# Book Insecurity: More Than Lack of Access

JEFF WHITTINGHAM University of Central Arkansas

DONNA WAKE University of Central Arkansas

ERIN SHAW
University of Central Arkansas

RACHELLE MILLER University of Central Arkansas

## Abstract

This study explores the phenomenon of book insecurity, a condition extending beyond lack of access to books, to the emotional and mental state of students' attitudes toward obtaining and owning books. Grounded in Maslow's hierarchy of needs, the study posits that book scarcity intersects with multiple levels of human needs. The study introduces and defines the concept of "book insecurity" as a state where individuals lack access to books and experience anxiety related to book acquisition, retention, or loss. The findings underscore the need for multifaceted interventions to improve book access and foster a culture of reading among low-income students.

Access to engaging, relevant books supports reading enjoyment and reading achievement (Franzen & Allington, 2008). Benefits of reading books include stronger vocabulary and higher academic engagement (Evans et al., 2010). Yet the intersection of poverty and access to supported reading practices may present a confounding variable amplifying the effects of poverty on student academic success and engagement. The negative effects of poverty on virtually every aspect of education have been consistently reported across decades (Ferguson et al., 2007; Jensen, 2009). A significant concern is the limited access to books at home among low-income families, which creates fewer opportunities for supported reading practice and vocabulary development during critical early literacy periods (Thulla et al., 2022). While interventions targeting both instructional quality and access to engaging reading materials show promise in mitigating these impacts, research suggests that sustainable improvements require comprehensive approaches addressing multiple poverty-related barriers, including family support, school attendance, and access to educational resources (Kranjac & Kranjac, 2021). Recent research demonstrates the complex relationship between socioeconomic status and literacy development, with studies showing that children from low-income households consistently score lower on reading assessments and show slower growth rates in reading skills compared to their more affluent peers (Lervåg et al., 2019).

Students in poverty have less access to books and materials than their more financially stable peers (Zucker et al., 2022). In addition to having fewer books in their home contexts, students in poverty are more likely to attend underfunded schools or live in under-resourced communities further limiting their access to relevant reading materials (Krashen et al., 2012). While the United States frequently ranks in the middle of international academic achievement comparisons (Guglielmi & Brekke, 2017), many Americans, including policymakers, often overlook the fundamental issue of widespread child poverty. This poverty deprives numerous children of essential resources such as healthcare, nutritious food, and educational materials (McKenzie, 2019; Miller & Sharp, 2018). While this study examines book insecurity in one state in the U.S., we acknowledge that this issue extends far beyond U.S. borders, as poverty and limited access to educational resources are global challenges. In many developing countries, the situation is even more dire, with millions of children lacking access to basic education and reading materials, perpetuating a cycle of poverty and limited literacy worldwide (UNESCO, 2021).

Complicating the effects of poverty and access to books, students from low socioeconomic contexts may have higher fear and emotional stress around the books they can obtain (Evans et al., 2010). The juxtaposition of book scarcity with complicating negative emotions renders a narrative where those students with the highest need experience the most uncertainty and emotional stress around book access. In this way, a lack of access to books means a student is "book insecure" or experiencing "book insecurity" (Manuscript Authors, 2018) in a psychological parallel to the well-established phenomenon of food insecurity. Both food insecurity and book insecurity result in emotional anxiety and a limiting of opportunities as a result of students' socioeconomic status.

This study explored how middle school students from low-income households, experience and emotionally respond to book insecurity. The goal was to understand how book insecurity is experienced by students from disadvantaged backgrounds. Participants shared their insights on the challenges of limited book access and its emotional impact. The findings offer guidance for teachers and librarians on addressing and mitigating book insecurity.

## Theoretical Framework

Maslow's hierarchy of needs provides the foundational theoretical framework for this study (Maslow, 1943). The model describes five levels of needs: physiological and safety (basic), belongingness and esteem (psychological), and self-actualization (self-fulfillment). The lower four levels are deficiency needs, while the top level focuses on personal growth. Building upon Maslow's established theory, this study proposes a novel re-framing using the hierarchy to posit that book scarcity intersects with the hierarchy at multiple levels. We argue that this use of Maslow's hierarchy to conceptualize the effects of book scarcity offers a valuable lens through which to examine the impact of book access on students' development. We hypothesize that access to relevant literature can provide emotional validation and security, potentially addressing the safety need. It may foster connection and group identity, potentially fulfilling the need for belongingness. Literature might also support the development of self-worth, potentially meeting the need for esteem. Finally, it could facilitate personal growth and creativity, potentially contributing to self-actualization.

Maslow's theoretical frame will be used to analyze and interpret the data collected from participants. By mapping students' responses and experiences with book access and insecurity onto our proposed extension of Maslow's hierarchy, we aim to explore how book scarcity might impact various levels of students' needs and development. This approach will provide a structured lens to discuss the findings and their implications for students' well-being and academic growth. Through this novel application of Maslow's theory, we seek to understand the multifaceted role that literature may play in individual development and fulfillment by potentially addressing needs at various stages of the hierarchy

# Review of Literature

Maslow's hierarchy of needs provides a foundational framework for understanding human motivation and development. This theory posits that individuals must satisfy lower-level needs before progressing to higher-level growth needs (Maslow, 1943). In education, this implies that children's ability to attain growth needs, such as academic achievement, is predicated on satisfying basic physiological and safety needs. However, the dynamic nature of these needs means they can fluctuate based on changing circumstances, potentially impacting a child's focus and priorities (Noltemeyer et al., 2021). Maslow posited that the levels were not static but more fluid and could change based on context. For example, a parent who has been evicted from their living situation and must immediately find housing may sacrifice growth needs such as academic achievement to meet the basic deficiency need of shelter.

Many children around the globe face significant challenges due to poverty and food insecurity (Pereira et al., 2021). These issues often stem from widespread problems and create difficulties for schools. About one in five American children experience poverty, which has a major impact on their education. According to recent data from the National Center for Education Statistics (2024), around 16% of children under 18 lived in poverty in 2022. This high rate of childhood poverty affects educational outcomes. Prince and Howard (2002) explain that ongoing exposure to traumatic situations like poverty can interfere with brain development, increasing anxiety and making it harder for children to manage their emotions. To be effective, educational programs and social services must also address students' and families' basic needs, as outlined by Maslow (Noltemeyer et al., 2021).

## Adverse Childhood Experiences

While poverty itself presents significant challenges for children's educational experiences, it is also closely intertwined with a broader spectrum of traumatic events known as Adverse Childhood Experiences (ACEs), which can have profound and lasting effects on a child's development and academic journey. Adverse childhood experiences represent a framework for understanding the long-term effects of childhood trauma. The original ACEs study, conducted in the 1990s, led to the development of a framework used in medical and educational fields to identify and support individuals experiencing the effects of trauma. ACEs can be categorized as personal (e.g., abuse, neglect), relational (e.g., incarcerated parent, domestic violence), or community-based (e.g., homelessness, racism) (CDC, 2021). Economic hardship or poverty is the leading indicator for ACEs (Child Trends, 2019).

The prevalence and impact of ACEs are significant. According to the National Survey of Children's Health (2020), approximately two-thirds of adults report at least one

ACE, with 20% reporting three or more. ACEs can negatively affect health and life opportunities, including increased risk of school dropout (Giovanelli et al., 2016) and decreased school engagement (Bowers et al., 2013). Furthermore, ACEs can alter brain development, affecting attention, decision-making, academic performance, and the ability to form stable relationships (CDC, 2021).

It's important to note that certain populations are disproportionately affected by ACEs. Students of color, those living in poverty, students with disabilities, undocumented or migrant students, homeless students, and LGBTQ students are at increased risk (Child Trends, 2019). Factors such as living in under-resourced communities, frequent moves, food insecurity, and exposure to toxic stress are also linked to higher rates of ACEs (CDC, 2021). Notably, the state where this study took place was rated in 2018 as first in the nation for having the highest rate of childhood trauma and consistently ranks among the highest states for childhood trauma rates (Swedo et al., 2023). Within the state, 60% of children have experienced at least one ACE, while the national average is 45% (Sacks & Murphey, 2018).

The impact of trauma can be reduced or mitigated through protective factors that are crucial for supporting students experiencing ACEs. Access to economic and medical support systems (Lester et al., 2020) and mental health services (Ridley et al., 2020) can alleviate some poverty-related stress. However, school-based protective factors have also been shown to address students' academic and emotional needs affected by ACEs (Bethell et al., 2014). These factors include positive relationships with caring adults like teachers and school counselors who can offer emotional support and stability important for students' well-being (Keane & Evans, 2022; Rebicova et al., 2021) and access to high-quality curricula that include social-emotional learning (SEL) to help students manage their emotions and build resilience (Durlak et al., 2011).

# Book Insecurity

The authors of this study acknowledge the critical issue of food insecurity for students in poverty. We do not wish to diminish the urgency of food insecurity for students in poverty. This study aims to highlight another significant but often overlooked problem: the lack of access to books, which we term "book insecurity" (Manuscript Authors, 2018). According to Mullainathan and Shafir (2013), the varied scarcities associated with poverty imposes a measurable strain impacting cognitive abilities and emotional regulation. We argue that this strain is further compounded for students facing adverse childhood experiences (ACEs) and trauma, as the lack of access to books exacerbates their challenges in managing cognitive and emotional development.

In the context of poverty and trauma experienced by many K12 students, access to books and literacy resources emerges as a critical factor in supporting students, particularly those from disadvantaged backgrounds. Students in poverty often have less access to books both at home and in their communities (Beckham, 2011; Krashen, 2004). This disparity extends to school contexts, where students in more affluent areas typically have access to better-resourced libraries and more qualified staff (American Psychological Association, 2017). Pribesh et al. (2011) identified a "school library access gap," noting that students in high-poverty schools often have more limited access to library resources.

Children in poverty are more likely to have fewer books in the home, live in areas with underfunded public libraries, and attend under-resourced schools (Beckham, 2011;

Krashen, 2004; Krashen et al., 2012). Students attending schools with large numbers of students in poverty have fewer library resources and limited or restricted access to those resources - a condition termed the school library access gap (Pribesh et al., 2011). Additionally, libraries in communities of poverty are open fewer days due to available funding to support collections and staff (Celano & Neuman, 2010; Neuman & Celano, 2001). In contrast, students in more affluent and better-resourced schools have access to better facilities, including libraries with larger collections and more qualified staff and teachers (American Psychological Association, 2017).

In addition to the paucity in reading materials, students in poverty may experience additional obstacles that further limit their access to books. These students do not have the funds to purchase books. Transportation to public libraries may be difficult, particularly for students living in poverty in rural contexts (Jacobs et al., 2016). Schools and public libraries may restrict student access to books through check-out limits or impose fines that present barriers to students in poverty (Miller & Sharp, 2018). As Pribesh et al. (2011) note,

Fees for services and overdue fines often serve as an economic obstacle for low-income library patrons. Charging patrons fees and/or overdue fines weighs heavily on clients living in poverty who can be denied access to library resources if they accumulate a significant amount of overdue fees. (p. 157)

Limiting access through check-out restrictions discourages students and may cause great frustration. The fear or shame of being unable to pay a fine or replace a book may keep a student from seeking books from the library (Pribesh et al., 2011). This stands in contrast to the American Association of School Librarians' (AASL) (2018) position statement that notes effective school libraries are essential learning environments that help bridge the gap between access and opportunity for all students.

## Books as Tools for Resilience and Emotional Growth in Education

The importance of book access extends far beyond academic achievement. Literature fosters students' social and emotional development, significantly enhancing empathy, social perception, and emotional intelligence (Dylman et al., 2020). Engaging with diverse and relevant books builds resilience and a sense of agency, helping students navigate challenges and envision future possibilities (Brewster, 2016). For students experiencing ACEs, access to high-quality literature is essential for understanding and coping with their experiences (Bishop, 2015). Given that students from low socioeconomic backgrounds often encounter higher rates of adverse childhood experiences, the social-emotional benefits of reading are particularly vital for supporting their overall well-being and development.

Access to relevant, high-quality literature is a powerful tool for supporting impoverished students. Reading enables students to see themselves (mirror), understand others' perspectives (window), and broaden their worldview and sense of agency (sliding glass door) (Bishop, 2015). Such literature provides crucial social-emotional support, helping vulnerable students navigate their ACEs and fostering an appreciation for diverse experiences (Bishop, 2015). Shechtman and Betzalel (2017) suggest that using literature to address social and emotional concerns, including anxiety, is effective because it allows students to connect their difficulties with book characters, facilitating personal resolution. Their study found that children exposed to carefully selected literature experienced an anxiety reduction. Through literature, children find validation of their thoughts and

emotions, establishing connections with characters that affirm their experiences (Brewster, 2016). Heath et al. (2017) advocate for leveraging books to strengthen social-emotional learning, helping students to transform their thinking and emotional responses.

Educators who realize the importance of books realize the potential of literature to support students as they explore and mitigate any negative effects of their ACEs. The humanities in general support student development of curiosity, empathy, and social awareness. Scaffolded discussions around books led by adults can foster social and SEL development (Garces-Bacsal, 2020). The use of high-quality literature has been linked to improving students' abilities to make decisions, to develop empathy and explore multiple perspectives, and to seek agency through civic engagement (Danifo & Valdez, 2019). As Bishop (2015) noted,

"Literature transforms human experience and reflects it back to us, and in that reflection, we can see our own lives and experiences a part of the larger human experience. Reading, then, becomes a means of self-affirmation, and readers often seek their mirrors in books." This is important for any child, but particularly critical for vulnerable and marginalized students.

Books can provide the backbone for a high-quality SEL curriculum where students learn self-awareness, self-management, social awareness, relationship skills, and responsible decision-making. Through this work students can be scaffolded in how to manage emotions, achieve goals, establish empathy with others, develop healthy relationships, weigh decisions, and develop healthy identities. In schools where SEL is an intentional part of the curriculum, students' academic performance improves, classroom behavior issues decrease, students have higher self-efficacy and stronger social, and emotional experiences, and students report a decline in anxiety (Cipriano et al., 2023). Additionally, inclusion of SEL has been linked to a variety of positive life outcomes (Jones et al., 2017) and can address various forms of insecurity by empowering students (Gregory et al., 2016).

## Countering Book Insecurity

Efforts to counter book insecurity and promote literacy can take various forms. Kittle (2020) advocates for getting books directly into students' hands, noting that daily reading can increase joy, confidence, and stamina. Beckham (2011) emphasizes the importance of allowing students to self-select texts to promote personal joy in reading. School libraries play a crucial role in this effort, with Pentland (2019) arguing that providing access to library materials should be a responsibility shared by the entire school faculty. Classroom teachers also play an important role in student access to books. According to Miller and Sharp (2018) children with strong classroom libraries read fifty to sixty percent more books than their peers with less well-developed collections. These students also spend more time reading, have more positive attitudes toward books, and reach higher reading achievement levels (Miller & Sharp, 2018).

Teachers and school librarians can help to fight the effects of book insecurity by simply working to get books into the hands of students. Kittle (2020) tells us that the simple act of reading can reduce stress and anxiety, adding that daily reading increases joy, confidence, and stamina. Beckham (2011) adds that students should be given access to a wide array of self-selected texts to promote personal joy in reading. She adds that "the temporary possession of a self-selected book is part of the pleasure found in the freedom

to read" (p. 54).

Pentland (2019) posits that providing access to library materials is the responsibility of the entire school faculty. Pribesh et al. (2011) call for school libraries to intentionally adjust services offered to students in high-poverty schools to be commensurate with libraries in more affluent contexts. Beckham (2011) admonishes librarians to not see stewardship of their collection as maintaining a pristine collection, but to focus on the important work of getting the collection into the hands of students. While this may sound risky, Moreillon (2012) furthers this thought, challenging librarians to see beyond limiting policies and embrace the importance of supporting readers who may not have the financial resources at home to support access to books. This approach to stewardship aligns with recommendations from the American Library Association's information access statement (2020), tenet one, which values the idea that "Libraries' role in providing people with equitable and open access to information in all formats that transcends limitations of personal economics."

To further their work in supporting students in poverty, school library specialists should partner with parents to promote the value of access to text (Beckham, 2011). Additionally, school library specialists need to work closely with teachers to elevate the importance of independent reading (Kittle, 2020). Teachers can provide dedicated reading space, support access to a wide array of books, and create a protected time for reading during school hours.

#### Methods

This study utilized survey research methodology to explore the relationship between poverty and book access among middle school students. The authors designed an online survey specifically for this study, which was administered to middle school-aged participants on the first day of a summer creative writing program. Participants were categorized into two groups based on their eligibility for their school's free lunch program, which served as a proxy for socioeconomic status. Students completed the survey independently using provided digital devices or their own personal devices.

## **Participants**

Participants included 55 middle school students who completed a summer writing camp held at a southern regional university. Thirty students paid full tuition to participate in the camp, and twenty-five students received scholarships to attend the camp. All 55 students completed the survey. The scholarships were provided to students who provided documentation establishing their eligibility for their school's free lunch program. Poverty, for the purposes of this study, was connected to the federal free lunch program which provides free meals for students with a family income that falls below 130% of the United States poverty level (Feeding America, 2020).

Prior to conducting the study, the researchers obtained approval from the Institutional Review Board (IRB) at the institution where the writing camp was held. Informed consent was a multi-step process involving both the camp participants (minors) and their parents or guardians. Parents were mailed detailed information about the study's purpose, procedures, and potential risks and benefits, along with consent forms to sign if they agreed to their child's participation prior to the beginning of the camp. All 55 participants returned signed parent consent forms. Additionally, an age-appropriate assent form was provided to the students, explaining the study in terms they could understand and

giving them the option to participate or decline. Participation in the study was entirely voluntary, and students were assured that opting out would not affect their involvement in the camp or their relationship with the camp staff. To protect privacy, all survey responses were anonymized, and data were stored securely, with access limited to the research team. Throughout the study, participants were reminded of their right to withdraw at any time without consequence.

In designing our research approach for working with vulnerable populations, we implemented several specific protective measures informed by best practices in trauma-informed research (Ellis et al., 2007; Fry et al., 2020). These included: conducting the survey in a familiar, supportive environment (the summer writing program) rather than in participants' schools; using asset-based language throughout the survey that avoided deficit perspectives; and providing participants the option to skip any questions that made them uncomfortable. Following recommendations by Newman and Risch (2006) for ethical research with vulnerable youth, we also carefully considered question sequencing, placing potentially sensitive questions about book loss or abandonment after less emotionally charged items about general reading preferences. This helped establish rapport and comfort before addressing more challenging topics. These methodological choices aligned with trauma-informed research principles that emphasize creating safe spaces for participants while gathering essential data about their experiences.

The researchers were particularly mindful of the vulnerable nature of some participants' family situations and took extra care to ensure that the survey questions and overall research process were sensitive to these circumstances.

## Data Collection

The survey questions for our study on book accessibility and reading habits among students (Appendix A) were developed through a multi-stage process guided by current literature. We began by reviewing existing literature on book accessibility, reading habits, and their impact on students' academic and personal development (Beckham, 2011; Krashen, 2004; Mullainathan & Shafir, 2013; Pribesh et al., 2011), which highlighted key themes such as book ownership, access to digital reading devices, and family attitudes towards reading. These studies informed the development of our questions. Additionally, the survey design was aligned with our theoretical framework - Maslow's hierarchy of needs.

A panel of nine qualified professionals (e.g., school librarians, K12 teachers, and education faculty) reviewed the initial draft of the survey. Their feedback helped refine question-wording and ensure comprehensive coverage of key topics. A pilot test of the survey was conducted with a small sample (n=5) of students, representative of our target population. This process helped identify issues with question clarity or relevance, leading to further refinements in the survey instrument.

## Data Analysis

Our data analysis approach allowed us to analyze quantitative and qualitative data, providing insights into their experiences with book access and reading in relation to their socioeconomic background. Quantitative survey responses were analyzed to compare the two socioeconomic groups, using descriptive statistics to summarize the data. Given the sample size of 55 respondents and in two groups (30 middle-income students and 25

scholarship students), inferential statistics were not applied in our analysis. The relatively small sample size limits the power and reliability of statistical tests designed to determine whether observed differences or relationships are statistically significant.

Qualitative data were analyzed using Braun and Clarke's (2006) recommendations for thematic analysis. Braun and Clarke emphasize an iterative process, starting with familiarization with the data, generating initial codes, searching for themes, reviewing themes, defining and naming themes, and writing the report. For this study, two of the researchers met and jointly coded the data and then shared their analysis with the remaining researchers to ensure consistency and accuracy. The entire team reviewed the coded data to define themes and verify that the analysis accurately represented the data, leading to a cohesive and cross-validated set of findings.

After thematic analysis was completed, we compared the data between the two groups—low-income and middle-income—by examining the prevalence and nature of themes within each group. We analyzed similarities and differences in responses related to book accessibility and reading habits to identify patterns specific to each group. This comparison involved reviewing the themes and codes across the groups and noting any significant variations or commonalities in their experiences and perspectives. This process helped us understand how book accessibility and reading habits differ between the two groups and provided insights into the impact of poverty on these factors.

# Researcher Positionality

As researchers, we acknowledge our positions as professors in a College of Education at a mid-sized university in the Southern United States. Two of us teach in the library media preparation program, while the other two specialize in teacher preparation focusing on literacy and equity. Our state is characterized by high rates of poverty and childhood trauma, which inevitably shapes our perspectives and research interests. We recognize that our roles in higher education and our focus on literacy and equity may predispose us to certain assumptions about the value of books and reading. Additionally, our experiences working in a state with significant socioeconomic challenges may influence our perceptions of student needs and educational barriers. We are aware that these factors could potentially bias our approach to this study, from formulating research questions to interpreting results.

To mitigate potential biases stemming from our positionality, we engaged in ongoing reflexive practices throughout the research process. We held regular team meetings to discuss and challenge our assumptions, encouraging each other to question our interpretations and consider alternative viewpoints. To ensure diverse perspectives, we sought feedback on our research design and interpretations from colleagues outside our immediate field. Throughout data analysis, we used a collaborative coding process, regularly comparing and discussing our individual interpretations to identify and address any potential biases. By maintaining this reflexive stance, we strived to enhance the trustworthiness and credibility of our findings while acknowledging the inevitability of our own perspectives shaping the research process.

### Results

Participants in the middle-income group reported owning many more books than those in the low-income group. Fifty-three percent of the middle-income participants

owned more than 100 books compared to 24% of the low-income group. Thirty-seven percent of the middle-income group owned 26-100 books and 24% of the low-income group owned the same amount. Ten percent of the middle-income group reported owning less than 25 books compared to 52% of the low-income participants. In addition, 16% of the low-income participants reported owning zero to five books. See Table 1 below.

Table 1
Number of books owned by groups

Group	Books owned	Percentage of responses
Middle-income	25 or fewer	10%
	26-100	37%
	More than 100	53%
Low-income	25 or fewer	52%
	26-100	24%
	More than 100	24%

Participants were asked if they had ever been forced to dispose of a book (e.g., abandon, leave behind a book). Twenty-six percent of the middle-income group reported they had never been forced to abandon a book while 72% of the low-income group reported being forced to abandon a book. When asked to explain the circumstances related to the abandonment, the middle-income group responses reported contexts when parents divorced (12%) or parents having them donate books to charities (88%). In contrast, the low-income group responses contained many reasons for abandoning a book including parent divorce (5%) or parents donating books because there was no space (14%). Notably, 78% of their responses related to the theme of moving, including the need to move quickly due to pending eviction (19%) or their house burning (10%) (see Table 2).

Table 2
Low-income group responses for book abandonment

Responses	Percentage of responses
Moved/Forgot to Pack	10%
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Moved/No Space	25%
Moved	14%
Parents Divorced/No Space	5%
Denoute Did Net Went	1.40/
Parents Did Not Want	14%
House Burned	10%
Moved Quickly	19%

Given the prevalence of the theme of "moving" (moving homes) in the data, researchers examined the qualitative responses for provided potential causality. Examples of student comments rendered a picture of students in transient or in volatile situations where they did not have access or control to their own possessions (Table 3).

Table 3
Examples of low-income group responses for book abandonment

Open-ended responses

Yes, we moved in the middle of the night and I couldn't take all my stuff with me.

My parents finished moving out while I was at school and they didn't get my books

My parents threw them away when we moved.

Participants were also asked about the amount of talk around books in their home situations. Ninety-seven percent of the middle-income group responded that their family contexts included talk around books with the adults in their families. In contrast, only 16% of the low-income group reported talk around books as a common occurrence in their home contexts.

Participants reported how frequently books were provided to them as a gift. Receiving books as gifts were also more prevalent in the middle-income group. Sixty-seven percent of the middle-income group always received books as gifted compared to 3% of the low-income group. None of the middle-income group reported "never" or "rarely" receiving books as gifts, while 85% of the low-income groups reported the same response (Table 4).

Table 4
Percentage of participants receiving books as gifts

Group	Received books as gifts	Percentage of responses
Middle-income	Sometimes	33%
	Always	67%
Low-income	Never	33%
	Rarely	52%
	Sometimes	12%
	Always	3%

Having a fear of losing books was a reoccurring response in the low-income group. When asked if they feared losing books, 96% of the low-income groups responded with a "yes" compared to 27% of the middle-income group. When examining the reasons, 100% of the middle-income group responded their fear around losing books centered on the need to finish them and find out how the story ended. In contrast, reasons reported by the low-income group discussing fear of losing books included: "I'm not responsible" (8%), "I'm worried my house will burn again" (8%), "I can't afford to pay the library fine" (16%), and "I can't afford to replace the book" (39%). In addition, 74% of the low-income participants reported that someone had previously taken a book away from them compared to only 3% of the middle-income group.

Participants in the low-income group also indicated they had difficulty accessing books. Notably, 94% of the middle-income group reported owning a public library card compared to only 16% of the low-income group. When asked about access to books for use in school, 73% of the middle-income group, but only 12% of the low-income group mentioned going to their parent/guardian for the books. Forty-four percent of low-income participants would seek out help from the school librarian and 28% indicated they would ask another relative. The middle-income group unanimously reported they would not have difficulty locating or accessing a book they needed for school while only 34% of the low-income group responded in the same way. When asked who they would seek out if they needed access to a book, the respondents primarily cited parents, teachers, librarians (Table 5).

Table 5
If you needed a book for school, who would you go to first?

	Middle-income group %	Low-income group %
Parent/Foster parent	73%	12%
Teacher	17%	4%
School librarian	7%	44%
Public librarian	0%	12%
Other relative	3%	28%

The researchers also examined the various places where participants had access to books, and the results indicated the low-income group had less access to purchase books online, but they did indicate more purchases from thrift stores and flea markets. The low-income group used the public library to a greater extent than the middle-income group (Table 6).

Table 6
Where do you get the books you read?

There we you get the even	Middle-income group %	Low-income group %
Bookstore	63%	64%
Online book seller	83%	28%
School library	59%	80%
Public library	56%	20%
Department store	23%	28%
Flea market	17%	52%
Rummage sale	10%	44%
Thrift store	10%	40%

Additionally, 96% of the middle-income group and 32% of the low-income group reported they read eBooks. In a related question, participants were asked about their access to devices for reading eBooks (see Table 7). A large majority, 76% of the low-income group, reported having access to a smartphone, but less access to eBook readers.

Table 7
What devices for reading eBooks do you have access to?

	Middle-income group %	Low-income group %
None	0%	0%
Nook	7%	0%
Kindle	53%	20%
Other eBook reader	27%	32%
iPad	53%	20%
Laptop/Home computer	60%	64%
Chromebook	40%	12%
Smartphone	30%	76%

When asked about the emotions of owning books, all respondents indicated a positive response. However, the low-income groups' responses were often more impassioned (see Table 8).

Table 8
How does owning a book make you feel? Responses from low-income participants

It makes me feel great knowing that I can escape right in my own room that I can go to whenever I need/want to.

Owning books makes me feel like I have a piece of knowledge that can stick with me forever because it's mine and I can always go back and read the books that give me the inspiration I need to write, and live a positive life.

Owning books makes me feel like all of my emotions mix with the author's. When I read a book, it helps me take care of them because it's like I own someone else's words that I can relate to and have as my own.

It just means I can read a book on my own time without turning it back into a school or public library.

Owning the book makes me feel like I can read without interruption or due dates.

## Discussion

The results of this study provide valuable insights into the phenomenon of book insecurity among middle school students, illuminating significant disparities in book access and ownership between middle-income and low-income students. These findings can be effectively understood through the lens of Maslow's hierarchy of needs (Maslow, 1943), offering a framework to explore how book insecurity intersects with students' basic, psychological, and self-fulfillment needs.

Book Insecurity Through Maslow's Hierarchy

At the most fundamental level, our study reveals that many low-income students struggle with basic needs, including stable housing. The frequent moves and sudden evictions reported by these students directly impact their ability to maintain a personal library or consistently access books. This instability at the foundational level of Maslow's hierarchy creates a challenging environment for literacy development, aligning with previous research on the effects of poverty on educational outcomes (Ferguson et al., 2007; Jensen, 2009).

Moving up Maslow's hierarchy to safety needs, our findings indicate that low-income students experience significant anxiety and fear related to book ownership and

access. The majority of low-income students (96%) reported fear of losing books, compared to only 27% of middle-income students. This fear often stemmed from concerns about financial repercussions, such as library fines or replacement costs, echoing findings by Miller and Sharp (2018) and Moreillon (2012) on barriers to library use for low-income students. This constant state of anxiety around book access can be seen as a threat to students' sense of safety and security, potentially impacting their ability to fully engage with and benefit from reading experiences.

The disparities in book ownership and access also have implications for students' sense of belonging, the third level of Maslow's hierarchy. Middle-income students reported more frequent discussions about books at home (97%) compared to low-income students (16%), suggesting that books play a more central role in the family culture of middle-income households. This aligns with research by Evans et al. (2010) on the impact of family scholarly culture on educational success. The lack of book-centered conversations in low-income households may deprive these students of a sense of belonging to a community of readers, potentially affecting their motivation and engagement with reading.

Our findings also shed light on how book access and ownership contribute to students' esteem needs. Low-income students expressed powerful emotional connections to book ownership, with one student noting, "Owning books makes me feel like I have a piece of knowledge that can stick with me forever." This sentiment aligns with Bishop's (2015) concept of books as mirrors, windows, and sliding glass doors, providing students with opportunities for self-affirmation and personal growth. However, the limited access to books experienced by low-income students may hinder their ability to build self-esteem through reading achievements and book ownership.

At the level of self-actualization, our study suggests that book access plays a crucial role in supporting students' personal growth and self-fulfillment. Low-income students described books as providing escape, emotional support, and inspiration. As one student put it, books provide "the inspiration I need to write, and live a positive life." This aligns with research by Brewster (2016) on the therapeutic potential of reading. However, the limited access to books experienced by low-income students may restrict their opportunities for self-actualization through reading.

## Understanding Book Insecurity and Access

The concept of book insecurity emerges from our findings as a complex phenomenon encompassing both physical access to books and the emotional/psychological relationship with books. We defined book insecurity as a state in which individuals lack reliable access to books and experience anxiety or fear related to book acquisition, retention, or loss. This concept extends beyond mere lack of access, incorporating the emotional toll of unstable book ownership and the constant threat of loss. Our findings suggest that book insecurity is prevalent among low-income students, potentially exacerbating other forms of insecurity they experience, such as food insecurity or housing insecurity.

The role of school libraries emerges as crucial in addressing book insecurity, particularly for low-income students. Our finding that 80% of low-income students rely on school libraries for book access, compared to 59% of middle-income students, underscores the vital role of school libraries in promoting equity in book access. This aligns with Pentland's (2019) emphasis on the responsibility of school libraries in ensuring equitable access to books. However, our findings also highlight potential barriers, such as fear of

fines or book loss, that may prevent low-income students from fully utilizing these resources.

Our study also reveals significant disparities in digital access between low-income and middle-income students. While both groups reported similar rates of access to laptops or home computers, low-income students were far more likely to rely on smartphones for e-book access (76% compared to 30% of middle-income students). This digital divide has important implications for students' reading experiences and literacy development. Reading long-form text on a smartphone may be less comfortable and engaging than reading on a dedicated e-reader or tablet, potentially impacting reading comprehension and enjoyment. This finding points to the need for schools and libraries to consider how they can support digital reading access for low-income students.

## Implications and Recommendations

The educational implications of book insecurity are profound. Limited access to books and the anxiety associated with book insecurity may hinder students' literacy development, academic performance, and overall educational engagement. This aligns with research by Allington and McGill-Franzen (2008) on the importance of book access for reading achievement. Addressing book insecurity could be a key strategy in efforts to reduce educational inequities and support the academic success of low-income students.

Our findings call for a multi-faceted approach to addressing book insecurity. Schools and libraries should consider policies to eliminate fines and reduce barriers to book access, as suggested by Pribesh et al. (2011). Communities could implement book ownership programs, such as book drives or grants for home libraries. Digital access initiatives could help bridge the gap in e-book access. Moreover, schools should consider incorporating discussions about books and reading into family engagement efforts, potentially helping to foster a culture of reading in low-income households.

In conclusion, this study illuminates the complex nature of book insecurity and its potential impacts on students' educational experiences and overall well-being. By viewing book access through the lens of Maslow's hierarchy of needs, we can better understand how book insecurity intersects with students' basic, psychological, and self-fulfillment needs. Addressing book insecurity emerges as a crucial component of efforts to promote educational equity and support the holistic development of all students, regardless of their socioeconomic background.

### Limitations

A number of limitations were associated with this study. The sample size of both groups was small. The definition of poverty, for the purposes of this study, defined as ability to pay for the writing camp may not have been a clear indication of family wealth. Finally, the study centered around a one-time survey without follow-up surveys or interviews. These limitations may cause the results to be less generalizable to the broader population.

### Conclusions

The results of this study suggest that students from low socio-economic backgrounds own fewer books than their more affluent counterparts. Many of these students live in poverty and in homes where books aren't a priority, aren't discussed, and aren't given as gifts. While an overwhelming number of these students had access to

smartphones, this group also had the lowest access to public library eBook collections. More importantly, many of these students suffer from fear and anxiety due to multiple adverse conditions beyond their control. The participants indicated they feared losing books, had books more often taken away from them, and had been forced to leave books behind, in incidents usually related to late night and unexpected evictions or domestic violence. These same students expressed anxiety from using the school library due to lack of funds for late fees, and fear of losing library books. This fear and anxiety go beyond lack of access to books and move into the social and emotional well-being of students into what we have termed as book insecurity.

Teachers and school librarians must recognize book insecurity as a condition that needs to be addressed. It is imperative that teachers and school librarians be trained in methods of identifying student trauma and in that way become more aware of methods of recognizing the signs of book insecurity. Additionally, school administrators and counselors should also be involved in providing this training to teachers and school librarians. Counselors might also serve as a resource for public mental health services for families, including parents and siblings of students experiencing trauma.

The researchers believe book scarcity contributes to book insecurity among students. Teachers and school librarians should help develop paths to book ownership. This might include community book drives, pursuing grant funds, purchasing books through earned book club points, building "little free libraries" and book fair funds to purchase books. Classroom teachers should work to build stronger classroom libraries with unlimited access by students, while school librarians should work with their administrators, parent groups, and community members to find ways to waive overdue fees or do away with these fees altogether. All of these measures would help reduce the fear and anxiety associated with book access.

Finally, it is imperative that schools work with the public library. This could help to increase access to eBook collections. Schools should invite public library staff into the school to help increase the number of library card holders in the school and also have these librarians inform students of all the appropriate smartphone applications that provide access to eBooks. Additionally, public libraries offer a myriad of programs and services that provide resources to the public at large in helping to deal with a variety of traumas.

Ultimately, the condition of book insecurity can be addressed with a community-wide approach. This should involve communication and collaboration between school administrators, the community, the public library and teachers and school librarians.

# Recommendations for Further Study

The researchers believe the results of this study call for further study. The study could be expanded to a larger sample size and to multiple states for comparison. This study took place in a state with a high level of childhood poverty, perhaps further study could compare states with less poverty or at least states with high poverty, but larger school resources. Additionally, studies that include follow-up individual interviews with participants and their families might shed light on the true nature of the factors and conditions that impact book insecurity among low income students and raise awareness of new initiatives that can be used to address this issue.

## References

- Allington, R., & McGill-Franzen, A. (2008). Got books? *Educational Leadership*, 65(7), 20-23.
- American Association of School Librarians (AASL). (2018). *Definition of an effective school library*.
  - https://www.ala.org/aasl/sites/ala.org.aasl/files/content/advocacy/statements/docs/ AASL Position Statement Effective SLP 2018.pdf.
- American Library Association. (2020). Access to library resources and services. https://www.ala.org/advocacy/intfreedom/access
- American Psychological Association. (2017, July). *Education and socioeconomic status factsheet*. <a href="https://www.apa.org/pi/ses/resources/publications/education">https://www.apa.org/pi/ses/resources/publications/education</a>
- Beckham, S. (2011). Promoting the joy of reading without killing it. *Knowledge Quest*, 36(4), 50-54.
- Bethell, C. D., Newacheck, P., Hawes, E., & Halfon, N. (2014). Adverse childhood experiences: Assessing the impact on health and school engagement and the mitigating role of resilience. *Health Affairs*, 33(12), 2106-2115. https://www.healthaffairs.org/doi/10.1377/hlthaff.2014.0914
- Bishop, R. S. (2015). *Mirrors, windows and sliding glass doors*. Scenic Regional Library. <a href="https://scenicregional.org/wp-content/uploads/2017/08/Mirrors-Windows-and-Sliding-Glass-Doors.pdf">https://scenicregional.org/wp-content/uploads/2017/08/Mirrors-Windows-and-Sliding-Glass-Doors.pdf</a>
- Bowers, A. J., Sprott, R., & Taff, S. A. (2013). Do we know who will drop out?: A review of the predictors of dropping out of high school: Precision, sensitivity, and specificity. *High School Journal*, *96*, 77–100. <a href="https://doi.org/10.1353/hsj.2013.0000">https://doi.org/10.1353/hsj.2013.0000</a>
- Braun, V., & Clarke, V. (2006). Using thematic analysis in psychology. Qualitative Research in Psychology, 3(2), 77-101. http://doi.org/10.1191/1478088706qp063oa
- Brewster, L. (2016). More benefit from a well-stocked library than a well-stocked pharmacy: How do readers use books as therapy? In Rothbauer, P. M., Skjerdingstad, K. I., McKenchie, E. F., & Oterholm, K. (Eds.), *Plotting the reading experience: Theory/policy/politics* (167-182). Wilfred Laurier University Press.
- Celano, D., & Neuman, S. B. (2010). Public libraries provide a safety net for our neediest children. *Teachers College Record*. https://www.tcrecord.org/books/Content.asp?ContentID=16104.
- Child Trends. (2018, February 12). The prevalence of adverse childhood experience, nationally, by state, and by race or ethnicity.

  <a href="https://www.childtrends.org/publications/prevalence-adverse-childhood-experiences-nationally-state-race-ethnicity">https://www.childtrends.org/publications/prevalence-adverse-childhood-experiences-nationally-state-race-ethnicity</a>
- Cipriano, C., Strambler, M., & Ha, C. (2023, July 14). Research finds social and emotional learning produces significant benefits for students. Yale School of Medicine. <a href="https://medicine.yale.edu/news-article/new-research-published-in-child-development-confirms-social-and-emotional-learning-significantly-improves-student-academic-performance-well-being-and-perceptions-of-school-safety/">https://medicine.yale.edu/news-article/new-research-published-in-child-development-confirms-social-and-emotional-learning-significantly-improves-student-academic-performance-well-being-and-perceptions-of-school-safety/</a>

- Danifo, J., & Valdez, J. (2019). Building social emotional learning in youth through humanities-centered activities. *Young Adult Library Services*, 17(2), 27-31.
- Durlak, J. A., Weissberg, R. P., Dymnicki, A. B., Taylor, R. D., & Schellinger, K. B. (2011). The impact of enhancing students' social and emotional learning: A meta-analysis of school-based universal interventions. *Child Development*, 82(1), 405-432. https://doi.org/10.1111/j.1467-8624.2010.01564.x
- Dylman, A. S., Blomqvist, E., & Champous-Larsson, M. F. (2020). Reading habits and emotional vocabulary in adolescents. *Educational Psychology*, *40*(6), 681-694. https://doi.org/10.1080/01443410.2020.1732874
- Ellis, B. H., Kia-Keating, M., Yusuf, S. A., Lincoln, A., & Nur, A. (2007). Ethical research in refugee communities and the use of community participatory methods. *Transcult Psychiatry*, 44(3), 459-81. https://doi.org/10.1177/1363461507081642
- Evans, M., Kelley, J., Sikora, J., & Treimand, D. (2010). Family scholar culture and educational success: Books and schooling in 27 nations. *Research in Social Stratification and Mobility*, 28, 171-197. <a href="https://doi.org/10.1016/j.rssm.2010.01.002">https://doi.org/10.1016/j.rssm.2010.01.002</a>
- Feeding America. (2020). *The National School Lunch Program (NSLP)*. <a href="https://www.feedingamerica.org/take-action/advocate/federal-hunger-relief-programs/national-school-lunch-program">https://www.feedingamerica.org/take-action/advocate/federal-hunger-relief-programs/national-school-lunch-program</a>
- Ferguson, H. B., Bovaird, S., & Mueller, M. P. (2007). The impact of poverty on educational outcomes for children. *Pediatric Child Health*, *12*(8), 701-706. https://doi.org/10.1093/pch/12.8.701
- Fry, C. E., Langley, K., & Shelton, K. H. (2020). Executive functions in homeless young people: Working memory impacts on short-term housing outcomes. *Child Neuropsychology*, 26(1), 27-53. https://doi.org/10.1080/09297049.2019.1628930
- Garces-Bacsal, R. M. (2020). Diverse books for diverse children: Building an early childhood diverse booklist for social and emotional learning. *Journal of Early Childhood Literacy*. <a href="https://doi.org/10.1177/1468798420901856">https://doi.org/10.1177/1468798420901856</a>
- Giovanelli, A., Reynolds, A. J., Mondi, C. F., & Ou, S.-R. (2016). Adverse childhood experiences and adult well-being in a low-income, urban cohort. *Pediatrics*, 137(4). https://doi.org/10.1542/peds.2015-4016
- Gregory, A., Hafen, C. A., Ruzek, E., Mikami, A. Y., Allen, J. P., & Pianta, R. C. (2016). Closing the racial discipline gap in classrooms by changing teacher practice. *School Psychology Review*, 45(2), 171–191. <a href="https://doi.org/10.17105/spr45-2.171-191">https://doi.org/10.17105/spr45-2.171-191</a>
- Guglielmi, R. S., & Brekke, N. (2017). A framework for understanding cross-national and cross-ethnic gaps in math and science achievement: The case of the United States. *Comparative Education Review*, 61(1), 106-213. <a href="https://doi.org/10.1086/689656">https://doi.org/10.1086/689656</a>
- Heath, M. A., Smith, K., & Young, E. L. (2017). Using children's literature to strengthen social and emotional learning. *School Psychology International*, *38*(5), 541-561. https://doi.org/10.1177/0143034317710070
- Jacobs, L., Stalls, E. L. P., & Leroy, L. (2016). Providing books to rural schools through mobile libraries. *Bulgarian Comparative Education Society Annual International Conference*

- Jensen, E. (2009). Teaching with poverty in mind: What being poor does to kids' brains and what schools can do about it. ASCD.
- Jones, S. M., Barnes, S. P., Bailey, R., & Doolittle, E. J. (2017). Promoting social and emotional competencies in elementary school. *The Future of Children*, 27(1), 49–72. <a href="https://doi.org/10.1353/foc.2017.0003">https://doi.org/10.1353/foc.2017.0003</a>
- Keane, K., & Evans, R. R. (2022). The potential for teacher-student relationships and the whole school, whole community, whole child model to mitigate adverse childhood experiences. *Journal of School Health*, 92, 504-513. <a href="https://doi.org/10.1111/josh.13154">https://doi.org/10.1111/josh.13154</a>
- Kittle, P. (2020). Let them read, please. Educational Leadership, 77(5), 77-81.
- Kranjac, A. W., & Kranjac, D. (2021). Child obesity moderates the association between poverty and academic achievement. *Psychology in the Schools*, *58*(7), 1266-1283. https://doi.org/10.1002/pits.22497
- Krashen, S. (2004). The power of reading. (2nd ed.). Libraries Unlimited.
- Krashen, S., Lee, S., & McQuillan, J. (2012). Is the library important? Multivariate studies at the national and international level. *Journal of Language and Literacy Education*, 8(1), 26-36.
- Lervåg, A., Dolean, D., Tincas, I., & Melby-Lervåg, M. (2019). Socioeconomic background, nonverbal IQ and school absence, affects the development of vocabulary and reading comprehension in children living in severe poverty. *Developmental Science*, 22(5), e12858. <a href="https://doi.org/10.1111/desc.12858">https://doi.org/10.1111/desc.12858</a>
- Lester, S., Khatwa, M., & Sutcliffe, K. (2020). Service needs of young people affected by adverse childhood experiences (ACEs): A systematic review of UK qualitative evidence. *Children and Youth Services Review*, 118, 105429 105429.
- Manuscript Authors (2018). Book insecurity: Listening to our students' voices. Conference presentation]. National Council of Teachers of English Conference, Houston, TX, United States.
- Maslow, A. H. (1943). A theory of human motivation. *Psychological Review*, 50(4), 370-96.
- McKenzie, K. (2019). The effects of poverty on academic achievement. *BU Journal of Graduate Studies in Education*, 11(2), 21-26. https://doi.org/10.19037/agse.11.4.02
- Miller, D., & Sharp, C. (2018). Game changer, Scholastic.
- Moreillon, J. (2012). Policy challenge: No kindergarten checkout until December. *School Library Monthly*, 29(3), 26-27.
- Mullainathan, S., & Shafir, E. (2013). Scarcity: Why having so little means so much. Times Books.
- National Center for Education Statistics. (2024). Characteristics of children's families. *Condition of Education*. U.S. Department of Education, Institute of Education Sciences. https://nces.ed.gov/programs/coe/indicator/cce.
- National Survey of Children's Health. (2020). Health resources and services administration. <a href="https://mchb.hrsa.gov/data-research/national-survey-childrens-health">https://mchb.hrsa.gov/data-research/national-survey-childrens-health</a>
- Neuman, S. B., & Celano, D. (2001). Access to print in low-income and middle-income communities: An ecological study of four neighborhoods. *Reading Research Quarterly*, 36(1), 8-26. https://doi.org/10.1598/RRQ.36.1.1

- Newman, E., & Risch, E. (2006). Ethical issues in trauma-related research: A review. *Journal of Empirical Research on Human Research Ethics*, 1(3), 29-46. <a href="https://doi.org/10.1525/jer.2006.1.3.29">https://doi.org/10.1525/jer.2006.1.3.29</a>
- Noltemeyer, A., James, A. G., Bush, K., Bergen, D., Barros, V., & Patton, J. (2021). The relationship between deficiency needs and growth needs: The continuing investigation of Maslow's theory. *Child and Youth Services*, 42(1), 24-42. https://doi.org/10.1080/0145935X.2020.1818558
- Pentland, C. (2019). Ensuring equitable access to books in the school library. *Teacher Librarian*, 46(5), 18-21.
- Pereira, A., Handa, S., & Holmqvist, G. (2021). Estimating the prevalence of food insecurity of households with children under 15 years, across the globe. *Global Food Security*, 28(2):100482. <a href="https://doi.org/10.1016/j.gfs.2020.100482">https://doi.org/10.1016/j.gfs.2020.100482</a>
- Pribesh, S., Gavigan, K., & Dickinson, G. (2011). The access gap: Poverty and characteristics of school library media centers. *The Library Quarterly: Information, Community, Policy, 81*(2), 143-160. https://doi.org/10.1086/658868
- Prince, D. L., & Howard, E. M. (2002). Children and their basic needs. *Early Childhood Education Journal*, 30(1), 27-31.
- Rebicova, M., Veselska, Z., Husárová, D., Gecková, A., Jansen, D., Dijk, J., & Reijneveld, S. (2021). Does schoolmate and teacher support buffer against the effect of adverse childhood experiences on emotional and behavioural problems?. *International Journal of Environmental Research and Public Health*, 18(24):13009 <a href="https://doi.org/10.3390/ijerph182413009">https://doi.org/10.3390/ijerph182413009</a>
- Ridley, M., Rao, G., Schilbach, F., & Patel, V. (2020). Poverty, depression, and anxiety: Causal evidence and mechanisms. *Science*, 370(6522):eaay0214. https://doi.org/10.1126/science.aay0214
- Sacks, V., & Murphey, D. (2018). The prevalence of adverse childhood experiences, nationally, by state, and by race or ethnicity. Child Trends. <a href="https://www.childtrends.org/publications/prevalence-adverse-childhood-experiences-nationally-state-race-ethnicity">https://www.childtrends.org/publications/prevalence-adverse-childhood-experiences-nationally-state-race-ethnicity</a>
- Shechtman, Z., & Betzalel, N. (2017). The impact of bibliotherapy superheroes on youth who experience parental absence. *School Psychology International*, 38(5), 473-490. https://doi.org/10.1177/0143034317719943
- Swedo, E. A., Aslam, M. V., Dahlberg, L. L., Niolon, P. H., Guinn, A. S., Simon, T. R., & Mercy, J. A. (2023). Prevalence of adverse childhood experiences among U.S. adults Behavioral risk factor surveillance system, 2011-2020. MMWR Morb Mortal Wkly Rep, 72:707–715. http://dx.doi.org/10.15585/mmwr.mm7226a2
- Thulla, P. F. Y., Moriba, S., Adom, D., & Mensah-Gborie, M. N. S. (2022). The rate of reading poverty after the COVID-19 pandemic school shutdown and specific intervention strategies for lower primary school pupils in the southern province and western area of Sierra Leone. *Journal of Language Teaching and Research*, 13(4), 689-696. https://doi.org/10.17507/jltr.1304.01
- UNESCO. (2021). Global education monitoring report 2021: Central and Eastern Europe, Caucasus and Central Asia inclusion and education: All means all. UNESCO. <a href="https://unesdoc.unesco.org/ark:/48223/pf0000375490">https://unesdoc.unesco.org/ark:/48223/pf0000375490</a>

Zucker, T. A., Oh, Y., Conradi Smith, K., & Baker-Finck, J. (2022). Low-income elementary students access to books & reading motivation. *Reading Psychology*, 43(3–4), 250–276. https://doi.org/10.1080/02702711.2022.2094040

Author Biographies

**Jeff Whittingham** is a Professor at the University of Central Arkansas, College of Education. His research interests include literacy, online field, and artificial intelligence sites used for education. He holds a Ph.D. from Southern Illinois University – Carbondale.

**Donna Wake** currently serves as a Professor for the University of Central Arkansas College of Education. Her research interests include diversity, equity, inclusion; critical literacy, teacher education reform; and technology in education. She holds degrees from Temple University, La Salle University, and Hendrix College.

**Erin Shaw** is as an Associate Professor for the University of Central Arkansas College of Education. Her research interests include information literacy skill instruction; digital literacy; school library advocacy; and technology in education. She holds degrees from the University of Memphis; the University of Central Arkansas, and the University of Arkansas.

**Rachelle Miller** is an Associate Professor in the Department of Teaching and Learning at the University of Central Arkansas. She works in the Master of Arts of Teaching program and in the Change Leadership for Equity and Inclusion Ph.D. program. Her research focuses on arts integration, culturally responsive teaching, and teacher self-efficacy.

# Appendix A BearsWrite Book Accessibility Survey

Approximately how many books do you own?

- a) 0
- b) 1-5
- c) 6-10
- d) 10-25
- e) 25-100
- f) More than 100

Have you ever had to abandon (leave behind) books you owned?

- 1) Yes
- 2) No

If so, why did you have to abandon your books?

Do you ever receive books as gifts for special occasions (birthday, Christmas)? a) Always

- b) Sometimes
- c) Rarely
- d) Never

Do you own any of the following? Check all that you own.

- a) Kindle
- b) Nook
- c) Chromebook
- d) Home computer/Laptop
- e) iPad
- f) Smart phone
- g) Other device use for reading eBooks

Does someone where you live own any of the following? Check all that they own.

- a) Kindle
- b) Nook
- c) Chromebook
- d) Home computer/Laptop
- e) iPad
- f) Smart phone
- g) Other device use for reading eBooks

Do you like to read?

- a) Yes
- b) No

Do you ever worry about losing your books?

- a) Yes
- b) No

If so, why do you worry about losing your books?

Where do you get the books you read? Check all the places you get books.

- a) Bookstore (Barnes and Noble, Books-A-Million, etc...)
- b) School Library
- c) Public Library
- d) Rummage Sales
- e) Department Stores (Walmart, Target, etc...)

- f) Thrift Stores
- g) Flea Markets
- h) Online Sites (Amazon.com, Ebay.com, etc....

If you could choose a book, what kind of book would you choose?

- a) Fiction
- b) Non-Fiction
- c) Graphic Novel
- d) Poetry
- e) Comic Book
- f) Other (Please fill-in)

Does your family talk about books?

- a) Yes
- b) No

Are you proud of the books you own (your personal Library)?

- a) Yes
- b) No

If so, why are you proud of the books you own?

If you needed a book for school, would you have a way to get it?

- a) Yes
- b) No

If you needed a book for school, who would you go to first to help you get the book?

- a) Teacher
- b) Principal
- c) School Librarian
- d) Public Library/Librarian
- e) Parent/Foster Parent
- f) Grandparent
- g) Other Relatives (Aunt, Uncle, Cousin, etc,.)

Have you ever had someone take away one or more of your books?

- a) Yes
- b) No

Have you ever had someone destroy one or more of your books?

- a) Yes
- b) No

Do you want to own more books?

- a) Yes
- b) No

What do you do with the books you won after you read them?

How does owning a book make you feel?

Do you ever give away your books? If so, why do you give away your books?