic factors influence college choice. For instance, Lower-SES students may have limited options due to technology-related barriers.

Gonzales' suggested solutions, such as providing more resources and support for Lower-SES students and developing user-friendly technology, are directly relevant to Perna's (2006) college choice model's goal of understanding and improving college access and choice. Addressing digital inequalities and ensuring equal access to technology resources can enhance the overall college-going process for all students.

Furthermore, the application of Gonzales' (2014a) technology maintenance construct in other studies, such as Read et al. (2021) and Farshchian et al. (2017), demonstrated its broader implications beyond academic settings. Technology

maintenance affects vulnerable populations' health outcomes, telecare, and independent living. These findings emphasized the need for comprehensive solutions and user-friendly technology to bridge digital divides in various contexts.

The conceptual model of technology-enabled college access in Figure 2 illustrates a continuum that college-intending students navigate on their journey toward postsecondary education. As each layer is considered, an individual's "situated context" informs the college-going behavior they develop. The first layer, habitus, consists of an individual's demographic characteristics as they relate specifically to race and socioeconomic status, in how they view their postsecondary college options and make decisions they are most comfortable with" (Moore & Williams, 2022, p. 11). The first layer also considers cultural and social capital. Regarding cultural capital, parental encouragement is situated on the college-going spectrum. Cultural knowledge about college directly results from parental education, so students whose parents have limited or no experience with the college-going process face challenges supporting their children (Holland, 2020). Finally, social capital considers information about college and assistance with college plans. The information students receive expands as school agents and college materials are more widely available. Students with more college information and guidance during their first- and second years of high school increase their chances of enrolling.

The second layer of this model is the school and community context. This layer considers the quality of the school attended by the individual and the level of support needed or desired in attaining college knowledge from school agents such as professional school counselors and teachers. School quality considers the amount and type of

resources available within a student's school. Regarding school agents, the model recognizes the significant source of college information that school agents are in helping students develop college knowledge.

The third layer of this model is the higher education context. As with the second layer, sources of college knowledge are also crucial to this layer to assist with college matching. Nora (2004) found that students prefer to attend institutions with characteristics consistent with their personal and social identities. The level of dissemination of information to students determines if a student will become undermatched or give careful attention to all the colleges and universities they qualify for.

Finally, the fourth layer encompasses the broader social and economic context. This layer considers the economic and social demographics caused by access to technology around the type of devices and software, internet connectivity, and technical support. Achieving digital democracy for everyone remains challenging in the 21st century as technology advances and changes rapidly and has become essential to daily life (Sosa Diaz, 2021; de Los Santos & Rosser, 2021). Digital inequalities present an ongoing struggle to ensure physical/material access or digital stability through the lens of technology maintenance (Gonzales, 2016; Gonzales et al., 2016). Therefore, this model considers three critical areas in the consideration of the technology maintenance construct. First, the reliability of devices and software must be considered. When students cannot maintain access to technology, socioeconomic hardships can impact their college-going behavior (Gonzales, 2016; Gonzales et al., 2016; Gonzales et al., 2020). Next, Internet connectivity varies based on the number of resources individuals have to prevent

challenges like periodic disconnection issues. The technology maintenance construct suggests that the digital divide impacts Lower-SES individuals in their ability to maintain the same level of access to technology as others due to unstable access (Gonzales, 2014a; Gonzales, 2014b; Gonzales, 2016). Finally, technical support is considered in the frame of digital literacy skills. The level of foundational knowledge related to technology that students have to become digitally literate is critical to obtaining college knowledge (Goode, 2010a; Horrigan, 2006).

Together, these layers inform the college-going behavior of college-intending students. Specifically for this study, the findings uncovered and discussed the difficulties LSECI Black students faced during the college application process during the onset of the pandemic in the Spring of 2020, particularly as it relates to potential technology maintenance issues.

In summary, the integration of Gonzales' (2014a) technology maintenance construct into Perna's (2006) college choice model enhances our understanding of the multifaceted challenges and opportunities faced by students in their college-going journey. It highlights the importance of technology access and maintenance as critical factors in shaping educational outcomes and underscores the need for equitable access and user-friendly technology solutions to reduce digital inequalities.

Chapter Summary

Initially centered on physical access to technology like high-speed Internet, the digital divide illuminated disparities tied to race and socioeconomic status. However, research shifted towards highlighting the "second-level divide," focusing on users' Internet knowledge and integration of digital media into daily life. Technology

maintenance emerged as a critical concern, particularly for Black students, widening the divide due to issues like declining personal computer use and unequal digital resource distribution. Under-connectedness persists, affecting students and families due to hardware and broadband limitations, exacerbated by affordability and availability challenges, especially in rural areas, leading to unequal academic experiences and performance. Bridging the socio-digital divide necessitates fostering digital literacy and capacity building for college access, addressing the digital inequities disproportionately impacting LSECI Black students, and ensuring adequate technology access for academic success. The COVID-19 pandemic underscored the urgency of these issues, revealing digital literacy gaps, the need for support and resources, and the imperative of restructuring education with a focus on digital equity and access.

The college application process is a pivotal step in the broader journey toward higher education, but it poses significant challenges for Black students and those from lower socioeconomic backgrounds. College knowledge, defined as the information and guidance necessary for successful college enrollment, plays a crucial role in navigating this complex process. However, racial and socioeconomic disparities persist, with LSECI Black students less likely to complete these steps. Access to accurate college information and college encouragement activities can significantly impact a student's journey toward college attainment, but these resources are not always readily available, especially for underprivileged students. Financial aid, a vital aspect of the college application process, remains elusive for many LSECI Black students due to a lack of information and the digital divide, further exacerbating educational inequalities. Professional school counselors are pivotal in providing essential college knowledge and guidance,

particularly for racially minoritized and Lower-SES students. Still, they often face resource constraints and time limitations that hinder their effectiveness in supporting students through the college application process. The struggle for LSECI Black students to access higher education persists, influenced by historical barriers, limited resources, and the quality of education they receive. Parental involvement and socioeconomic status significantly impact a student's college enrollment, with those from families with no college-going experience facing greater challenges. Competing priorities and socioeconomic disparities underscore the importance of accessible support systems and college knowledge dissemination to help LSECI Black students achieve upward mobility through higher education.

This study employed Perna's (2006) college access and choice model as its theoretical framework, which combines social and economic approaches to understanding the college-going process. Specifically, it focuses on how technology and the digital divide intersect with this model. The four-layered framework encompasses individual habitus, school and community context, higher education context, and the broader social, economic, and policy context. It emphasizes the complexities of college choice and the influence of demographic characteristics, institutional resources, higher education institutions, and broader societal factors. In addition to Perna's (2006) college choice model, the study integrates Gonzales' (2014a) technology maintenance construct, which addresses the challenges of maintaining access to technology and the digital divide's impact on individuals' ability to utilize technology effectively. This combination of frameworks provides a comprehensive lens for examining how socioeconomic status and race intersect with technology access and maintenance in the context of college access

and choice for LSECI Black students, especially during the COVID-19 pandemic, highlighting the economic and social challenges they face in securing reliable technology to achieve their college attainment goals.

CHAPTER 3

METHODOLOGY

This study addresses the gap in the literature related to socioeconomic achievement gaps in college access. The primary objective of this qualitative research was to pinpoint the obstacles encountered by college-aspiring Black students from lower socioeconomic backgrounds with limited technology access as they navigated the college application process amid the initial stages of the COVID-19 pandemic. Drawing upon Perna's (2006) college access and choice model and Gonzales' (2014a) technology maintenance concept as theoretical frameworks, this study aimed to understand the persistent disparities in technology access based on socioeconomic status and race.

Given the dearth of knowledge regarding COVID's impact on students' experiences, the following research question guides the proposed research: How did Lower-SES, college-intending, Black students with limited access to technology experience the college-going process during the onset of the COVID-19 global pandemic?

The choice of a basic qualitative study methodology was suitable for this research, as it aimed to explore the extent of college knowledge among LSECI Black students and how they acquired this knowledge. This methodology was also well-suited for examining the unique circumstances that influenced college opportunities during the research period. According to Denzin and Lincoln (2008), qualitative research crosscuts disciplines, fields, and subject matters. This is critical in examining the interconnectedness of college access, access to technology, and COVID-19. Merriam and

Tisdell (2016) asserted that researchers who utilize the basic qualitative approach can draw on multiple methods that respect the humanity of the participants in the study.

Through qualitative interviews, participants were able to tell their own stories and share their knowledge (Merriam & Tisdell, 2016), which was essential for understanding their experiences during a challenging time. The basic qualitative approach allowed interview participants to characterize their experiences in detail, providing rich descriptive insights. Merriam and Tisdell (2016) wrote, “Words and pictures rather than numbers convey what the researcher has learned about a phenomenon” (p.17). This approach was particularly important in the context of understanding the impact of the little-known phenomenon, COVID-19, during a consequential period for these participants. Marshall et al. (2016) wrote, "Qualitative researchers are intrigued by the complexity of social interactions expressed in daily life and by the meanings the participants themselves attribute to these interactions. (p. 2)” Qualitative research provides information about multiple real-world experiences during this challenging period (Marshall et al., 2016). Hence, this study sought to understand how data from LSECI Black students in Spring 2020 came together to help us better understand the impact of COVID-19 and access to technology on college access.

Qualitative research was crucial for examining the interconnectedness of college access, access to technology, and COVID-19. Researchers utilizing the basic qualitative approach could draw on multiple methods that respected the humanity of the study participants. As qualitative researchers are intrigued by the complexity of social interactions and the meanings attributed by participants, a basic qualitative study was

deemed an appropriate approach to examine LSECI Black students' college-going process during the onset of the COVID-19 pandemic.

Site Selection

This research purposefully selected participants previously enrolled in the Bibb County School District, consisting of 34 schools, in Macon-Bibb County (consolidated government), the fourth largest city in Georgia. This specific setting has about 74% of students from lower socioeconomic households, as defined by the United States Department of Agriculture's non-pricing meal service options for school districts. This site is also significant given that the Bibb County School District's mission is to ensure every student is college or career-ready. In determining the site location, I recalled research by Alvesson (2003), who pointed out that research in your setting (hometown/location of residence) is feasible and provides the potential to build trust and rapport with participants, which was necessary for this qualitative study.

Data Collection Process

Before conducting interviews, I provided each participant with an initial eligibility survey or questionnaire to be sure they met the selection criteria. The questionnaire primarily focused on gathering information related to technology ownership, internet access, technology reliability and satisfaction, efficiency with technology, financial ability to replace technology, borrowing technology from others, and the impact of technology issues on college preparation and enrollment during the onset of the COVID-19 global pandemic (March-July 2020). It also included Likert-scale questions to assess the participants' experiences and attitudes related to their technology usage and satisfaction. The survey was available in print and online formats if some

participants were still experiencing issues with technology. The questionnaire can be found in Appendix A. That method was chosen primarily to eliminate any shame or embarrassment a participant may have felt due to their technological condition. I desired to capture the deep meaning of experience in the participants' words while being sensitive to the difficulties of the period they were being asked to reminisce.

Wengraf (2001) viewed qualitative interviews as going in-depth and using the researcher's quality standards. My in-depth, semi-structured interviews were conducted through Google Meets with each participant in the study (Guest et al., 2006). Marshall et al. (2016) described semi-structured interviewing as gathering data where questions are arranged in a protocol that evokes rich responses. The interviews' desirable outcome was to provide context and a deeper understanding of the college-going process during the onset of the COVID-19 global pandemic from the perspective of LSECI Black students with limited access to technology. Utilizing semi-structured interviewing as my primary strategy for data collection helped me as a researcher gain what Merriam and Tisdell (2016) listed as necessary to "understand how people make sense of their lives and their experiences" (p. 23): 1) how people interpret their experiences; 2) how they construct their worlds; and 3) what means they attribute to their experiences.

The interviews followed a structured format, much like a conversation between friends. As I identified and interviewed participants for this research, I aimed to build rapport with everyone involved. Establishing rapport is imperative to gaining access to each participant and acquiring meaningful insight. Patton (2015) advised researchers to provide complete disclosure to participants. To accomplish such a task, I disclosed clearly to participants what I was interested in learning about. We discussed the

challenges LSECI Black students generally face in completing all the steps to achieve college access. Additionally, I shared with each participant how their experiences could help inform education leaders and policymakers to make positive enhancements to policies and procedures in the future.

Each session typically lasted around an hour. During these engaging conversations, we delved into the core themes of the participants' high school experiences and their journeys toward college. At the start of each interview, I would express my heartfelt gratitude, ensuring they had received and understood the consent form. We reminded ourselves of our mutual agreement to record and transcribe the conversation, allowing them the opportunity to review it later for accuracy. I took a moment to explain the significance of their participation in the broader context of college access literature, emphasizing its relevance to the higher education of LSECI Black students. Confidentiality was paramount, and I assured them that their identities would remain protected using pseudonyms and secure data storage. To maintain an open line of communication, I shared my contact information, offering them the option to reach out if they had any further questions or if they simply wanted to connect.

As our conversations ended, I expressed my sincere appreciation for their valuable insights and thoughtful responses to my questions. Additionally, as part of my exit strategy, I provided a small token of appreciation as a gift card to mark the end of our interviewing relationship. A small token is appropriate for this population of traditional college students, seeing that their time spent with me would have disrupted their daily routines. Marshall et al. (2016) described the act of adjusting a participant's priorities and

routines to assist the researcher as an instance where they selflessly contribute. This token showed how indebted and sensitive I was to their priceless time and participation.

Study Participants

This study interviewed 12 LSECI Black students aged 21 to 22 who graduated from high school in 2020. As previously noted, the participants' involvement in a federal TRIO Talent Search program indicated their aspirations for higher education. TRIO programs were established in the 1960s as part of President Lyndon B. Johnson's War on Poverty to prepare disadvantaged students for successful entry, retention, and completion of postsecondary education (Eksterowicz & Gartner, 1990; Venezia & Jaeger, 2013). Upward Bound, Talent Search, and Special Services for Disadvantaged Students were the original three TRIO programs, but more were added by the federal government in the 1970s (Eksterowicz & Gartner, 1990). The programs have helped more than 2 million students graduate from college (Venezia & Jaeger, 2013). The eligibility requirements of each program vary; however, participants in this study are alumni of the TRIO Talent Search program. The Talent Search program helps individuals between the ages of 12 and 27 navigate the college-going process as early as middle school through post-baccalaureate programs. Talent Search program participants are college-intending, primarily limited-income and potential first-generation college students (Eksterowicz & Gartner, 1990; Venezia & Jaeger, 2013). Additionally, the Talent Search program addresses the following areas of student need: increased psychosocial and behavioral support, greater exposure to college, and better information about college and financial aid (Venezia & Jaeger, 2013).

A sample size ranging from 12 to 15 participants was selected, aligning with the theoretical saturation point for non-probabilistic sampling within a homogeneous group, as Guest et al. (2006) outlined. Purposive sampling allows the selection of participants from predetermined criteria relevant to a particular research objective (Marshall et al., 2016). This research required data gathered amidst a global pandemic where contact tracing is still encouraged by the Centers for Disease Control and Prevention. Research in this setting minimized travel to other locations where the virus may be more prevalent. The study gained valuable insights into the impact of the COVID-19 pandemic on the challenges faced by high school graduates in the year 2020, marking the onset of this global emergency. Additionally, from informal observations with students outside of the context of this study and knowledge of school district policy regarding lending electronic devices to limited-income students, I knew that students who graduated during this period were only issued a laptop after instruction was moved entirely virtually. Therefore, we learn how their level of access to technology impacted their college-going decisions without school-based resources. Also, the sample size is appropriate due to time constraints and resources available to the researcher.

The viable population of the study could include students anywhere in the world, seeing how the global pandemic impacted everyone. However, I chose this specific population because LSECI Black students are often racially marginalized. The twelve LSECI Black students in this study are attending or have attended college, pursuing various majors such as nursing, business management, occupational therapy, communications, health performance, music education, and more. Most participants had positive experiences in high school despite some challenges. They enjoyed activities,

made friends, and had fun during their years there. During high school, each was involved in co-curricular activities such as sports, student organizations like Bea Club and National Honor Society, and military service. Many participants started their senior year on a positive note, looking forward to graduation, senior activities like prom, and enjoying their final year of high school; however, the COVID-19 pandemic forced a sudden transition in the final semester of school. This shift brought challenges, including adjusting to new modes of instruction, handling assignments remotely, and managing time effectively. This study sought to understand LSECI Black students' experience alongside unique challenges associated with limited access to technology.

In gaining access to participants, I utilized my professional network, or gatekeepers, at two federal TRIO Talent Search programs collaborating with the Bibb County School District. As a college access and success professional, I have made lifelong professional relationships with other administrators in the field. Therefore, recruitment was not an issue. Utilizing these programs narrowed my attention to college-intending high school students, as evidenced by their enrollment. I faced no tensions due to collegiality with the 'gatekeepers' in gaining access to participants' information. To gain that access, my colleagues made initial contact with their former participants to gain consent to receive their contact information.

In my initial outreach, potential participants received a phone call and an email inviting them to participate in the study. A phone call added a more personalized approach to participants to receive their commitment to participate. Once I received each participant's commitment, a pseudonym, as provided in Table 1, was assigned to each of them. In Table 1, information about each participant from the study is provided, including

their high school, age, gender, and major. The participants in the study came from various high schools in Bibb County, including Westside, Southwest, Central, and Northeast. Westside and Central are the most common high schools among the participants, with 4 participants each originating from these schools. The participants in the study range from 21 to 22 years old, with most of them being 21 years old. The gender distribution among the participants is predominantly male, with ten males and only three females. A wide range of majors is represented among the participants, including Nursing, Business Management, Occupational Therapy, Entrepreneurship, IT, Communications, Sports Management, Automotive Technology, Health Performance, Music, Graphic Design, and Biology. Entrepreneurship and IT are the most common majors among the participants, each represented by two individuals.

Table 1

Study Participants' Contextual Information

Participant	High School	Age/Gender	Major
Laquita	Westside	21/Female	Nursing
April	Westside	21/Female	Business Management
Brandy	Southwest	21/Female	Occupational Therapy
Chris	Westside	21/Male	Entrepreneurship
Matt	Westside	22/Male	IT
Javion	Central	21/Male	Communications
Jason	Central	21/Male	Sports Management
Darrell	Central	22/Male	Automotive Technology
Quinton	Central	22/Male	Health Performance
Mike	Northeast	21/Male	Music
Kevin	Central	21/Male	Graphic Design
Preston	Central	22/Male	Biology

After the initial phone call, each participant was given a questionnaire to assess their access level to technology. The responses helped to determine whether and how

SES and access measures varied. I first report descriptive information about ownership. I then described participants' experiences of achieving, sustaining, and coping with disruptions in access.

Technology ownership

Prior research on the digital connectedness of students found that nearly every student owned either a laptop or a smartphone (Berry, 2021; Gonzales et al., 2020). However, I found that most participants (66%) owned a cellphone with smartphone capabilities, even though most of those owners (62.5%) utilized an older/outdated model. Regarding laptops, only one-third of respondents (33%) owned one; however, the laptops were either used, outdated with connectivity issues, or shared with other family members.

Achieving access

During the pandemic, many students reported a lack of resources, exceptionally reliable computer usage, or the Internet (Cooper et al., 2020; Reed et al., 2022). My study found that two out of three respondents (66%) had access to high-speed Internet; even though the overwhelming majority (83%) did not pay for any Internet plans, someone else did, primarily parents.

Sustaining access

Despite near universal ownership of a smartphone, 1 in 2 respondents utilized a laptop that either became inaccessible or unstable. Overall, most respondents (66%) found their laptop to be "good enough to get work done," and 75% were satisfied with the quality of their laptop, which is a preferred technology needed to complete the college application process (Gonzales, 2016).

Coping with disruption

Finally, respondents shared how they coped with not having a laptop as they maneuvered through the pandemic to achieve college access. Of the responses, 58.3% shared a laptop with a family member, which led to being "under-connected" (Rideout & Katz, 2016, p. 40). Additionally, 91.6% used their cellphone instead, and 83% visited a community access point like a library or coffee shop to use a computer. If they had a problem with lost or damaged devices, 58% of respondents believed repairing it would take 1-6 months. When asked if their family could loan them money to fix a piece of technology needed for school, the responses were split: 50% responded yes, and 50% responded no or not sure.

Once it was determined that each participant experienced limited access to technology, they took part in an interview. The participants who agreed to take part in my study each brought a rich, unique lived experience that I highlight below:

Laquita is a full-time nursing student who recently graduated from Georgia Military College with an associate's degree in nursing. She is also a part of the Army National Guard and runs a part-time entrepreneurial venture. In her childhood, she enjoyed playing with neighborhood kids, and although she experienced some bullying in school, she remained a reserved but cheerful child.

April graduated from Westside High School in 2020 and is in her third year at Kennesaw State University, majoring in business management. She moved to Macon in the third grade, and her education in Macon was positive, especially during her time at Miller Fine Arts Middle School and Westside High School.

Brandy is a Tuskegee University senior majoring in occupational therapy with a minor in health sciences. She graduated from Southwest High School and Law Academy in 2020 and was part of the TRIO program. Growing up in Macon presented challenges, especially in a neighborhood she described as "the hood," but being part of the TRIO program opened opportunities and changed her perspective on college.

Chris graduated from Westside High School in 2020 and is working in the workforce. He has positive memories of growing up in Macon, focusing on spending time with friends outdoors and avoiding the negativity that sometimes surrounded him.

Matt is 21 years old and plans to attend school in August. He had a good childhood and described growing up in Macon as uneventful.

Javion is a junior in college, soon to be a senior, and attended Central High School. He grew up in a large family and had to navigate his path while avoiding negative influences, given the challenges and risks in the area where he grew up.

Jason is a junior in college majoring in communications, with a focus on sports management and human resources. He graduated from Central High School and is also a college athlete. He has a diverse family network across different states.

Darrell attended Nashville Automotive Diesel College and studied automotive technology. He had a regular childhood with no major privileges.

Quinton is a senior at Albany State University, majoring in health performance with a focus on dental hygiene. Originally from Virginia, he moved to Macon in the 6th grade and had to adapt to the new environment and educational system.

Mike graduated from Northeast High School in 2020 and joined the military in 2018. Currently, he is a student at Kansas State University, pursuing a degree in music

education. He grew up on the east side of Macon, an area with its share of violence, but he and his family managed to stay out of trouble.

Kevin is from Macon, Georgia, pursuing a bachelor's degree in design and film with a minor in graphic design. He described his childhood as peaceful and enjoyed spending his time drawing and watching YouTube.

Preston is studying biology in college and described himself as a typical college student. He is originally from Macon and appreciates his peaceful upbringing, though he notes the frequent weather changes.

Data Analysis

(Marshall et al., 2016) described data analysis as “a process of bringing meaning to raw, inexpressive data” (p. 217). My data set for analysis consisted of transcribed interviews, analytic memos, and the pre-interview questionnaire. All interviews received consent, followed an interview protocol, and were recorded (with permission). The protocol can be found in Appendix B. To the extent possible, I engaged in simultaneous data collection and analysis. This is typical of qualitative research studies where the researcher does not “know ahead of time every person who might be interviewed, all the questions that might be asked, or where to look next unless data are analyzed as they are being collected” (Merriam & Tisdell, 2016, p. 195).

My analytic memos included my personal reflections on each interview, recorded as close in time to the actual interview as possible. Topics for my notes included participant demeanor, notes for future interviews, tentative themes, things to pursue, and notes on other possible study participants. I kept detailed memos while the interviews were fresh in my memory. Keeping the detailed memos was a top priority to capture the

essence of each interview as patterns were discovered (Merriam & Tisdell, 2016). Jotting allowed me to offer my reflections on both the interview and participants while keeping notes on other items of importance, like changes to interview questions that may arise. As Merriam and Tisdell (2016) suggest, I read and reread my data and added additional notes on the data as I did so. All data was imputed, sorted, and coded in Trint, a computer-assisted qualitative analysis software. While interviewing, I recorded and saved the audio, then transcribed it as soon as possible. After completing the transcription, I edited, cleaned, and de-identified the participant in the interview data utilizing Trint. Trint allowed me to edit and clean each interview more efficiently. Additionally, I used Trint to listen to each interview multiple times to become more engulfed in the lived experiences of my participants. This allowed me to listen more attentively to their responses, and for participants who turned their cameras on, I was able to observe their body language. Prior to each new interview, I reviewed my memos and purposely planned how to pursue leads from prior interviews.

Merriam and Tisdell (2016) suggest that data analysis “is a complex procedure that involves moving back and forth between concrete bits of data and abstract concepts, between inductive and deductive reasoning, between description and interpretation” (p. 202). To derive meaning from the data I collected, I looked for patterns and insights related to my study purpose: to examine the experiences of LSECI Black students during the onset of the COVID-19 pandemic. My coding framework included key elements of my research question. Merriam and Tisdell (2016) defined a code as “a word or phrase that symbolically assigns a summative, salient, essence-capturing, and evocative attribute for a position of language based on visual data" (p. 199). As part of my multi-step coding

procedure, my first cycle coding (deductive) applied provisional codes to my data from my interview protocol, literature review, conceptual framework, research question, and key concepts that I brought into the study ((Miles, 2020). My analytic tool was based on the core construct of Perna's (2006) college access and choice model and Gonzales' (2014a) technology maintenance construct to help uncover emerging themes in the data related to my research question.

I constantly reassessed my initial codes as I collected questionnaires, conducted interviews, and adjusted as needed. Patton (2002) described the process of inductive analysis as "discovering patterns, themes, and categories in one's data" (p. 222). Specifically, I added codes related to the experiences of LSECI Black students both during their senior year of high school and their first year in college. After each interview was cleaned and edited in Trint, I printed them so that I could read them while listening to the recording of each interview. This allowed me to identify similarities and differences between each interview. I used a highlighter and pen to capture what I observed in each printed transcript. After all interviews had been coded, I began grouping codes thematically until the three primary themes identified in my findings emerged.

Trustworthiness

In qualitative research, trustworthiness is extremely important when it comes to the credibility of the research study (Merriam, 2009). Trustworthiness consists of the following components: (a) credibility, (b) dependability, (c) confirmability, and (d) transferability (Lincoln & Guba, 1985). Lincoln and Guba (1985) wrote that when considering trustworthiness, it can be simplified into one question: "How can an inquirer persuade his or her audiences (including self) that the findings of an inquiry are worth

paying attention to, worth taking into account of?" (p. 290). This is a fundamental question, as most qualitative studies have small sizes (Marshall et al., 2016). To ensure the trustworthiness of this research study, I discuss the following below: member checking, reciprocity, and peer debriefing.

Member Checking

I utilized member checks to establish trustworthiness and enhance credibility, as Lincoln and Guba proposed (1985). Member checking is the most “crucial way to establish credibility” (p. 314). Member checking allows participants the opportunity to review their interview transcripts for accuracy (Marshall et al., 2016). With member checking, the researcher can verify with the participant whether the overall transcripts and themes developed from the interviews are accurate. Sometimes, participants may express themselves one way but mean something completely different. Allowing member checking provides the participant with the extra comfort of knowing that the researcher will not misinterpret their lived experiences and that they will have a part in the presentation of the research. The participants in this research were able to check the transcripts from the interview about their lived experiences of undergoing the college-going process during the COVID-19 pandemic. After interviewing participants, I emailed their interview transcripts to each of them for review in accuracy. In reviewing their deidentified transcripts, participants could determine their comfort level and have any of it excluded from the research (Seidman, 2013). This access was provided after the transcription of each interview was completed. I allowed three weeks to review and provide concerns through feedback.

Reciprocity

The practice of reciprocity was given special attention. Understanding that my participants came from Lower-SES backgrounds, like households I was raised in, my interest in the participants' experience and how I presented what they told me was conducted to honor their words and lived experiences as I analyzed them in my research. Additionally, I was happy to provide informal feedback to my participants who may have decided they wanted to give college another chance or may need direction to obtain various resources to restart their college-going journey.

Peer Debriefing

Marshall et al. (2016) discussed the importance of sharing emergent findings with critical friends to ensure that the analyses are grounded in the data. As such, I engaged in one-on-one dialogue with five colleagues across the country in both the K-12 and higher education fields to discuss my findings. The insight provided by my colleagues allowed me to gain new insight and validate the interpretations presented. One new insight gained led to a recommendation for future research regarding consideration of the experiences of professional school counselors in college advising during the COVID-19 pandemic.

Subjectivity Statement

Before conducting this research, I worked as a college access and success coordinator for a federal TRIO program in an urban community for six years. This experience as a practitioner, combined with my own lived experiences, has led me to view my role as one that reduces systematic barriers to college access for LSECI Black students. I constantly imagine ways to challenge or minimize barriers facing students,

notably LSECI Black students, that would prevent them from achieving their desire to attend college.

As an African American, first-generation college graduate from a Lower-SES household who graduated high school less than ten years ago, I often see myself in the eyes of these young adults. They face similar challenges, but some more than I could ever comprehend at their age. Nevertheless, this work is vital at this site. Especially as a graduate of the same school district as my participants, it drives me to ensure that I accurately represent their lived experience, which is paramount to this study and critical to me. Understanding that my participants came from Lower-SES backgrounds, like households I was raised in, my interest in the participants' experience and how I presented what they told me was conducted to honor their words and lived experiences as I analyzed them in my research. Additionally, I was happy to provide informal feedback to my participants who may have decided they wanted to give college another chance or may need direction to obtain various resources to restart their college-going journey.

The onset of the COVID-19 pandemic has undoubtedly impacted LSECI Black students in ways that will have long-term implications. My association as a Board of Education member who voted to transition students from the traditional classroom to a virtual environment is an influence of this research. Additionally, as a first-generation college student and eventual graduate from a limited-income household and under-resourced school, I remember how difficult it was to navigate the college-going process. Luckily, I had in-person access to professional school counselors and college preparation programs like TRIO to assist me. However, my students and others undergoing the

college-going process during the pandemic needed more access to similar resources to build their college knowledge.

As a result, barriers related to long-suffering issues like access to technology were given new significance in this pandemic. As a high-school student, I did not own a laptop or have a capable cellphone, thus having limited access to technology. This research could help students minimize or eliminate ongoing technological barriers to seeking college access. Furthermore, I firmly believe that hearing the lived experiences of others, collected through in-depth interviews, is beneficial to improving college access.

CHAPTER 4

FINDINGS

All the participants provided candid responses and were comfortable sharing their unique experiences during the COVID-19 global pandemic. I examined these perceptions and wrote the findings in this chapter. Each section is organized into informative subsections that address participants' perspectives of their college-going experience. This chapter summarizes the data I collected and the major themes that surfaced during the analysis. My analysis is presented in three subsections: Unanticipated consequences of beginning college planning in senior year, FAFSA's vital role in college enrollment, and persistent college enrollment during COVID-19. The first theme, Unforeseen Ramifications Arising from Initiating the College Planning Journey in the Final Year of High School, discusses the impact of waiting until late to complete the college-going process. The second theme, The Fulfillment of the FAFSA as a Pivotal Determinant in the College Enrollment Journey, explores the critical role of FAFSA completion on students from this population. The final theme of the chapter, Unwavering Continuation of College Enrollment Amidst the COVID-19 Pandemic, Coupled with New Challenges Exacerbated by the Crisis, depicts the path that the participants traveled towards their first year in college and the realities they uncovered.

Unforeseen Ramifications Arising from Initiating the College Planning Journey in the Final Year of High School

The theme, "Unforeseen Ramifications Arising from Initiating the College Planning Journey in the Final Year of High School," sheds light on the experiences of

participants who began their college planning process relatively late, typically during their senior year of high school. This theme underscores the challenges they faced and how these challenges were exacerbated by the unforeseen impact of the COVID-19 pandemic, which disrupted their senior-year experiences, including traditional graduation ceremonies, prom, and academic programs. This theme is connected to Perna's (2006) college access and choice Model, particularly the stage of college choice and enrollment. In this stage, students decide which colleges to apply to and ultimately attend. The experiences described by the participants, such as starting their college planning relatively late in their senior year and the disruptions caused by the COVID-19 pandemic, highlight the challenges they faced during the college choice process. The model emphasizes that this stage involves gathering information, considering options, and making decisions about college enrollment, which aligns with the participants' experiences of researching colleges and dealing with unexpected disruptions.

The subthemes within this overarching theme further elucidate the participants' experiences. "Pandemic Impact" highlights how the pandemic disrupted their senior year, affecting their high school experiences and their college-going plans, emphasizing the need for adaptability. "Dependence on Technology" emphasizes the crucial role of technology in the participants' college planning process, particularly for research, applications, and scholarship searches. "Use of Mobile Devices" explores how participants, away from traditional school settings, turned to mobile devices, primarily phones, to navigate various aspects of the college planning journey, overcoming challenges related to the use of such devices for college-related tasks. Together, these subthemes illustrate the complex interplay between delayed college planning, the

unexpected pandemic, and the pivotal role of technology in shaping the participants' college aspirations and pathways. Additionally, the subthemes are connected to Gonzales' (2014a) technology maintenance construct in how students use technology to maintain their educational pathways, including access to college-related information and resources. The participants' heavy reliance on technology, such as laptops, smartphones, and online resources, to research colleges, complete applications, and communicate with schools aligns with the idea that technology plays a crucial role in maintaining their college planning journey. The challenges they faced, such as limitations in technology access and the use of mobile devices for college-related tasks, illustrate the importance of technology maintenance in navigating the college access process, especially in the context of limited resources.

Overall, this theme and subthemes provide insights into how students experience and navigate the college planning process, highlighting the impact of external factors like the COVID-19 pandemic and the role of technology in facilitating or hindering their access to college opportunities.

Pandemic Impact

Many participants did not start college planning until their senior year of high school, despite thinking about college within specific years ranging from freshman to junior year. Consequently, COVID-related disruptions proved to have an impact on their college-going plans.

Across all responses, the COVID-19 pandemic significantly impacted participants' senior-year experiences. Although COVID-19 disrupted activities (traditional graduation ceremonies and prom) and college-going plans, most participants

adapted and made the most out of their final year in high school. Chris highlighted a successful senior year until the pandemic forced a transition to virtual instructional learning and impacted his dual enrollment program that, as a result, denied him from gaining his emergency medical transition (EMT) certification.

Chris shared:

> My senior year at Westside (high school) was going well. I had a couple of classes at Westside, but most of my day was at Hutchings Career Academy and the EMT program, and everything was pretty much going well until COVID came. And then we had to, you know, switch over and do everything virtually. I could not complete my EMT class. And then, at Westside, it became more challenging to complete, like the calculus class that I had online and the French class. It was hard to complete those classes online. I was not able to have a traditional graduation or a traditional prom. My relationship with my counselor weakened after we switched to virtual learning since we were not in school. I was not happy with the way it ended. However, we still prevailed. It was not anything that I could change myself.

Darrell was one of many participants who expressed his belief that senior year felt incomplete due to the pandemic, resulting in a limited senior experience:

> Honestly, I only remember half of my senior year because I think that we barely even had a senior year because of the pandemic. It did not even feel like we were seniors, really. We were just there for the first couple months of senior year, and then we just left and nothing else. It was just that we were home doing work on computers, so I did not really have a senior year.

Like Darrell, April recounted the excitement of senior activities and events planned for the end of the year, which were canceled due to COVID-19.

> So Senior was interesting because we had a whole bunch of stuff planned for the end of the year. We were supposed to go to Universal (Studios). We did end up doing a Fright Fest that October. Super fun. Most of us were waiting for, like, the end of the year activities and everything, and you know, that did not happen. I was also in the band. I think I joined the band in 10th grade, so my senior year, I was doing the internship at GEICO; I would leave it like the fifth period and then just go straight to my training. So, it took away from me being in a band, but I was still there somewhat. But yeah, we were waiting around for the end-of-the-year stuff, and then COVID happened. Moreover, yeah, we just left school one day and never saw each other again until graduation... really unexpected.

Likewise, Brandy reflected on a positive senior year, including basketball, and like April, Brandy was also in the band, but was serving as the drum major. She shared how the pandemic halted events like prom and senior walkout.

> My senior year was good up until COVID came, of course, because that kind of just stopped everything. I was just excited, you know, for graduation and that we had a great basketball team that year because we made it all the way to state. I was the drum major of the band. So, my senior year was actually great. The only thing I was waiting for was to be able to walk across the stage, graduate in front of everybody, and get ready to go to college. In high school, they have something called Senior Walkout Day, where you go to your old elementary schools with your peers and stuff that you walk through at the beginning. You know, it is just

> like a memory lane, kind of, sort of. And you get to see where you came from, where you at now. So, we really did not get to experience any of that or prom or anything because COVID came, and it just kind of just stopped everything that we were doing.

Additionally, Brandy referred to college-going programming that she was involved in, specifically related to completing college applications. Brandy shared, “The highlight of my senior year was getting accepted into different colleges back-to-back. I remember the effect that COVID-19 had on everything because it messed up my whole senior year.”

On the other hand, Jason did not wait until late into his senior year to take care of his senior-year tasks related to college preparation. In reflecting on how his journey unfolded, he shared the following:

> I would say that since I got my SAT scores and scores out of the way, that really did not affect me when COVID hit. I would just say the only the only thing that would happen is the automatic acceptance kind of thing. I had a different opportunity to go play football somewhere, and I got accepted. Still, I did not have enough money to be admitted into the school because it was a private school, D3, Berry College. I would say I signed and signed with my current school and all the college in Hanover, Indiana. I would say that after the automatic acceptance they sent, the school that I wanted to go to sent me an acceptance letter, but I already had wanted to go to where I was. So, I do not think that was a big thing, but I am glad that I went to where I am now.

COVID-19 abruptly disrupted the senior year of each participant, leaving it feeling incomplete and devoid of traditional experiences. Despite the challenges, some of

them achieved academic milestones and college acceptances, while others faced unexpected twists in their college journeys. We all share the sentiment that the pandemic drastically altered our final year of high school. This analysis supports the work of Bell et al. (2009), Hossler et al. (1989), and others, who described college-going programming as integral to a student's attainment of college knowledge to complete the college application. My findings also align with Bell et al. (2009) that college-going programming ramps up during the upperclassmen years of high school.

This subtheme highlights various aspects of the digital divide in the context of how the COVID-19 pandemic affected the college plans and senior-year experiences of different high school students. This subtheme emphasizes the importance of college-going programming in helping students complete college applications. It mentions that this programming becomes more critical during the upperclassmen years of high school. The digital divide can impact students' access to such programming and resources, potentially disadvantaging those who lack the necessary digital tools and internet access.

Dependence on Technology

All participants acknowledged the significant role technology played in their college planning process. They used technology to research colleges, fill out applications, look for scholarships, and communicate with schools. These participants had to seek other means to gain college knowledge, such as free video-sharing websites, most notably YouTube and other online resources and search engines for research and information gathering. Brandy discussed the significant role that technology played in her college planning process. She extensively used YouTube for virtual tours and gathered information about Tuskegee University. Brandy shared, “Technology played a big part

after I noticed that I got into Tuskegee, and that was my number one choice. I started searching and googling, and I wanted to see everything. I went to YouTube. I was watching YouTube videos, just everything." April's college planning started during her senior year, when she faced stress over affordability and proper preparation, particularly related to financial aid. April initially considered options like UGA, Kennesaw, and Savannah, even debating whether to attend an HBCU. Like Brandy, she too conducted extensive research, including watching YouTube videos to understand college life.

> I started really planning my senior year. It was stressful, but it was more just kind of like making sure that I could afford it and making sure that I was getting the proper tools to do it. Like when it came to FAFSA for financial aid and everything. So, I was more so just like looking. I had narrowed it down to like three of them. I think it was like UGA, Kennesaw, and Savannah. I could not decide if I wanted to do an HBCU or not, but I did not choose an HBCU; it was more just making sure I was researching. And so, I was watching a lot of YouTube videos, like college students what their college experience is like.

Moreover, Mike also depended on technology; however, instead of YouTube, he relied heavily on Georgia Futures and Google for his college search.

> We kind of just Google stuff here and there, but for the most part, we would use Georgia Futures. We would look at Georgia Futures as we are mostly just looking for colleges in Georgia. We were not really trying to go out of state as out-of-state tuition was more than we expected for some colleges. So, we used Georgia Futures, and we would type the name into some type of search bar, and it would just be whatever the search was; it would just highlight a whole list of different

> colleges with whatever that keyword was that we searched. So, we would search that way. And, of course, I think Georgia Futures, also gives you the best estimate of how much the tuition costs and their options for (campus) living. I think it also has a link to where they post their scholarships that you can apply for. So, Georgia Futures was the main thing that we used to search for these colleges.

Matt also shared the substantial role that technology played as he used it to complete his college applications and the FAFSA. His school provided him with a laptop even though it came with its own difficulties.

> It played a big role because I had to use technology to fill out the college application and the FAFSA. Everything was okay because they provided us with a new laptop. And I just use my new laptop for college work so I would not have any problems.

Javion began looking for colleges toward the end of his junior year instead of waiting until his senior year and focused on schools with strong engineering programs. He conducted extensive online research, sought advice from people he knew, and visited various schools to find the best fit.

> I did a lot of online searching. I knew about a couple of schools from different word of mouth of different people that I knew that might have gone through Central (High). So, I was asking around a lot of people about the schools they were at and their experiences. And then I visited a lot of schools as well, trying to figure out any that was good for something that I wanted to be at.

The participants also highlighted the availability and level of access to technology. Regarding his search for colleges, Quinton shared, “I was searching online using a school

computer at school." Quinton's access to technology was limited to the traditional school environment. Additionally, other participants like April had a dedicated computer and would use a shared desktop computer with family members to research and locate information.

> I use the computer [shared desktop] mainly so that I can get a big view of everything. I shared it with my mom and my sister. I kind of mainly looked into the ones that I had physically been to and then mostly just what I knew about your college. And I would just like to research them and everything like one says nearby in Georgia. So, the best rating for my degree that I wanted to go for was this business.

Finally, participants like Brandy had to borrow laptops to complete her college search on Google. She shared, "I was using both of the laptops, the one from TRIO and the one from the school."

Technology played a pivotal role in the college planning journeys of these students, enabling them to research colleges, complete applications, and navigate financial aid processes. Brandy heavily relied on YouTube for virtual tours and information about her top choice, Tuskegee University. April began her college planning in her senior year, dealing with stress over affordability and thorough preparation, turning to YouTube to gain insights into college life. Mike used Georgia Futures and Google to search for colleges, focusing on in-state options due to tuition considerations. Matt utilized technology provided by his school to complete applications and the FAFSA. Javion initiated his college search in his junior year, conducting extensive online research, seeking advice, and visiting schools with strong engineering programs.

Participants' access to technology varied, with some using shared family computers, while others borrowed laptops to access vital resources for their college planning efforts. This analysis supports the research provided by Reza (2020) and Gonzales and Jackson (2020) that pointed to the importance of one-to-one laptop schools within school districts. One-to-one technology is needed to bridge the digital divide. Additionally, this analysis supports the work of Venegas (2006) and Hoxby and Turner (2015), who highlighted that many major parts of the college-going process, like completing applications for admissions, have gone primarily electronic. This development has made access and technology dependency critical for an individual who desires college access.

This subtheme highlights the critical role that technology plays in the college planning process for the participants, and it also underscores the impact of the digital divide on their access to and use of technology. This finding also reveals that participants had varying levels of access to technology. While some had their own laptops or access to school-provided devices, others had to share computers with family members or borrow laptops to conduct their college research. This variability in technology access reflects the digital divide, where not all students have equal access to the necessary tools for college planning.

Use of Mobile Devices

A common theme among participants that developed after being away from the traditional school environment was using mobile devices, primarily smartphones, for various aspects of the college planning process. Participants used their phones to access applications, communicate with schools, and perform research. While some participants owned personal laptops or computers, others mentioned borrowing laptops from friends

or using devices provided by family members. Preston shared his experience using his cellphone to complete the Common Application. When I asked him about his experience, he shared, “It was tedious. The most difficult part was with the essay portion, where you had to go ahead and write it out. Like you go ahead and try to type out one thing, but then it goes ahead and autocorrects over to one thing. And then, the slow process on your phone is just such a hassle.” Likewise, as a football player, Jason used his cellphone for searches and looked for schools that offered an opportunity to play on the next level. Jason shared:

> I would use my phone. I knew schools in Georgia. Those were the ones that kind of I just knew off the top of my head. But just seeing what other schools, like divisions or conferences for football, would also help me just kind of like search some more schools to see if I could play there or play somewhere else and things like that.

Like Preston, Darrell shared challenges he faced with using his cellphone. However, he was communicating with colleges through his cellphone’s email service.

> I think it was kind of confusing. Because I was not used to using my Gmail as much as I had to use it. So, I had to figure things out and try to get it to them and make sure they had it and make sure I got the emails they were sending me.

Furthermore, Mike shared his struggle with technology, including using his cellphone to fill out college applications. He highlighted the challenges of lacking consistent access to suitable technology.

> When it came to enrolling and filling out certain applications with the college, I could not do that on my laptop. I would use my phone, or if my nana were

> available, I would use her laptop. That was pretty much it as far as trying to fill stuff out. It was just a terrible time.

These participants faced challenges while using their cellphones for various aspects of their college planning journey. Preston found completing the Common Application on his cellphone to be tedious and especially struggled with the essay portion due to autocorrect and the slow process. Jason primarily used his phone for college searches, focusing on Georgia schools he knew and exploring others that matched his football aspirations. While communicating with colleges through his cellphone's email service, Darrell found it initially confusing and had to adapt to using Gmail more extensively. On the other hand, Mike faced significant difficulties using his phone for college applications and noted the lack of consistent access to suitable technology as a significant hindrance in the process. This analysis is aligned with research supported by Rideout and Katz (2016) and Berry (2021), who reported that smartphones are readily accessible to teens of all racial populations and socioeconomic backgrounds, unlike laptops. If a student's total reliance is on this sole device, it makes accessing the Internet difficult, thus negatively impacting their college access.

This subtheme illustrates how the digital divide is reflected in the challenges faced by participants who primarily used mobile devices, especially smartphones, for various aspects of their college planning process. First, many participants mentioned using their mobile devices, specifically smartphones, for college planning tasks. This reliance on mobile devices can be indicative of limited access to more traditional computing devices like laptops or desktop computers. Additionally, relying on mobile devices may also imply limited access to reliable internet connections. Mobile data may

not be as stable or as conducive to certain tasks as a broadband connection, further exacerbating the digital divide.

The Fulfillment of the FAFSA as a Pivotal Determinant in the College Enrollment Journey

The theme, "The Fulfillment of the FAFSA as a Pivotal Determinant in the College Enrollment Journey," delves into the participants' experiences regarding the FAFSA and its significance in their pursuit of higher education. This theme highlights the challenges and successes encountered while completing the FAFSA, emphasizing the complexities associated with gathering financial information, particularly from parents or guardians. This theme is connected to Perna's college access and choice model, particularly the stage of college choice and enrollment. In this stage, students make decisions about which colleges to apply to and ultimately attend. The experiences described by the participants, such as starting their college planning relatively late in their senior year and the disruptions caused by the COVID-19 pandemic, highlight the challenges they faced during the college choice process. The model emphasizes that this stage involves gathering information, considering options, and making decisions about college enrollment, which aligns with the participants' experiences of researching colleges and dealing with unexpected disruptions.

The subthemes within this overarching theme further elucidate the role of the FAFSA in the participants' college journeys. "Overcoming Financial Hurdles: Navigating the Complexities of FAFSA Data Gathering" sheds light on the difficulties participants faced in collecting and inputting accurate financial information, with a particular focus on the role of parents in this process. "Pursuing Higher Education Dreams: The Crucial Role

of FAFSA in Financial Aid Access" underscores the motivation behind completing the FAFSA, emphasizing its significance in securing financial aid resources essential for affording college. These subthemes are connected to Gonzales' (2014a) technology maintenance construct. This construct focuses on how students use technology to maintain their educational pathways, including access to college-related information and resources. The participants' heavy reliance on technology, such as laptops, smartphones, and online resources, to research colleges, complete applications, and communicate with schools aligns with the idea that technology plays a crucial role in maintaining their college planning journey. The challenges they faced, such as limitations in technology access and the use of mobile devices for college-related tasks, illustrate the importance of technology maintenance in navigating the college access process, especially in the context of limited resources.

Together, these subthemes provide a comprehensive understanding of how the FAFSA serves as a pivotal determinant in the college enrollment journey, influencing financial aid access and shaping the participants' higher education aspirations and decisions. Additionally, these subthemes provide insights into how students experience and navigate the college planning process, highlighting the impact of external factors like the COVID-19 pandemic and the role of technology in facilitating or hindering their access to college opportunities.

Overcoming Financial Hurdles: Navigating the Complexities of FAFSA Data Gathering

Many participants shared a mix of challenges and successes related to completing the FAFSA but mostly found certain aspects of the FAFSA process challenging.

Unfamiliarity with the process made the completion of the FAFSA a daunting task. The gathering and inputting of financial information, particularly from parents or guardians, was a resounding challenge for many participants. All participants emphasized the importance of obtaining accurate financial information, mainly collecting tax information from parents and tax-related details, to complete the FAFSA accurately. Javion shared:

> Well, the first time is difficult. I am better at it now because I did it multiple times. It (the FAFSA) just asks you for all the information about tax purposes and your parents' purposes. Moreover, sometimes it is just like much information you do not know. The first time I did it, I do not think I probably did it until right before my freshman year that Fall because I had to get my parents' information there.

Many participants highlighted the difficulties of securing the necessary financial information for their FAFSA from their parents. For Preston, it was the only problem that he faced with his FAFSA. He shared, "The FAFSA process was good. The only issue they had with it was the whole tax; I had to wait for my parents to come home and work on that portion." Likewise, April found FAFSA completion to be a bit of a struggle, and she remarked on the challenges she faced with getting her mother to understand the process and securing the necessary information.

> Well, the first time doing it was interesting. You know, my mom, she had not done it for so long because, you know, she was in college, but. That was an interesting process, trying to get her to understand and get all the right information and stuff like that.

Like April, Matt also mentioned that he initially found the FAFSA difficult his first time. Matt shared the following:

> It was kind of hard. You know, my first time doing it. Yeah, my mom and I would be struggling to figure it out. And then, one time, the school had something going on to help us with the FAFSA. And then my mom came, and that helped.

There were some participants who did not find the overall FAFSA process as hard but specifically pointed to the parent's tax gathering portion as the hardest part. One of those participants was Kevin, who shared, "It was not that hard. It is like you need taxes. Like, you need the tax numbers. That is the hardest part because you need to not know how to read the tax paper to do it." Quinton also shared similar sentiments by saying," Likewise, Chris shared during his reflection on completing his FAFSA:

> The FAFSA process was pretty easy. There was a secondary process that the parents had to fill out. That was kind of a bit of a difficult one. The difficult part was having to get both to complete what they were supposed to do. You know, I was able to get my mom to do what she was supposed to do, but my dad, I just had to kind of just fill everything out for him. Okay, overall, it was easy.

All participants highlighted the importance of accurately completing the FAFSA, particularly when it came to collecting financial information from their parents, including tax-related details. Javion noted that the process became easier with experience but stressed the challenge of gathering tax and parental information. Several students faced difficulties securing this information from their parents, like Preston, who had to wait for his parents to work on the tax portion of the FAFSA. April struggled initially, needing to explain the process to her mother and obtain the necessary information. Matt initially

found the process difficult, but he received assistance from his school. Kevin and Quinton mentioned that the parent's tax gathering portion was the most challenging aspect. Chris also found the FAFSA process relatively easy but noted that getting both parents to complete their respective parts could be challenging. This analysis advances the notion made by Kim and Schneider (2005), Belasco (2013), and others that assistance from parents is an essential source for LSECI Black students in their upward mobility.

This subtheme highlighted an aspect of the digital divide in the context of the challenges and successes that students faced while completing the FAFSA as it relates to digital literacy and familiarity. Many participants found the FAFSA process challenging, especially during their first attempt. This challenge can be attributed to their unfamiliarity with the process. Completing the FAFSA requires a level of digital literacy, as it involves navigating online forms and providing various financial information. Participants who were less familiar with online forms may have faced greater difficulties.

Pursuing Higher Education Dreams: The Crucial Role of FAFSA in Financial Aid Access

Overall, the participants shared a common motivation for completing the FAFSA: the financial assistance it provided for pursuing higher education. Robinson and Schulz (2013) found that financial aid is integral to the college-going process and is critical for LSECI Black students to access resources. All participants emphasized the importance of financial aid in covering their college expenses. Completing the FAFSA was crucial to accessing grants, scholarships, and loans that would help them afford their education. For many, their personal or family dynamics made FASA completion a necessity. Quinton's motivation for completing the FAFSA was rooted in his desire to attend college and his

recognition that he could not afford higher education without it. He also considered his mother's financial situation and knew she could not cover the costs. Quinton remarked, “I wanted to go to school, and I knew that if the FAFSA were not done, I would not be able to go because I could not afford it. I knew my mom could not either.” Likewise, Brandy's motivation to complete the FAFSA was driven by the need for financial support to cover the high costs of attending a private out-of-state school like Tuskegee. She shared that her timely completion of the FAFSA allowed her to secure the necessary funds to continue her education and graduate, even when she had turned it in late.

> Oh, the thing that motivated me the most was that I knew that I needed money for school. Personally, I was going to school out of state in a private school, and Tuskegee cost a lot of money just because it is private; that motivated me because I had received the email because I turned in my FAFSA late, but they still worked with me, thank God. But if I did not do the FAFSA, I would not be graduating at all this year.

Laquita highlighted the importance of financial aid, explaining that while scholarships and grants are offered, unforeseen circumstances can affect these funding sources. She emphasized that financial aid provides crucial assistance for students in need, serving as a safety net during their college journey. Laquita's motivation to complete the FAFSA stemmed from her need to take charge of her education costs due to not having anyone else to pay for her schooling. She saw the FAFSA as a resource that would help her avoid the burden of student loans and ensure she could manage her college expenses effectively.

> I feel like even though you are offered scholarships and stuff like that; sometimes stuff happens when it comes to scholarships and grants and stuff like that. So, I feel like doing financial aid is something that helps students who are in need—financial help when it comes to paying for school. When it came to school for me, I did not have anyone to pay for school for me, so I had to go out on my own. That is one of the resources that I had that ensured that I was going to be able to take care of school without having to worry about whether I had student loans or if I would be paying off college classes for the rest of my life.

Additionally, Preston highlighted the necessity of completing the FAFSA for financial aid and scholarships. His motivation stemmed from the desire to take advantage of the benefits it offered to support his education and help him graduate without excessive financial burdens. Preston shared, “Completing the FAFSA application for financial aid was a necessary step, and the desire to avail the benefits of scholarships served as a motivating factor.”

A couple of participants mentioned the influence of their parents or guardians in motivating them to complete the FAFSA. Family members encouraged them to apply for financial aid, demonstrating their concern for their education and future. Javion shared:

> Really, financial problems were important for me because me and my mom are really close. So, I would hear her talk about my older brother. He would have a lot of things he needed money for. It was his freshman year in college, so he did not work. So, he had all these things he needed to pay for college. So, I knew college was expensive. And then I started looking at prices for college and like $8,000 or $10,000 a semester. So, I knew it was expensive, and I did not want my parents to

> pay out of pocket. So, I was trying to figure out anything that gave me scholarships or anything that could help knock the cost down for my school.

Mike's response had a humorous undertone, as he mentioned that his motivation was to appease his nana and stop her from nagging him about completing the FAFSA. He acknowledged his family's persistence in encouraging him to complete the application.

> I hate to say it like this, but if I did my FAFSA and showed my nana, she would stop nagging me about it. She was very persistent about me filling out the FAFSA, so my incentive was that if I did it now and did not procrastinate on it, she would not be jumping down my throat.

The motivation to complete the FAFSA was a common theme among these students, driven by the desire to access financial aid for college. Quinton recognized that without the FAFSA, affording higher education would be impossible for both him and his mother. Brandy's motivation stemmed from the need to secure funds for her private out-of-state education at Tuskegee University, which ultimately allowed her to graduate. Laquita stressed the importance of financial aid as a safety net for students in need, enabling them to manage college expenses without the burden of student loans. Preston emphasized the necessity of the FAFSA for scholarships and financial aid, viewing it as a vital step to support his education without excessive financial burdens. Family influence also played a role, as Javion was motivated by his close relationship with his mother, and Mike's incentive was to stop his nana from nagging him about completing the FAFSA. This analysis supports prior research by Freeman (1997) and Conwell and Quadlin (2022) that found LSECI Black students were uncertain about their ability to pay for college, and it was primarily fueled by the student’s lack of financial resources.

Unwavering Continuation of College Enrollment Amidst the COVID-19 Pandemic, Coupled with Challenges Exacerbated by the Crisis

The theme, "Unwavering Continuation of College Enrollment Amidst the COVID-19 Pandemic, Coupled with Challenges Exacerbated by the Crisis," delves into the experiences of participants as they navigated the complexities of college enrollment during the COVID-19 pandemic. This theme underscores the participants' resilience and determination to pursue higher education despite the unprecedented challenges posed by the global health crisis. Additionally, this theme is connected to Perna's (2006) college access and choice model by showcasing students' determination to pursue higher education despite challenges, and it relates to Gonzales' (2014a) technology maintenance construct by illustrating how students navigated the digital divide and adapted to virtual learning during the COVID-19 pandemic as part of their college experiences.

The subthemes within this overarching theme provide a comprehensive exploration of the participants' experiences. "TRIO Works: A Pathway to College Readiness and Beyond" highlights the instrumental role of the TRIO program in preparing participants for college and expanding their horizons beyond high school. It showcases the positive impact of TRIO in equipping students with essential college knowledge and providing exposure to college-related activities and opportunities. "TRIO Program Resilience During the Pandemic: Adapting and Supporting College Aspirations" delves into how the TRIO program adapted to the challenges posed by the pandemic, emphasizing its continued support in critical areas like FAFSA completion and college decision-making. It underscores the program's flexibility in transitioning to virtual formats to ensure ongoing assistance to students. "Navigating the Pandemic and Personal

Challenges" explores the diverse experiences of participants as they entered college amidst the pandemic, emphasizing the disruptions, isolation, and personal challenges they faced. This subtheme sheds light on the emotional and academic impact of the pandemic on students' first-year college experiences. "Overcoming Virtual Learning Challenges: Navigating College Amid the Digital Divide" delves into the specific challenges participants encountered with virtual learning, particularly in the context of the digital divide. It highlights issues related to limited resources, connectivity, and the adjustment to online classes, emphasizing the importance of addressing these barriers to ensure equitable access to higher education. This subtheme is particularly relevant to Gonzales' (2014a) technology maintenance construct. It highlights the challenges posed by the digital divide, emphasizing limited resources, unreliable technology, and the struggle to adapt to online classes. These challenges are in line with the notion of technology maintenance, where students need access to reliable technology and the skills to use it for their academic pursuits effectively.

Together, these subthemes provide a nuanced understanding of how participants persevered through the pandemic and personal challenges while pursuing their college aspirations, with the support of the TRIO program and the acknowledgment of digital disparities in higher education. Additionally, these subthemes are connected to Perna's (2006) college access and choice model by illustrating how various dimensions of the model come into play during the COVID-19 pandemic. Additionally, they are linked to Gonzales' (2014a) technology maintenance construct by emphasizing the digital disparities and challenges students faced while navigating virtual learning during the pandemic. These connections provide insights into the complex interplay between college

access, technology access, and the challenges students encountered during this unprecedented period.

TRIO Works: A Pathway to College Readiness and Beyond

All the participants in the study took part in TRIO. In this college preparation program, they experienced college-encouragement activities such as attending college fairs and tours earlier in their academic careers. Quinton described his experience in TRIO by sharing:

> It gave me a great experience; I want to say, without it, I do not even know how I would have gotten through with my college information or anything because I even know that the TRIO program definitely helped me when it got time for college and just helping me with college even, steering our mind in the direction of college from when you first get in when you are a freshman in high school, just like in college tours and doing different activities and meeting different people and everything and just kind of different stories about college and people, that had been going to college and everything just thought it was pretty good. Moreover, I even took the information, and the man was using it to inform my friends who were not in the program or people that I knew who were not in the program who had questions about college because, as I said, without the TRIO program, I would not even had known about my FAFSA to get it done and if I even would have got it done in time enough or anything like that without being in the TRIO program.

Many participants found the TRIO program to be an enriching experience that provided them with the resources and information needed for successful transitions to

higher education and post-graduation life. TRIO was noted to broaden participants' perspectives beyond high school, exposing them to various college options, potential career paths, and opportunities outside their immediate surroundings. Brandy remarked about her experience:

> The TRIO program was good. The trips we went on, like the different colleges and stuff like that. It was a big eye-opener for me, not only to experience it, but it showed me life after high school, like there is way more out there in the world to see than just being stuck in one place.

Similarly, Darrell described TRIO as a helpful and learning-oriented experience that provided insight into the college experience. He appreciated the preparation it offered before he entered college.

> It was a good learning experience. TRIO showed me the college experience before I went to college. So, I knew what to expect when I went. And I am glad I went and did the things I did with TRIO because, without it, I would not have gone to college. I thought college would always be bad, but when I visited Alcorn State with TRIO, I guess it was not that bad. They told us stuff that would be happening in the classes, and it sounded interesting.

Javion also reminisced on how the TRIO program took him on a college visit where he was able to stay in a college form and expand his understanding of college life.

> I loved the TRIO program. The Trio program took me to my first college experience to see college life. I can still remember the first time I went and stayed in a college dorm at Savannah State. And they took us there for like three days or

> two days. And getting to see how a dorm is, how small they are, the smaller than some doors, and how it was just staying in a dorm with another person.

Finally, Laquita found TRIO to be a helpful experience that provided resources and guidance for navigating the transition from high school to college. The program equipped her with information and skills to navigate her post-graduation path confidently.

> Being in TRIO was an experience to have as a high school student. I feel like people who did not experience it did not really get the resources they needed to do certain things or prepare themselves better for when they did go to their next schools or after graduation.

Participants universally praised the TRIO program for its invaluable contributions to their college preparation and life after high school. Quinton credited TRIO with providing essential guidance and information about college, helping him navigate college applications, including the FAFSA, and sharing college experiences with peers, all of which he passed on to friends outside the program. TRIO was recognized as an eye-opening experience that expanded their horizons beyond high school, with Brandy emphasizing its role in broadening her perspective about life after graduation. Darrell found TRIO instrumental in preparing him for college and dispelling misconceptions about it, making him more comfortable with the idea of pursuing higher education. Javion cherished the program for offering his first college visit experience, allowing him to stay in a dorm and gain insight into college life. Laquita highlighted TRIO's role in providing resources and guidance that equipped her with essential information and skills for the transition from high school to college, emphasizing the program's value for students in need of such resources.

TRIO Program Resilience During the Pandemic: Adapting and Supporting College Aspirations

The TRIO program provided participants with extensive college information to increase their college knowledge. However, the pandemic forced TRIO programs to shift their programming and, as a result, limit college-encouraging activities, as Case et al. (2022) found. Despite the challenges posed by the pandemic, participants highlighted that the TRIO program continued to provide support and assistance, particularly with tasks like FAFSA completion, college decision-making, and staying connected with resources. Mike described his limited interaction with the TRIO program during the pandemic by sharing:

> Honestly, there was not much we could do during the pandemic. There were resources available to us that we were made known of; TRIO would reach out very frequently to us to make sure we were all good. However, as far as doing activities, I know I did not participate in much during the pandemic.

Likewise, Jason shared that the pandemic led to a reduced connection with TRIO programs as virtual learning shifted the focus to individual interests and challenges.

> During the pandemic, I kind of lost touch with all the programs that kind of was there for us. So, I do not know. I think that I thought they would have a hard time reaching out just because of the pandemic and stuff like that; I kind of lost touch with you.

However, Brandy shared how the TRIO program played a significant role during the pandemic by assisting with college applications and financial aid items like FAFSA. She

shared how her TRIO advisors communicated through platforms like Facebook to ensure continuous support:

> So, the TRIO program played a big part in the pandemic because I was not getting my counselor the help that I needed as far as finishing up my applications for college and stuff and seeing what the next steps that I needed to take to help me do my FAFSA because I did not know how to even get my financial aid or anything for going out of state. So, TRIO helped a lot with that. And as far as checking on us all the time, even like some of the TRIO, I guess they are like the teachers and stuff that I did not even know about that were a part of TRIO. Um, they were finding us on Facebook and sending us messages, so yeah.

Additionally, Quinton perceived that TRIO maintained its supportive role during the pandemic, including regular communication about FAFSA and college choices.

> During the pandemic. I want to say it was still good. They still communicated with us and made sure when to check in on our FAFSA to accept your loans and everything. Also, to make sure that our school choice changed or not because we all had different options to go to. And just making sure that housing and everything was set up. I will say they were there.

Participants had varying experiences with the TRIO program during the pandemic. Mike and Jason noted reduced interaction and engagement with TRIO due to the limitations imposed by virtual learning and the challenges presented by the pandemic. However, Brandy emphasized the program's significant role during this period, particularly in assisting with college applications and FAFSA, highlighting how TRIO advisors reached out through platforms like Facebook to provide continuous support.

Quinton perceived that TRIO maintained its supportive role, ensuring regular communication about FAFSA and college choices while helping students with various aspects of the college transition, such as housing and school choice adjustments. Overall, participants shared how the TRIO program persisted in offering support, guidance, and resources during the pandemic, adapting to virtual formats to ensure that students were still equipped with the tools they needed for successful transitions to higher education.

Navigating the Pandemic and Personal Challenges

The influence of TRIO programs helped each participant to persist to college; however, they arrived on campus faced with a diverse range of experiences, influenced by factors like the pandemic, personal preferences, and unique challenges. Many participants mentioned the significant impact of the COVID-19 pandemic on their first year of college. They experienced disruptions, remote learning, and limitations on in-person interactions due to safety measures. Chris, who would go on to drop out of college after one semester, shared the following:

> In my first year in college. It was not good. It was not good. I believe it is due to COVID-19. I could not get the whole experience of being in college. I became depressed and did not even know that was a thing. However, to go through it, you know, that was hard. I think the fact that I went to school and stayed in my dormitory 24-7 played a part in it because at Georgia Southern, when I did get there, the classes were pretty much virtual. You did have the option to go into a room, but it was still the professor on the screen. So, it was still pretty much virtual. So, yeah, I did, you know, stay on my own by choice, attending my

> classes there. I did not meet any new friends whatsoever. I did not join any organizations. Moreover, all that was due to the pandemic and COVID.

Chris described his experiencing isolation, depression, and lack of engagement due to virtual classes and limited opportunities for in-person interactions. Mike also dealt with issues related to isolation and lack of engagement due to virtual classes, which led him to withdraw from classes. He found the online format to be manageable; however, the lack of hands-on experiences and interactions with peers affected his overall college experience.

> It was not that bad because the first couple of teachers were all right. And like it was, it was basically online. So, I was really in my dorm just doing my work on a computer the first couple of days of the class, I think. Yeah, I think we did. First week in class. One week. In the actual shop. But we could not even really use the shop if other students were in there because of the pandemic. So, if other people were in the shop, we would have to go back to our dorms and get back on the computer, or we would have to wait for them to leave the shop and go in.

For a few of the participants, dropping out of college became the most obvious choice after their first year in college. April was one of those students that made the difficult decision to drop out of school. April shared, “It was very hard mentally. I did not do well in my classes. I had just decided to come home, and that dropped out.” Mike, who was attempting to balance the military and attending college virtually, also ultimately had to withdraw from classes due to challenges in college.

> It was difficult. This post-COVID, things are still on high alert, and everything with the campuses shut down and switching from in-person to virtual. At the time

> when the fall semester started, I was still in training with the military. I had the laptop that I borrowed from my friend with me, and that was the only laptop I could use then. So, I had a few classes, and I was attending Albany State at the time. They were all online, and it was difficult to try to do some assignments and transition things in because, as I said, the Chromebook sometimes would have software issues with trying to do certain assignments or filling stuff out. So, a lot of the time, I would miss assignment deadlines, and the paperwork would not be filled out correctly or something. There was always something going on with that laptop. I eventually ended up having to withdraw from my classes in the fall semester just because I could not get a hold of a better laptop. I could use my phone, but it was not very efficient as far as how many assignments I was doing throughout the week to include my training at the time. So, from that first semester in college, with post deadlines and guidelines and not having the best computer, it was difficult.

Although strongly considered, Javion debated dropping out of college as well but ultimately decided not to. In his reflection on his first year in college, he shared:

> My first year in college was complex. I wanted to drop out. I wanted to stop going for most of my first year of college. I sat up in a dorm room and worked on a computer because we did not do any in-person classes, so I would usually just go back home and then just do my work online, or I would just sit in my dorm all day and just do my work there. It was not a college experience. It was not really any going out or seeing people on the college experience or meeting new people. It was just a lot of us cooped up in a room.

Various emotions marked Brandy's personal challenge during her first year in college as she adjusted to being independent without parental guidance. As a freshman, she faced the challenges of navigating college life on her own, which included managing her responsibilities and adapting to the new environment.

> My first year of college was one for the books. I must say that. It was a whole bunch of emotions at once. There were good days and bad days. Cause only because I was just a freshman and I was just getting there. So, I had to learn everything, and I had to figure my way out without the help of my parents. So, it was kind of like just me on my own, really.

Several participants shared their challenging experiences during their first year in college, primarily influenced by the COVID-19 pandemic. Chris described feeling isolated and depressed due to virtual classes and a lack of in-person interactions, leading to a disengaged college experience. Mike faced issues with online classes and a lack of hands-on experiences, which prompted him to withdraw from courses. April made the difficult decision to drop out due to academic struggles and mental health challenges. Javion also contemplated dropping out but ultimately persevered, though he found the college experience devoid of in-person interactions. Brandy navigated her freshman year's emotional ups and downs, marked by newfound independence and the challenges of adapting to college life on her own. These participants' experiences highlight the significant impact of the pandemic on their college journeys, including isolation, academic challenges, and mental health struggles.

Overcoming Virtual Learning Challenges: Navigating College Amid the Digital Divide

Because of the digital divide, the pandemic exacerbated or created substantial barriers to college access, with many students reporting a lack of resources, exceptionally reliable computer usage, or the Internet (Cooper et al., 2020; Reed et al., 2022). Several participants found virtual learning challenging. They struggled with adjusting to online classes, communicating with instructors to get timely assistance, and navigating digital platforms for assignments. Mike's entire first year in college was conducted virtually, and he faced numerous challenges due to the limited functionality of his laptop. He highlighted his difficulties by sharing:

> So, even conversing with my professors, trying to explain the situation like, hey, I cannot get a hold of a better computer to do my assignments. Is there any other way I can do an alternative assignment or something? Moreover, for the most part, they would tell me no because those were not necessarily severe accommodations at the time. They mostly only accommodated people with physical ailments that would not allow them to do stuff. So, it was just hard trying to do all my classes online. I honestly did not have time enough to do them all. I am trying to go from this virtual class and turn in all sorts of assignments because they give you more assignments if you are fully online versus hybrid or in-person. So, I had 4 to 5 assignments for one class here. Three for assignments for another class. Moreover, this was weekly. Trying to keep up with all that weekly with the type of laptop I had that was barely working for me at the time was almost impossible to maintain.

Javion's entire first year was conducted virtually due to the pandemic. He noted the difficulties in connecting with professors and getting timely assistance, particularly when feeling overlooked among the multitude of college students. He emphasized the importance of building connections with professors for better support.

> Difficult because you have to go back again to college professors. I feel like college professors are overwhelmed because they have a lot of college students. So, if you do not really know your college professors or they do not know you, sometimes you will get overlooked and not help as much. So, if there was stuff I did not know or stuff I needed to help with, most of my college professors did a decent job of getting all the information online in a good time, but if it was something that I needed help with or an assignment that I could not turn into. I had to try either to email them or call them and hope they got back and get back to me in time before the assignment was due. Also, multiple times were like; I would have to wait till after the assignment was due to get back to my professor because they were out doing something else that they were not able to get back to.

Brandy experienced a hybrid approach during her freshman year, with classes being a mix of online and in-person sessions. She found the transition challenging, especially given her preference for in-person learning. The format changes made by Tuskegee University affected her ability to interact with instructors during class, leading to the need for email communication after class hours.

> My first year was a challenge because when I was in high school, I was used to waking up early in the morning to go to a physical place. I am not the type that can learn through video calls. Like, I must see it in person. But as far as, like,

> having to do it online, it was kind of challenging for me because it was like even when you do not understand, the format that they were using at first before they changed it at Tuskegee, the teachers was not able to see when you had like questions or when you had your hand raise. So, it was kind of challenging. So, you had to email them after the class hours and just try to get help that way.

Mike faced substantial challenges during his entirely virtual first year of college, primarily due to the limited functionality of his laptop. He struggled to communicate with professors and request accommodations, ultimately finding it nearly impossible to manage the heavy workload associated with online classes. Javion's experience was also marked by virtual learning, leading to difficulties in connecting with overwhelmed professors and receiving timely assistance. He emphasized the importance of building relationships with professors to navigate these challenges effectively. In contrast, Brandy encountered a hybrid approach during her freshman year, with a mix of online and in-person classes. This transition posed challenges for her, as she preferred in-person learning and faced obstacles in interacting with instructors during class. She relied on email communication after class hours to seek help, highlighting the adjustment required when adapting to different learning formats. These experiences underscore the unique difficulties faced by students during the pandemic, whether entirely virtual, hybrid, or in-person, and the varied ways in which they navigated these challenges.

This subtheme highlighted how aspects of the digital divide manifested during the COVID-19 pandemic, affecting college access and student experiences. The digital divide became evident as several students faced challenges during virtual learning due to the limited functionality of their laptops and access to reliable computers. Mike's laptop

issues made it difficult for him to manage online classes and complete assignments. This limitation hindered his ability to communicate with professors and request accommodations, highlighting the critical role of technology in online education. Additionally, aspects of the digital divide can be found in the preference that some participants had for in-person learning. Brandy's experience underscores the fact that not all students are comfortable with online learning. She preferred in-person classes, and the transition to online or hybrid formats was challenging for her. The inability to have real-time interactions with instructors and classmates affected her learning experience. This aspect of the digital divide highlights that not all students thrive in virtual learning environments, and the lack of in-person options can be a barrier to their education.

Chapter Summary

Chapter 4 of the study presented findings related to the experiences of twelve LSECI Black participants who are attending or have attended college. These participants pursued various majors and engaged in co-curricular activities during high school. The COVID-19 pandemic significantly impacted their senior-year experiences, leading to challenges in transitioning to college by participants with limited access to technology. The chapter was organized into three main subsections: (a) Unforeseen Ramifications Arising from Initiating the College Planning Journey in the Final Year of High School, (b) The Fulfillment of the FAFSA as a Pivotal Determinant in the College Enrollment Journey, and (c) Unwavering Continuation of College Enrollment Amidst the COVID-19 Pandemic, Coupled with Challenges Exacerbated by the Crisis. In summary, the chapter presented insights into the experiences of Black students navigating the college planning

process, dealing with the impact of the COVID-19 pandemic on their senior year and first year of college, and highlighting the role of technology in shaping their journeys.

CHAPTER 5

DISCUSSION

LSECI Black students with limited access to technology faced difficulty due to technology maintenance issues such as not having a laptop or relying on a cellphone to complete college-going tasks. Nevertheless, they persisted in achieving college attainment, only to be met with new challenges because of the COVID-19 pandemic. This qualitative research aimed to identify the challenges LSECI Black students with limited access to technology faced while navigating the college-going process during the onset of the COVID-19 pandemic. Using Perna's (2006) college access and choice model and Gonzales' (2014a) technology maintenance construct as a theoretical foundation, the study sought insight into why access to technology remains stratified by socioeconomic status and race. The following section addresses findings related to the research question.

Discussion of Findings

All the participants that I spoke with generally knew the steps required to enroll in college; however, despite having the college knowledge, due to their enrollment and involvement in a college preparation program, did not activate said knowledge before the then-novel COVID-19 pandemic, exposing challenges in their pursuit for college access related to access to technology. A significant challenge faced by participants in this study was the completion of the FAFSA, which is critical for LSECI Black students to access resources to enroll in college (Bell et al., 2009; Hoxby & Turner, 2015; Berry, 2021). Thus, the pandemic prevented individuals from capital-enhancing activities like completing financial aid during college applications (Robinson & Schulz, 2013). Venegas

(2006) and Bell et al. (2009) reminded us that more than having access to technology alone is required to undergo capital-enhancing activities; one must also be digitally literate. Before the pandemic, students could have received assistance from school agents. However, that assistance was no longer accessible during the COVID-19 pandemic, thus exacerbating the digital divide. For many participants who matriculated to college, not having a solid technology identity is a product of an unequal high school education and disparities in home resources (Goode, 2010b) that materialized during their college enrollment, where they struggled. Nevertheless, even though the participants could not have their desired access because of technology maintenance issues, they persevered.

Implications

This study may provide valuable insights for K-12 and higher education leaders and policymakers looking to learn from the COVID-19 pandemic's impact on LSECI Black students. Three significant implications were identified through this research study: (a) Proactive and Adaptable Approaches to College Preparation, (b) the Multifaceted Nature of FAFSA's Role in College Enrollment, and (c) the Resilience of Students to Achieve.

Proactive and Adaptable Approaches to College Preparation

First, this study reinforces the need for proactive and adaptable approaches to college preparation, recognizing the influence of technology and the impact of unexpected disruptions like the COVID-19 pandemic on students' journeys toward higher education. Educational stakeholders should collaborate to provide comprehensive support and resources to ensure that all students can pursue their college aspirations.

Late College Planning and Pandemic Impact. The delayed initiation of the college planning process until the senior year of high school highlights the need for early and comprehensive college readiness programs. Education leaders and policymakers should consider implementing college preparation activities and resources starting in the freshman and sophomore years to ensure that students have ample time to explore college options, secure financial aid, and make informed decisions.

Adaptability and Resilience. The pandemic's disruptive impact on traditional high school experiences underscores the importance of adaptability and resilience among students. Institutions should provide students with support systems and resources to help them navigate unexpected challenges, such as transitioning to virtual learning.

Technology Dependence. The participants' reliance on technology for various aspects of the college planning process, including research, applications, and communication, underscores the critical role of digital literacy and access to technology in college preparation. Education leaders and policymakers should ensure equitable access to technology resources, especially for students from underserved communities.

Mobile Device Usage. The use of mobile devices, primarily smartphones, for college planning activities, highlights the importance of mobile-friendly college application platforms and resources. Institutions should optimize their digital offerings to accommodate users on mobile devices, recognizing that many students rely on them for college-related tasks.

Communication Challenges. Participants' experiences with communication challenges related to email and mobile devices emphasize the need for clear and accessible communication channels between students and educational institutions.

Schools and colleges should provide guidance on effective email communication and consider alternative communication methods that cater to students' preferences and technological constraints.

Research and Information Gathering. The participants' use of online resources, such as YouTube and search engines, for college research underscores the significance of providing credible and informative online materials. Colleges and universities should enhance their online presence and provide easily accessible information to help prospective students make informed decisions.

Financial Aid and Application Processes. The challenges associated with financial aid application processes, such as FAFSA, call for simplified and user-friendly application systems. Policymakers and educational institutions should work to streamline financial aid processes to reduce barriers for students, especially those from low-income backgrounds.

Multifaceted Nature of FAFSA's Role in College Enrollment

Next, it emphasizes the multifaceted nature of the FAFSA's role in the college enrollment journey. To facilitate access to higher education, institutions, policymakers, and educators should address challenges related to financial literacy, technology access, parental involvement, and financial aid awareness, ultimately making the college enrollment process more equitable and accessible to all students.

Financial Literacy Education. The participants' experiences highlight the need for enhanced financial literacy education both for students and parents. Schools and colleges should offer resources and workshops that educate students and families on the

importance of accurate financial information and strategies for navigating complex financial aid applications.

Parental Involvement. The challenges related to gathering financial information, particularly from parents, underscore the role of parents or guardians in the college enrollment journey. Institutions and educators should consider ways to facilitate parental involvement and provide support for parents who may be unfamiliar with the FAFSA process.

Importance of Financial Aid. The participants' strong motivation to complete the FAFSA highlights the critical role of financial aid in making higher education accessible. Policymakers and educational institutions should prioritize financial aid programs and ensure they are easily accessible to LSECI Black students.

Barriers Posed by the Digital Divide. The digital divide presents significant challenges for students who rely on mobile devices or have limited access to technology. Efforts should be made to bridge this divide by providing students with equitable access to laptops or desktop computers and ensuring that online platforms for financial aid applications are mobile-friendly.

Effective Use of Technology. Educational institutions should invest in user-friendly online platforms for financial aid applications like the FAFSA, recognizing that technology plays a central role in the college planning process. Ensuring that students can easily complete these applications online is crucial for accessibility.

Financial Aid Awareness. Students and families should be informed of the availability of financial aid and the importance of early FAFSA completion. Schools,

colleges, and college access organizations can collaborate to promote financial aid awareness campaigns and provide guidance on the financial aid process.

Resilience of Students to Achieve

Lastly, it underscores the resilience of students and the importance of educational programs like TRIO in facilitating college enrollment. The pandemic's impact on students' emotional well-being and academic progress, as well as the digital disparities it revealed, highlights the need for ongoing support and resources to ensure that all students have equitable access to higher education.

Resilience and Determination. The experiences of participants highlight their resilience and determination to pursue higher education even in the face of unprecedented challenges posed by the COVID-19 pandemic. This determination underscores the importance of providing support and resources to help students overcome obstacles.

Role of TRIO Programs. TRIO programs have played a pivotal role in preparing students for college and expanding their horizons beyond high school. These programs offer exposure to college-related activities and opportunities, equipping students with essential college knowledge. Policymakers should continue to support and fund such programs to ensure college readiness.

Adapting to Virtual Formats. The pandemic forced TRIO programs and educational institutions to adapt to virtual formats. This adaptability allowed them to continue providing support, particularly in critical areas like FAFSA completion and college decision-making. This flexibility serves as a model for how educational programs can pivot during crises.

Emotional and Academic Impact of the Pandemic. Participants who started college during the pandemic faced significant disruptions, isolation, and personal challenges. The emotional and academic impact of the pandemic on these students underscores the need for mental health support services and strategies to address the academic setbacks caused by the crisis.

Enhanced Communication with Professors. Participants highlighted the importance of building connections with professors for better support, especially in the virtual learning environment. Institutions should encourage and facilitate effective communication channels between students and professors to address academic challenges.

Support for First-Year Students: Institutions should pay special attention to supporting first-year college students, particularly those who started during the pandemic. Providing orientation programs, mentorship, and resources to help them acclimate to the college environment can mitigate challenges associated with remote learning.

Recommendations for Policy

The results of this study would suggest that without active policy changes, LSECI Black students will be less likely to complete college, significantly impacting their capital enhancements (Robinson & Schulz, 2013) and potentially harming their educational and labor force prospects for years to come. After analyzing the data, I have identified three recommendations for education leaders and policymakers who are reconsidering the level of support needed for students in Lower-resourced schools.

First and foremost, it is imperative that state and federal policymakers reevaluate the allocation of government funding for education. There is an urgent need for increased

financial support to address the persistent digital divide that has become even more glaring in recent times. To bridge this gap effectively, it is crucial to expand initiatives aimed at providing one-to-one technology access to students nationwide. The COVID-19 pandemic prompted some school districts to take unprecedented measures, such as the transformation of traditional learning environments into one-to-one laptop schools, where every student was equipped with a personal laptop for instructional purposes (Gonzales & Jackson, 2020). This proactive approach must serve as a model for the broader educational landscape. However, instead of relying on one-time infusions of resources, such as those provided by the Coronavirus Aid, Relief, and Economic Security Act (CARES) and the American Rescue Plan (ARP), our education systems require sustained, long-term government funding commitments. These initiatives should be aimed at ensuring digital equity and widespread access to such learning institutions. By shifting the focus from short-term relief measures to sustained investment, policymakers can lay the foundation for a more equitable and technologically inclusive educational system that serves all students, regardless of their socio-economic backgrounds. This strategic approach is essential to prepare our students for a future where digital skills and technological literacy are paramount, ensuring that they have the tools and resources necessary to thrive in an increasingly interconnected and digitally driven world.

Secondly, federal policymakers should positively impact access to programs to reduce college knowledge barriers through federal TRIO programs. The participants in this study had fond memories of TRIO programs that aided in their development of college knowledge, primarily because of college encouragement activities, such as attending college fairs and tours. The dissemination of accurate college information and

widespread college-encouragement activities by college preparation programs in a student's high school career helps propel them toward college attainment (Belasco, 2013; Bell et al., 2009). Additionally, this recommendation could provide students with more college information and guidance during their first- and second years of high school, thus increasing their chances of enrolling in a postsecondary institution. With the further alignment of state and federal policies with independent college access programs, LSECI Black students could be positively impacted in their college pursuits.

Finally, we know that financial aid is essential in enrollment and persistence to graduation, and completing a financial aid application is a starting point in the aid process (Venegas, 2006). However, the complexity of the FAFSA deprives students of essential resources that can help them obtain college access. Therefore, my final recommendation would be to simplify the FAFSA form further and promote early FAFSA completion. Many participants in the study talked about how their parents were busy, mainly due to working long hours. They could not provide them with the information needed to complete the FAFSA within their desired timeframe. Findings in this study also indicate that students struggled through the FAFSA process after waiting until the pandemic to complete it while now faced with limited access to technology. Simplifying the FAFSA form, especially transferring tax information without parents' guidance, could help ease completion efforts.

Limitations

This study has several limitations. As with any qualitative research endeavor, limitations derive from the conceptual framework and the study's design (Marshall et al., 2016). First, this study was designed to facilitate the collection of qualitative data on the

college-going process of LSECI Black students during the onset of the COVID-19 pandemic. My findings are limited to one county in Georgia that learned more about the COVID-19 phenomenon, but nonetheless, I recognize that students' experiences could differ geographically. This study purposefully focused on students in one Lower-SES school district, and what we found may be different from students in other districts; therefore, I cannot directly comment on how experiences might be similar or different for populations in other parts of the country. Recognizing a bias is essential to acknowledge and reflect on its possible impact on a study. A disadvantage to the Lower-SES school district selected as my site was my difficulty in separating myself from the research. Being an "insider," given my personal connections to different aspects of my research, including the site, had several possible limitations. First, I share several characteristics, such as gender, ethnicity, and culture, with my participants. Nevertheless, I had to maintain empathic neutrality as I conducted this study (Patton, 2015). Additionally, I have spent the last seven years of my professional life devoted to addressing barriers of this population related to the college-going process, which makes my understanding of the issue, ability to not disrupt the flow of social interaction, and ability to extract true data from participants, as better suited to conduct this research. Smyth and Holian (2008) suggested that this type of connection would put me more at risk of revealing too much sensitive information in my research. However, I took steps to minimize and limit such through member checking and peer debriefing.

Secondly, this study involved a small sample of LSECI Black students. Only twelve individuals participated in this study. The individuals involved were all currently

enrolled in college or dropped out since the onset of the COVID-19 pandemic. The results may be different if students who did not attend college were included.

Moreover, the time separation between the time frame of the studied phenomenon and now could also be a limitation. The study would have significantly benefited from speaking with students as the onset of the COVID-19 pandemic was ending. Listening to the lived experiences of my participants while they were fresh in their minds could have led to more expansive responses.

Next, the present study was carried out from a holistic approach to the phenomenon of socio-digital inequalities in college access concerning the COVID-19 pandemic to consider all the possible concepts and aspects that may influence said phenomenon. With that said, the study's approach in these terms was very ambitious due to its complexity and breadth. For example, each of the questions pondered in the study can pose a study focus on its own, which, if analyzed separately, may be studied more thoroughly.

Finally, as with any qualitative study, this research is subject to biases related to interviewees' desire to provide answers that align with the interviewer's expectations and potential biases in interpreting the data. Therefore, it is valuable to cross-reference these findings with similar quantitative studies on the same topic and replicate some of these findings. It is essential to acknowledge these limitations; however, they do not diminish the significance of this exploration into the college-going process of LSECI Black students.

Recommendations for Future Research

As discussed, the study focused on semi-structured interviews to better understand the challenges Black students faced while in high school, which impacted their transition to and completion of college. However, one recommendation for future research is to interview counselors at the participants' high schools for their experience with providing college advisement during the onset of the pandemic. This would allow leaders to determine if the perspectives of students and counselors align and whether there are opportunities to build more intentional connections to support students.

Given the research that suggests that student-counselor interaction exerts a significant amount of influence on college attendance of Lower-SES students (Belasco, 2013), a recommendation for future research is to investigate the role of professional school counselors on the college-going aspirations of LSECI Black students. Research also finds a messy and complicated path to college for each student's unique experiences. Some students may choose not to meet with a counselor to discuss college and still (Holzman et al., 2020), while others may meet with a counselor and decide not to pursue postsecondary education. As such, recommendations for future research include quantitatively and/or qualitatively exploring how professional school counselors encourage college enrollment and choice and assessing the prioritization of college-going advisement in their daily duties.

Conclusion

I would conclude that numerous questions remain unanswered, thus opening new research lines for future studies to expand and improve the data obtained in the present study, which was focused on the socio-digital inequalities in college access regarding the

COVID-19 global pandemic. Through the lens of technology maintenance, this study utilized Perna's (2006) college choice model and Gonzales' (2014a) technology maintenance construct to explore how LSECI Black students underwent the college-going process. Despite participants' best efforts, the inability to consistently maintain appropriate access to technology led to cycles of dependable instability. LSECI Black students often lack the support needed to enroll and succeed in college (Belasco, 2013). These students live in homes, reside in communities, and attend Lower-resourced schools, where college-going is not the norm and where adults, particularly their parents, may not have the college knowledge to share the prerequisites or the benefits of post-secondary education. Yet, participants in this study persevered to reach college attainment. A shift in thinking is required to prepare students for college in a digitally equitable way as we work to reduce the digital divide over the next few decades, aided by these new theoretical perspectives.

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APPENDIX A

QUESTIONNAIRE

Please complete the following questionnaire based only on your situation around the onset of the COVID-19 global pandemic, which would be March - July 2020.

1. Which technology did you own between March and July 2020?
    1. Laptop
    2. Personal Computer (desktop)
    3. Tablet device
    4. Cellphone (with smartphone capabilities)
    5. Cellphone (no smartphone capabilities)
    6. Printer
    7. Other tech devices (please specify) _____
2. Did you have access to high-speed internet?
    1. Yes
    2. No
    3. Not sure
3. Did you pay for your high-speed, wireless internet plan?
    1. Yes, I pay for all the monthly fees.
    2. Yes, I pay for part of the monthly fees, and someone else pays for the rest.
    3. No, I do not pay for any of my monthly fees, someone else does.
    4. No, I did not have high-speed, wireless internet.
    5. Other (please specify): _____
4. How did you come to own your laptop?
    1. I purchased it myself.
    2. Someone else purchased it for me.
    3. Someone else gave it to me, used.
    4. My school issued/loaned it to me.
5. About how often did your laptop become inaccessible or unstable for any reason?
    1. Once a week or more
    2. Once a month
    3. Once a year
    4. This has never happened to me.
6. How well did your laptop work?
    1. (Likert-scale response options: 1- Does Not Work to 7 - Works Perfectly)

7. How satisfied are you with the quality of your laptop?
    1. (Likert-scale response options: 1- Very Dissatisfied to 7 - Very Satisfied)
8. How efficient would you say you are with technology?
    1. (Likert-scale response options: 1- Very Efficient to 7 - Not Efficient at all)
9. If your laptop or desktop computer was lost or damaged beyond repair, how long do you think it would take you to replace it?
    1. I couldn't afford to replace it at any point in the foreseeable future
    2. 1 - 6 months
    3. 2 - 4 weeks
    4. About a week
    5. About 1 day
10. Have you ever had to turn to a family member or friend to borrow a piece of technology (e.g., a laptop) because yours was broken or lost?
    1. Yes
    2. No
    3. Not sure
11. If needed, would your family be able to give/loan money to fix or replace a piece of technology you need for school (e.g., a laptop)?
    1. Yes
    2. No
    3. Not sure
9. When you were without your laptop what did you do:
    1. I shared a laptop of a family member (yes/no)
    2. I used my cellphone instead (yes/no)
    3. I visited a community access point to use a computer (e.g., library or coffee shop) (yes/no)
    4. I waited until I could get it fixed (yes/no)
10. During the onset of the pandemic (March-July 2020), how much time did you spend using a laptop or desktop computer for schoolwork (e.g., completing assignments, taking notes, emailing teachers, counselors, or other students about class, etc.)?
    1. Less than one hour a day
    2. 1-2 hours a day
    3. 3-4 hours a day
    4. 5-6 hours a day
    5. 7-8 hours a day
    6. 8+ hours a day
11. During the onset of the pandemic (March-July 2020), how much time did you spend using a laptop or desktop computer for college preparation (e.g.,

completing the FAFSA, applying for scholarships, completing college applications, etc.)?

1. Less than one hour a day
2. 1-2 hours a day
3. 3-4 hours a day
4. 5-6 hours a day
5. 7-8 hours a day
6. 8+ hours a day

12. Have problems with technology (e.g., broken, inaccessible, malfunctioning software or hardware) ever affected your ability to apply or enroll in college (e.g., caused you not to complete your FAFSA or other necessary college paperwork)?
    1. Yes
    2. No

APPENDIX B

INTERVIEWING PROTOCOL

Establishing Consent:
Thank you for agreeing to participate in this interview. I want to begin by checking to see if you read over the consent form and if you have any questions before we start. Please remember that you may choose not to participate at any time or refrain from responding to any of the questions I ask today. You can contact the PI or coPI following the interview with any questions or concerns. Contact information is listed on your consent form. I also want to be sure you are still okay with me recording our interview, so I have a record of what was said to refer to when analyzing data.

Topic: Introduction & Background

- Tell me a little about yourself. (Probes: Where are you from? What was it like growing up in [insert city]?)
- Describe your family to me. (Probes: What do your parents/guardians do for a living? Did either attend/graduate college? Where? Do you have siblings? Did any of them go to college? Where? Where are they now?)

Topic: About High School Experience

- What was high school like for you? (Probes: How was your senior year? What do you remember the most about that year? How was your transition to virtual learning?)
- How would you describe yourself as a student in high school?
- How would you describe your relationship with your high school counselor?
    - What impact would you say they played on your postsecondary plans?
    - How much time do you think you spent with your counselor?
- How would you describe your time in a TRIO program? (Probe: How would you describe your time in a TROP program during the pandemic?)

Topic: College-Going Process

- When did you first start thinking about college? (Probes: What prompted you to think about college at that age?
- Describe to me the first time you were conversing with someone about the possibility of college. (Probe: What grade were you in? who was that person?)
- What was the college planning process like for you? (Probes: When did you start your search? How did you go about searching? If online, ask for specifics – personal computer or in library, for example)
- Was there someone who helped you through the process? (Probing: teachers? Counselors? Family? Friends?)
    - With scholarships? SATs?

- How might you describe the FAFSA process? (Probes: Did anyone assist you with it? What were the motivating factors for completing the FAFSA? Did you experience any challenges completing the FAFSA?
- How might you describe the college application process for admission? (Probes: Did anyone assist you with it? What were the motivating factors for completing college application(s)?
- What role did your parents/guardians play in the college planning process? (Probe: What information/advice did they provide you?
- What role did technology play in the college planning process? (Probe: And what type of technology did you have access to? How was the usage of that technology as you underwent the college planning process?)

Topic: College Experience (for those that attended)

- How was your first year in college? (Probes: First Semester? Second Semester?
- Were your classes virtual or in-person? (Probes: How was that experience?)
- What role did technology play during your college enrollment?

Conclusion

- Is there anything else you would like to add that we did not have a chance to discuss during the interview?
- I would like to reassure you that confidentiality will be maintained through all stages of the project. Thank you again for participating. Do you have any questions for me at this time? (If you happen to think or have any questions after you leave here today, please do not hesitate to call or email my information is listed on the consent form.)
- Will you mind if I follow up with you if I have additional questions?

APPENDIX C

QUESTIONNAIRE DATA

Participant	**1. Technology Owned between March-July 2020**	**2. Did you have access to high-speed internet?**	**3. Did you pay for your high-speed internet?**	**4. How did you come to own your laptop?**	**5. About how often did your laptop become inaccessible or unable for any reason?**
Laquita	Laptop	Yes	No someone else does	Someone else gave it to me, used	This never happened to me
April	Personal computer (desktop)	Yes	Free wifi service in county	N/A	This never happened to me
Brandy	Cell phone (w/smartphone capabilities)	No	No someone else does	TRIO loaned it	Once a week or more
Chris	Laptop, cell phone (w/smartphone capabilities), printer	Yes	No, someone else does	Someone else gave it to me, used	This never happened to me
Matt	Laptop, cell phone (w/smartphone capabilities), printer	Yes	No, someone else does	Someone else purchased it for me	Once a week or more
Javion	Laptop, cell phone (w/smartphone capabilities	Yes	No, someone else does	Someoene else gave it to me, used	Once a week or more
Jason	Cell phone (w/smartphone capabilities)	Yes	No, someone else	Someone else purchased it for me	This never happened to me
Darrell	Cell phone (w/smartphone capabilities)	Yes	No, someone else	School issued/loaned	This never happened to me

Quinton	N/A	No	No high-speed internet	N/A	N/A
Mike	Cell phone (w/smartphone capabilities)	No	No high-speed internet	School issued/loaned	Once a week or more
Kevin	Laptop; cell phone (w/ smartphone capabilities)	Yes	No, someone else	Someone else gave it to me used	This has never happed to me
Preston	Personal computer (desktop); cell phone (w/ smartphone capabilities)	No	No, someone else	N/A	N/A

Participant	**6. How well did your laptop work?**	**7. How satisfied are you with the quality of your laptop?**	**8. How efficient would you say you are with technology?**	**9. If your laptop or desktop computer was lost or damaged beyond repair, how long do you think it would take you to replace it?**	**10. Have you ever had to turn to a family member or friend to borrow a piece of technology because yours was broken or lost?**
Laquita	5	7	3	1-6 months	No
April	N/A	N/A	N/A	2-4 weeks	No
Brandy	4	5	1	2-4 weeks	No
Chris	3	4	1	1-6 months	No
Matt	5	6	6	1-6 months	No
Javion	6	5	7	1-6 months	No
Jason	7	7	1	1-6 months	No
Darrell	6	6	3	1-6 months	No
Quinton	N/A	N/A	4	I couldn't afford to replace it at any point in the foreseeable future	Yes

Mike	4	3	2	I couldn't afford to replace it at any point in the foreseeable future	Yes
Kevin	7	7	2	2-4 weeks	Yes
Preston	7	6	4	1-6 months	Yes

Participant	**11. If needed, would your family be able to give/loan money to fix or replace a piece of technology you need for school?**	**12. When you were without your laptop, what did you do?**	**13. During the onset of the pandemic, how much time did you spend using a laptop or desktop computer for schoolwork?**	**14. During the onset of the pandemic, how much time did you spend using a laptop or desktop computer for college preparation?**	**15. Have problems with technology ever affected your ability to apply or enroll in college?**
Laquita	No	Used cellphone instead	3-4 hours a day	1-2 hours a day	No
April	No	N/A	1-2 hours a day	1-2 hours a day	No
Brandy	Yes	Used my cellphone instead; waited until I could get it fixed	Less than 1 hour a day	8+ hours a day	Yes
Chris	Yes	Used cellphone; shared a laptop with a family member	Less than 1 hour a day	Less than 1 hour a day	No
Matt	Yes	Used cellphone	3-4 hours a day	1-2 hours a day	Yes
Javion	No	Shared a laptop with	1-2 hours a day	Less than 1 hour a day	No

		a family member; used my cellphone instead			
Jason	Yes	Used cellphone; shared a laptop with a family member	7-8 hours a day	3-4 hours a day	No
Darrell	No	Used cellphone	5-6 hours a day	1-2 hours a day	Yes
Quinton	No	Used my cellphone; visited a community access point	5-6 hours a day	1-2 hours a day	Yes
Mike	Yes	Shared a laptop of a family member; used cellphone instead; visited a community access point	1-2 hours a day	1-2 hours a day	Yes
Kevin	Yes	Shared a laptop of a family member	1-2 hours a day	3-4 hours a day	No
Preston	Not sure	Shared a laptop of a family member	5-6 hours a day	Less than 1 hour a day	Yes