The goal of this study was to understand what first-generation college students’ (FGS) portrayal in Library and Information Science (LIS) literature reveals about characterizations researchers make when attempting to identify, explain, and understand the needs of FGS. Specifically, it sought to better understand how perceptions of first-generation students in LIS literature have changed and whether the needs and behaviors of first-generation students are portrayed with deficit or asset-based thinking. All nine articles analyzed were published between 2008 and 2020 and were subject to content analysis. The findings demonstrate a tendency towards deficit-based portrayals of FGS, which can cause unintended harm to students. This paper suggests ways to approach FGS students in more productive, asset-based ways such as adopting critical librarianship practices, normalizing help-seeking behavior, and diversifying who can be an authority on the library. By dismantling deficit thinking and instead engaging students with an asset-based approach, academic librarians can acknowledge the unique needs of FGS without diminishing the complexities of their lives.

Headings:

First-generation

Content Analysis

College and university libraries

Education--pedagogy
SHIFTING THE NARRITIVIE: A CONTENT ANALYSIS OF FIRST-GENERATION STUDENT PORTRAYAL IN LIBRARY AND INFORMATION SCIENCE LITERATURE

by
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A Master’s paper submitted to the faculty of the School of Information and Library Science of the University of North Carolina at Chapel Hill in partial fulfillment of the requirements for the degree of Master of Science in Library Science.

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Introduction

The university library has long been viewed as the center of academic life on campus; however, many universities have historically served a relatively homogenous student body. These students were typically white and middle- or upper-class and academic librarians could accurately assume that students had a general understanding of their services and how to use them (Arch & Gilman, 2020, p. 37). It was not until the passage of the GI bill in 1944 that the relatively new middle class, and the subsequent baby boomers, started attending college en masse. This rapid growth of undergraduate enrollment has led to students coming to college campuses with a wider range of academic experience and knowledge than previous generations. As post-recession college enrollment continues to climb, student demographics skew ever further from the "traditional" undergraduate— the 18- to 22-year-old who enrolls immediately after high school or a single gap year, attends class full-time, lives on campus, is funded by parents or guardians, and graduates in four years.

As academic institutions in the United States become increasingly diverse in the 21st century, libraries and librarians are adapting to the changes in the student body. There are many significant Library and Information Science (LIS) studies that look at how undergraduates utilize their campus libraries. However, there a few that look at how LIS studies characterize undergraduate students within the literature. Most studies that
have looked at undergraduate perceptions of the academic library have limited their work to a general survey of undergraduates as an overall population. More recent studies, recognizing that higher education systems were not designed for minoritized students, have limited their scope to smaller demographics of undergraduates such as Latinx students or international students.

While all students, especially those from underrepresented backgrounds, experience challenges in college, one group merits special attention: first-generation college students. These students cross racial and cultural boundaries, and unlike other minoritized students, their minority status is invisible. First-generation students (referred to FGS or 1G) can be a difficult group to define. This study uses the US federal guidelines, which define FGS as those whose parents did not earn a four-year baccalaureate degree (Higher Education Act, 1965). Following this definition, as of academic year 2015-16, 33 percent of undergraduates at public 4-year institutions nationally were first-generation college students and 59 percent of these students were also the first sibling in their family to go to college (National Center for Education Statistics, 2018). With approximately a third of all US undergraduates categorized as first-generation, it is vital for colleges and universities to understand the needs of these students and to address institutional barriers to their success. However, as researchers attempt to identify, explain, and understand the needs of FGS they must also take care and pay attention to how they characterize and portray first-generation students.

Scholarship on first-generation students in the field of LIS has increased in the last decade, demonstrating a renewed interest in serving their needs. Some colleges and
universities, such as Duke and the University of Washington, have conducted FGS surveys in the past, with the aim of better understanding the attitudes of these library users when it came to thinking about and using their university libraries. However, there have been far fewer studies that investigate the stereotypes researchers hold about first-generation college students and the role these characterizations play in LIS literature of first-generation college students. Although first-generation students are often celebrated for their achievements within LIS literature, these learners are most frequently positioned as problems to be solved rather than as individuals with the potential to succeed. Their “non-traditional” status marks a division between librarian and student and those who belong in higher education and those who don’t.

As first-generation college students continue to enroll in higher education, it will be increasingly important for those who work with students – in libraries or elsewhere – to recognize the field’s historically negative assumptions in order to effectively support and encourage them throughout their college experience. The goal of this paper is to understand what first-generation college students’ portrayal in LIS literature reveals about the characterizations researchers make when attempting to identify, explain, and understand the needs of FGS. This study aims to draw attention to the tendencies of portrayals in LIS research and to suggest ways in which information professionals might approach FGS students in more productive ways.
Literature Review

History of LIS literature on FGS

In the last decade the scholarship on first-generation students in the LIS field has increased substantially. A quick search on Library and Information Science Abstracts (LISA) for "first-generation students" reveals that out of the twenty-one results, seventeen were published between 2010 and 2020. There is a renewed interest in serving the needs of the 1G student population and that makes it an apt time to review the LIS literature on this substantial demographic group.

LIS literature responds to historical and demographic developments in higher education. The literature on first-generation students is no different—it has responded to the developments in higher education that have taken place over the last 60 years. The first of these developments was the emergence of open admissions or open enrollment policies, which began in the early 1960s. Starting with the City University of New York, open enrollment was a way to reduce discrimination in college admissions and to promote education of the underprivileged (Breivik, 1977). Breivik notes that as colleges and universities experienced an influx of students that were characterized as needing “remedial instructions”, librarians began to consider how their libraries would meet the needs of these new students (17). The second, related, event was the creation of the federal TRIO programs in 1964 under the Economic Opportunity Act of 1964 (U.S.
Department of Education, 2014). TRIO programs, such as Upward Bound and Student Support Services, were designed to provide outreach and student services programs for individuals from disadvantaged backgrounds. The stated goal these programs, which have since expanded and continue today, is “to serve and assist low-income individuals, first-generation college students, and individuals with disabilities to progress through the academic pipeline from middle school to postbaccalaureate programs” (Office of Postsecondary Education). The open enrollment trend and the TRIO programs contributed to an increase in a more demographically diverse student population. These demographic factors include race, ethnicity, socioeconomic status, age, veteran status, and parental level of education (Illet, 2019). As the diversity of student populations on U.S. college campuses grew, so did scholarly literature on 1G college students. The first LIS writings on 1G students appeared in the 1970s, as librarians experienced the changes that the trends of the previous decade brought to their campuses.

More recently, there has been a renewed interest in first-generation students in higher education generally and in LIS studies specifically. Research on FGS has steadily increased in the fast two decades. While the number of studies on first-generation students remained small between 1970 and the 1999, between 1999 and 2013 the number of FGS studies grew 606% (Wildhagen, 2015, p. 287). In 2006 the U.S. Secretary of Education, Margaret Spellings, commissioned a report called, *A Test of Leadership: Charting the Future of U.S. Higher Education*, which called attention to shortcomings in serving underrepresented student populations, including barriers to access,
affordability, and standards of instruction (U.S. Department of Education, 2006). Illet (2019) claims that the uptick in LIS research studies on first-generation students in the last decade is, at least in part, a response to the findings of the Spellings Commission. This report, whose central theme proclaims that, “to meet the challenges of the 21st century, higher education must change from a system primarily based on reputation to one based on performance” has had an enduring effect on high education and LIS literature. In 2013, the US Department of Education created the “College Scorecard” which includes the retention of 1G students as a metric of institutional success, further cementing the visibility of this group as a specific population in higher education (Graf, 2019). Colleges and universities became invested in the success of 1G students not only for the students’ benefit but also because first-generation students’ success now partly defined the institution’s success. As colleges’ priorities shifted to serving underrepresented groups, academic librarians’ interest in understanding these groups characteristics and needs grew as well. Out of the need to serve FGS more effectively and to fulfill the directive of increased FGS success in higher education, LIS research on the information literacy and information behaviors of 1G students has continually increased.

**Defining FGS Students**

First-generation students can be a difficult group to define. One approach has been to define 1G students in terms of their parents’ education. The federal definition, outlined in the Higher Education Act of 1965, defines first-generation students as either being the first in the family to attend college or as having parents who did not graduate
from a four-year institution (Redford & Hoyer, 2017). LIS studies tend to follow this definition. However, there are up to eighteen definitions of the term in the research, which vary in level of family education and which family members are considered in 1G status (Nguyen & Nguyen, 2018). These variations range from neither parent earning a bachelor’s degree (Strayhorn, 2006) to “no immediate family member could have attended any college, two-year or four-year, with or without having earned a degree” (Inman & Mayes, 1999, p. 6). While the range of definitions in the literature is not itself harmful, definitions that take the baccalaureate degree—or any level of family education—as the standard ignores the skills, knowledge, and experiences of parents who studied at community colleges or other types of institutions.

Another approach to characterizing 1G students has been to include FGS as one subgroup under a broader category. Historically, much of the LIS literature on first generation students emphasizes what they lacked to be successful in higher education. The term FGS often appears in discussions of disadvantaged, nontraditional, at-risk, and emerging students (Patfield et. al., 2020). These broad categories, under which some researchers place FGS, make assumptions about the characteristics and skills of FGS and highlight how FGS are different than continuing-generation students. They can also serve as a cipher for students of color, students of lower socioeconomic status, or both (Illet, 2019). For example, while some universities have specific first-generation student programs, many universities don’t have services for just first-generations students, but rather conflate first-generation status with low economic status and form programs like the University of Pennsylvania’s, First-Generation, Low-Income Program (University of
Pennsylvania, n.d). In these cases, the term first-generation has conflated an entire population under a single category of “low income”. Kezar & Kitchen (2019) write that integrating programs this like is beneficial because it offers a broad range of coordinated support and aids students’ transitions to college. However, other researchers are more critical. Billson & Terry (1982) argue that LIS studies often use the FGS catch-all to lay claim to students’ challenges and educational outcomes, ignoring the possibility that other dimensions of their lives and identities may overlap or play a larger role than the FGS status alone. Wildhagen (2015) goes further to claim that by describing first-generation students as non-traditional or emerging students, they are portrayed as academically deficient and in need of cultural transformation. Associating FGS with terms that characterizes these students as “lacking” undermines the wide spectrum of experiences, histories, and contexts that students who are the first in their families to attend college bring with them to campuses.

**Deficit Models**

A common feature of LIS literature on first-generation students is emphasizing what they lack to be successful in higher education. Researchers often cite FGS lack of study skills, lack of awareness about student support services, or lack familial understanding of the college experience as reasons they do not succeed in higher education (Chapman et. al., 2018). This often leads to the creation programs that focus solely on “fixing” the challenges they face. This perspective is called the deficit mindset or deficit-thinking, which labels any student that does not fit into a traditional norm as “at-risk” or working at a deficit (Sharma, 2016). Deficit thinking has been a prevalent
and predominate view in LIS and education literature for well over a century and posits that students who fail in school do so because of internal deficits or deficiencies that they are able to control or change (Valencia, 1997; Rios-Aguilar & Kiyama, 2018). In deficit thinking, students are characterized by their weaknesses rather than their strengths and the emphasis is on what students lack and the reasons they fail academically.

In LIS research, deficit thinking often manifests when researchers and librarians characterize FGS as “exceptional” students. The implication is that they are different than traditional students, who are often understood as white, middle class, English speaking, and continuing generation students (Montiel-Overall et.al., 2016). According National Center for Education Statistics (2018) it is true that those who are the first in their family to attend college differ demographically: FGS are more likely to be native speakers of languages other than English (English is not a first language for nearly 20 percent of first-generation students, compared to 8 percent of white students) and students of color (51 percent of first-generation students identify as non-white ethnicities). However, by depicting these demographics as “exceptional” LIS researchers emphasize how FGS are atypical in higher education, resulting in attempts to fix first-generation students to fit a mold of what a college student ought to be (Montiel-Overall et. al., 2015).

The deficit mindset often occurs with the good intention of supporting students. However, recent LIS studies claim that it can lead to problematic outcomes. When librarians assume that because first-generation students’ parents did not attend college,
they have lower levels of academic confidence, comfort in college, and
cultural knowledge, librarians oversimplify the diverse FGS student experience and
cause harm to marginalized students (Sharma, 2016). Deficit thinking also ignores
systemic inequalities and injustice students face and puts the blame for a lack of
learning on students and on the knowledge or experiences they do not have (Tewell,
2020). Critics of the deficit perspective claim that the students are not inherently lacking
or at risk of failure, but instead that educational systems create at-risk conditions and
set up students to fail. Illet (2019) states that, “rather than viewing students as
deficient, we librarians—as part of such educational systems—might ask ourselves to
what extent we are part of the problem. We might then work to find ways to make it
possible for all students to succeed, not just those socially preselected for academic
success” (p. 180). When researchers and librarians portray first-generation student
through the traditional deficit model, they focus on students’ weaknesses, including the
knowledge, motivation, and cultural values that they presumably lack, rather than the
strengths they already possess.

Asset-based Models

In contrast with the deficit model, which is based on a person or group of people
lacking a desired quality, the funds of knowledge model describes students from the
vantage point of opportunity and how their experiences can contribute to classrooms.
Originally developed in elementary education, the term funds of knowledge refers to
the developed and accumulated strategies, skills, abilities, ideas, practices, or bodies of
knowledge that are essential to an individual or community’s functioning and well-being
(González et al., 2005, pp.91-92). Put simply, the funds of knowledge approach is an asset-based pedagogy that focuses on the experiences and prior knowledge students possess that can help them succeed in academics, rather than focusing on the skills—or deficits—that students lack. It aims to acknowledge the wealth of experiences students bring to learning, and actively incorporate them into an educational community. This is a fairly new model that is still taking hold in the field of education.

Lately, higher education and academic libraries have started to discuss the benefits of an asset-based model as well. In writing about funds of knowledge, Folk (2018) suggests that “one potential strategy to combat feelings of academic alienation and to help students join scholarly conversations is to incorporate their identities, as well as their prior knowledge, lived experiences and interests, into their academic work.” Tewell (2020) called on librarians to adopt a funds of knowledge approach to library instruction which he claims would help students understand the context of their lives and empower them to create change. The goal of a funds of knowledge approach in LIS is that rather than acting as obstacles to success in college, the assets—the knowledge, skills, and dispositions that students gain from their families, communities, work experiences, and previous education—can form a base on which to expand their learning. Funds of knowledge and asset-based models can also be used to think about how LIS researchers characterize and portray first-generation students. Although it is a fairly new concept, Illet (2019) states that a funds of knowledge approach could serve as a model for understanding first-generation students. Given that the literature demonstrates an interest in understanding the needs of FGS to serve them better, but it
is often grounded in a deficit model of education that focuses on what first-generation students lack instead of what they have, now is opportune time to study how deficit and asset-based thinking are used to describe the needs of and portray first-generation college students.
Research Questions and Hypotheses

This study seeks to examine the portrayals of first-generation (FGS) college students in LIS literature. Specifically, it seeks to better understand how perceptions of FGS students in LIS literature have changed and whether the needs and behaviors of first-generation students are portrayed with deficit or asset-based thinking.

1. How do LIS researchers characterize and portray first-generation college students?
2. Do LIS researchers use deficit or asset-based thinking in their characterizations of first-generation college students?
Methodology

The purpose of this study was to examine the perceptions of first-generation college students in LIS literature. Specifically, it sought to understand how perceptions of 1G students in LIS literature have changed and whether the needs of first-generation students were portrayed with deficit or asset-based thinking. The study utilized qualitative methods because of the exploratory nature of the work and the specific population the researcher studied, based on the idea that it allows for a scientific way to understand social reality in a subjective manner (Wildemuth, 2009). It used qualitative content analysis to examine wide range of LIS literature on first-generation students.

Content analysis is a method for analysis that uses coding to extract, categorize, and examine the data that are found in documents. Since the data in this study was extracted from documents, content analysis is fitting. Qualitative content analysis was chosen for this study because it tends to focus more on describing the object of the analysis in great detail rather than proving or disproving a particular hypothesis (Schreier, 2014, p.173). Specifically, this method uses both manifest and latent content to reveal meaning. Wildemuth (2009) explains that “qualitative content analysis goes beyond merely counting words or extracting objective content from texts to examine meanings, themes, and patterns that may be manifest or latent” in a text (308). Because this study seeks to determine what meanings, themes, and patterns are common in LIS
literature about first-generation college students, qualitative content analysis is appropriate.

**Data Collection**

This study utilized purposive sampling in an attempt to identify the patterns that exist in LIS literature about perceptions of first-generation students. Qualitative content analysis “requires small, purposively selected samples” for the results to be transferable. (Wildemuth, 2009, 298). Because the goal of the paper is to establish transferability rather than generalizability, a purposive sample was appropriate. The literature that was chosen for analysis in this study were chosen purposely to represent the variety that exists in LIS about first-generation college students.

Selection began by searching the databases *Library & Information Science Source* and *Library and Information Science Abstracts* using the keywords “first-generation students” and “first-generation college students”. Book reviews, annual reviews of LIS research, and sources that mentioned FGS but did not include a significant discussion of their needs or characteristics were discarded. The remaining results were then narrowed further. To be chosen for inclusion in this study, a source needed to focus on an American college or university. This decision was made in an effort to standardize the definition of first-generation. Because the study followed the U.S Department of Education’s definition for *first-generation* it was appropriate to only include colleges and universities that also adhered to this definition. Studies on community colleges and non-four-year programs, such as associates degrees, were also excluded. This process left ten sources. The list of studies used in the content analysis is provided in Appendix A.
Data Analysis

Data analysis was the most challenging piece of the research process. It was messy, and it felt both vast and elusive. In light of the exploratory nature of the study, summative content analysis guided the data analysis. This approach allowed the researcher to start coding for manifest content, deficit thinking and asset-based thinking language, and then extend analysis to include latent meanings and themes. Coding took place in multiple stages, over time. The initial coding process started with a set of basic codes that arose from the research questions and from the literature review. These key codes were identified as: deficit-thinking language and asset-based language. Based on this initial analysis, coding for latent content related to the portrayal of first-generation students began. It was an emergent process, with categories and themes identified as documents were coded. Strauss and Corbin’s (1990) guidelines for coding data by beginning with opening coding, "the process of breaking down, examining, comparing, conceptualizing, and categorizing data" were used (p. 61). After these initial reads through the data, axial coding began. The different segments of information with codes were labeled and the researcher began making connections between categories (p. 96). Finally, there was a transition to selective coding, in which the overlap of codes was reduced and collapsed into themes (p. 116). In the paper findings are presented thematically based on the codes that emerged.

The ATLAS.ti software was used to support the coding process. It allows the researcher to code the data, retrieve text based on keywords, rename or merge existing codes without perturbing the rest of the codes, and generate visualizations of emergent
codes and their relationships to one another. ATLAS.ti also maintains automatic logs of coding changes, which makes it possible to keep track of the evolution of the analysis.

Trustworthiness and Limitations

To establish trustworthiness a qualitative content analysis must demonstrate credibility, transferability, dependability, and confirmability. To establish credibility, the categories used in coding the data needed to depict accurately what the data says. The thorough, reiterative process that is used when categories are created via emergent coding is a way to address this concern, demonstrating credibility, and that is the process employed in this study. Along with credibility, to be reliable the results need to demonstrate transferability. This is crucial since the goal in qualitative content analysis is transferability, or to identify the patterns that are found in a material. This study analyzes data from several different studies, pulling out themes, in an effort to identify the general, overarching themes that exist in LIS literature about first-generation students. If findings are going to be transferable, the process in which the data is collected as well as analyzed needs to demonstrate dependability, or to be internally consistent. The memos that were kept during this study were used to ensure dependability. In addition, the process needs to demonstrate confirmability, or have the ability to be replicated. Others have to be able to repeat the process and reproduce similar results. Although there was no secondary coder to assure that the findings were reliable, the codes were transparent and a codebook was created so that others could repeat the process and compare the results.
This study has several limitations. The first limitation is the sample. All of the data analyzed was published after 2006. This was intentionally done because the goal was to study how first-generation students have been portrayed in the past fifteen years as asset-based thinking has become more familiar in the fields of LIS and education. However, because of this small scope, the findings do not take into account the entire historical context of LIS literature since its beginning in 1970. Another limitation is that no secondary coder confirmed the findings. This was addressed by being transparent with the codes and creating a codebook so that others could repeat the process and compare their findings.
Findings

The initial round of coding focused on broadly coding for deficit-thinking language and asset-based language in the selected LIS literature on first-generation college students. Approximately 83 percent of the initial codes where tagged as deficit, while only 16 percent were coded as asset-based language. From there the different segments of information with codes were labeled and the researcher began making connections between categories. Four main themes emerged: portrayals of first-generation students different than continuing-generation peers, students as ignorant to the academic and social cultures of college, libraries as the expert source for FGS needs, and portrayals of first-generation students as valuable members of the campus community.

First Generation Students as Different

In the introductions and literature reviews of studies, many researchers cite demographic data about first-generation college students. Demographic factors such as race, ethnicity, socioeconomic background are the most commonly referenced.

1 Although no researcher would intentionally choose to cause harm to the FGS population, the wording “first-generation students as ignorant” was chosen because it is an accurate description of the language used to describe these students—as lacking knowledge, information, or awareness about a particular thing. Similarly, while no research intends to suggest that first-generation students are not a valuable part of campus, “portrayals of first-generation students as valuable members of the campus community” was chosen because the language coded activity affirms their value and the unique assets they possess.
characteristics of FGS. In the analysis of nine articles, terms about familial finances like “low-socioeconomic status” and “low-income” were coded 56 times. That is an average of six times a student’s low-socioeconomic background was mentioned in a single article. While giving background information about the population being studied is fair and common research practice, it is concerning here because “low-income” is portrayed as a problem to be solved by those in higher education. For example, Soria et. al (2015) writes,

There are reasons higher education practitioners and administrators should be concerned about students from lower socioeconomic backgrounds; for example, low-income, working-class first-generation college students in higher education often feel intimidated and lack confidence in their ability to be successful in academia (p. 637).

There are many negative effects of viewing first-generation students’ low-income status as problem. First, is it characterized as a deficiency that will hinder their ability to find success in college. Not only does this embody a deficit-thinking mindset, but it also prevents students from feeling like they are capable of achieving a college degree. Further, when researchers mention low-income status, they often refer to FGS as a whole and an assumption is made that all first-generation students are alike and that as a group, they are deficient and different than their continuing-generation peers who readers assume are not low-income.

Beyond the frequent citation of statistics about economic status, researchers also constantly refer to the race and ethnicity of first-generation students when
describing them in studies. Terms such as “ethnic minority” and “students of color” were used in every data source to differentiate first-generation students from the traditionally white, continuing-generation students. While it is factually correct that 51 percent of first-generation students identify as non-white ethnicities, the description of FGS person-of-color (POC) status is often portrayed as a challenge to be overcome (Redford & Hoyer, 2017). When Stacy Brinkman, Katie Gibson, and Jenny Presnell (2017) describe first-generation students as “more likely to be ethnic minorities” they do so immediately after writing that “first-generation students are a high-risk population, with higher dropout rates, lower levels of academic self-confidence, lower grades, and lower self-efficacy than their peers” (p. 2). This portrayal conflates ethnicity with a with a string of negative statistics and leads the reader to view first-generation students as deficient. Similarly, Parker (2017) introduces first-generation students as predominately “members of marginalized groups: students of color, undocumented students, LGBTQ students, students who are identified as low-income status” (p. 30). She continues to write that these identities are barriers to students’ success at universities and that an emerging role for academic librarians is to help these students find success in college.

The use of the term *marginalized* treats first-generation students as insignificant or peripheral to the academic community. Not only does this reinforce the ways in which FGS differ from continuing-generation students, but it makes the FGS identity seem problematic. Overall, the common trend of opening research reports on first-generation students with demographic factors such as socioeconomic background and ethnicity
seems to frame common characteristics of FGS as problems and deficiencies that will become barriers to students’ success on campus.

First-Generation Students as Ignorant

One implication of deficit thinking in LIS literature has been the portrayal of first-generation students as lacking knowledge about many parts of the college experience. Much of the literature analyzed described FGS as having knowledge gaps that their continuing generation peers did not. Over 42 percent of all codes related to perceived information and knowledge gaps in first-generation students. Jordan Yee (2007) wrote, for example, that first generation college students are “challenged by gaps in their heuristic knowledge... burdened by unrealistic expectations about college or hindered by a lack of practical knowledge regarding how universities work.” (p. 261). Similarly, Adriana Parker (2017) referred to FGS as “lacking the institutional knowledge that traditional undergraduates have provided to them by parents or older siblings who previously attended a university.” Claims such as these position students as ignorant and unprepared to succeed in college. More specific portrayals of FGS as ignorant appeared as well. The most frequently used characterization was that FGS students had an information gap about the institution of college. Of the codes that perceived FGS students as having a knowledge gap, 55 percent related to a lack of institutional knowledge about the university and the expectations of students in academia. According to Collier & Morgan (2008), an individual’s understanding of the “college student role” and what is expected from a professor is a critical element in student success at a university. However, from their research they claim that first generation
students’ often have more difficulties in understanding professors’ expectations and that professors often have “frustrations with [first-generation] students’ difficulties in comprehending their basic expectations” (p. 8). Words like “have-nots”, “cumulative disadvantage” and “non-traditional” were used to suggest first-generation students from “less educationally advantaged backgrounds may not perform as well as those who come from more educated families” (445). This characterization is in contrast to what Collier & Morgan describe as traditional students—those whose parents attended college and are therefore “not only more familiar with higher education from listening to family members’ academic histories, but are also likely to have more appropriate approaches for dealing with teachers and other educational authorities because of parental coaching” (p. 430). In this view, FGS were lacking cultural capital and ignorant to higher education in terms of expectations, background information and the appropriate role that students ought to play in the classroom. Further, students were need of “academic integration” in order to conform to the norms of classrooms (p. 426).

Given the frequent depictions of FGS as ignorant of the college experience by academic leadership, it is not surprising that students internalize feelings of not belonging in college generally and in academic libraries specifically. Stacy Brinkman, Katie Gibson, and Jenny Presnell investigated how first-generation students’ perceptions of their own college knowledge impacted their academic information seeking behaviors and found that first-generation students perceived themselves “information-poor” in their college lives (p. 13). Students used language such as “don’t understand the
system,” and “out of the loop” to describe their perceived ignorance of university life. At the same time, FGS assumed their peers whose parents went to college had the “inside scoop.” They used language like “hidden thing I don’t know” and described how they “assumed there was a ‘system’ to learn” (p.2). Similarly, Arch & Gilman (2019) studied challenges FGS face and concluded that a “lack knowledge of how to navigate academic culture and expectations of academic life is the commonly cited challenge for first-generation students” (p.10). As these portrayals demonstrate, first-generation students—both as individuals and as a collective—are seen as outsiders and are constantly “othered” in the LIS literature analyzed in this study. Using the rhetoric of deficit-thinking gives the impression that these students do not belong in college and are ill-equipped to succeed in academia. For librarians and all staff interacting with students, reading such deficit focused sentiments in LIS research could negatively impact how librarians perceive and serve underrepresented groups such as first-generation students.

**Libraries as a Savior for FSG**

Counter to the first theme of first-generation students as ignorant, the second theme found was that LIS researchers often portray themselves using asset-based language to discuss the overwhelming number of resources that they offer for first-generation students. Krista M. Soria, Shane Nackerud, and Kate Peterson (2015) indicated that “academic libraries provide [first-generation] college students with vital access to information resources and course materials, often serving as a primary gateway to students’ acquisition of knowledge” (p. 636). Similarly, Yee (2007) wrote
first-generation student lack the practical knowledge of “how college works” and concluded that librarians “inculcate the necessary heuristic knowledge pertaining to student attitudes, roles, and expectations” (p. 259). While this is not an inherently wrong or bad sentiment, the effect is that it portrays librarians as having the all of the answers and first-generation students as reluctant users who aren’t taking advantage of the resources available. This “reluctancy” was often portrayed as a reason for FGS were not successful. Approximately 66 percent of librarian interaction-related codes used deficit-thinking to describe first-generation college students. Using phrases like “interventions targeting first-generation student” and “a reticence to engage institutional support” implies that FGS have a limited understanding that their continuing-generations peers to do not (Borelli et. al., 2019, p. 33; Parker, 2017, p. 29). Borelli et. al. (2019) is even more direct when they write, “first-generation students operate from a deficit of library-related cultural capital relative to their continuing-generation peers” (p. 32). By contrast, when describing themselves and their library services, 74 percent of codes were asset-based. Adrianna Parker (2017), a librarian at the University of Utah who created an embedded librarian program within the first-generation scholar’s program, wrote that “I taught them how to engage help from one of the biggest, most unfamiliar institutions on campus: the library” (p. 28). Some bias is expected as the researchers are studying, reflecting, and making recommendations about their own profession. However, the sharp difference in the rhetoric hints at the pervasive nature of deficit-thinking in the LIS field when describing first-generation students.
First-Generation Students as Valuable Contributors

Despite portrayals of first-generation students as having knowledge deficits and a general lack of understanding about “how college works”, some researchers have also presented findings that diverge from the usual deficit perspective on first-generation students. Unlike studies that place blame on FGS for not understanding the academic library, Xan Arch and Isaac Gilman (2019) suggest that librarians ought to make library services “student-ready,” instead of expecting first-generation students to be “college-ready” (p. 1008). They recognized that there is a stigma attached to academic help-seeking and push librarians to normalize the need for assistance in the library and with their professors. By making the need to establish help-seeking behavior a norm for all students, not merely FGS, Arch and Gilman step away from the “othering” of first-generation students. Along the same lines, librarians at Wellesley College realized that their core first-generation outreach programs had been planned with a deficit-based mentality. Their emphasis was on what they could share with Wellesley’s FGS, rather than listening to and learning from the students about how the library could change to affirm them (Barbrow et. al., 2020). The following year, the Wellesley librarians “built in more structured opportunities for library staff to learn from student participants, thereby empowering students to co-create the event itself by making the conversation more reciprocal” (p. 285). This change in programming style demonstrates a shift from programming that focuses on what first-generation students lack—deficit-based—to programming that instead prioritizes hearing about FGS lived experiences and perspectives on research and the libraries—asset-based.
During data analysis, many researchers focused on what first-generation students need to change in order to “persist” and “succeed” in college. However, some researchers also brought attention to the academic strengths that FGS already possess. Brinkman, Gibson, and Presnell reported that most first-generation students felt academically prepared for college (p. 11). When studying first-generation students’ exposure to the research process prior to college, Pickard & Logan (2012) found that FGS had developed some knowledge about search tools and evaluating sources as well as recognized the need for quality information when doing research and thus had some research experience on which librarians could build upon during college.

Other studies have identified traits that contribute to the academic success of FGS, such as self-efficacy, independence, and resilience (Borelli et. al., 2019). All these findings indicate that FGS have potential funds of knowledge related to conducting research and studying which librarians could foster and extend.

Another encouraging finding is that the use of strength-based portrayals of first-generation students extends beyond academics to include the socio-culture strengths that diverse populations, like FGS, bring with them to campus. Arch & Gilman (2019) wrote that while student services inherently privilege the dominant culture (white, middle-class, male, heteronormative), “students from outside the dominant culture possess attributes, knowledge, and experiences that should be seen as assets that will enrich their own and their peers’ academic experience” (p. 997). The researchers go on to suggest that in order for libraries to serve FGS in a productive and asset-based way, librarians ought to draw upon the diverse prior knowledge and experiences of students
when designing course content so that libraries can “engage students and affirm the value of their existing knowledge” (p. 1003). Other studies advocate for creating library spaces that affirm students’ diverse identities and their contributions to the college community (Folk, 2018). Using words like “affirm” and phrasing such as “the value of their existing knowledge” depict FSG as bringing worthy live experiences to their campuses. Rather than having librarians inculcate knowledge of campus culture, the lived experiences of first-generation students become a norm in academia. All of these findings hint at a trend in LIS to try to make the academic experience, and the library experience, more accessible to all students.
Discussion and Implications

Research on first-generation college students has increased in library and information science over the past decade, as it has in higher education research as a whole. As the data analysis showed, much of the literature on first-generation students relies on the deficit model, which ascribes achievement gaps in education to a problem on the part of individual students, rather than a failure of the educational system that is not set up to help all students succeed. The harm caused by a deficit model is evident in the language used to describe FGS. Words like “non-traditional” and “have-nots” portrays them as academic outsiders in need of fixing. Deficit-thinking often occurs with the good intention of supporting students and when introducing demographics about the first-generation community; however, it leads to problematic outcomes and oversimplifies the vast and heterogeneous first-generation experience. None of research analyzed intended to cause harm to FGS. The studies aimed to improve library experiences for students but in doing so focused almost exclusively on what these students lacked, rather than the skills they already possessed that librarians could build upon.

Historically, the deficit-perspective was used in LIS writing to describe the shifting of student demographics away from the dominant white, middle-class, male, heteronormative culture and towards a more diverse student body, of which increasing
numbers of first-generation students were a part. Then, as librarians reported on adjustments made to library services and instruction to meet the needs of FGS, deficit-thinking was used to discuss how to meet the needs of this population in a way that “othered” them from the dominant academic community. In recent years, as efforts to improve equity and access in academia shined a light on underrepresented communities, the deficit model has persisted as some LIS researcher treat first-generation students like they needed to be “saved”. As a profession, librarians have adopted language such as: at-risk, gaps, and lacking to describe entire groups of students and these terms are a manifestation of deficit thinking. In the context of first-generation students, this ignores the experiences these students had in their K-12 education and insinuates that the way academic librarians teach information literacy or help students navigate the library is superior. The cumulative effect has been a body of literature that largely focuses on what knowledge and experiences student don’t have and how they differ from continuing-generation peers.

Meanwhile, other librarians and higher education researchers have made an active effort to view first-generation students holistically and recognize the funds of knowledge FSG possess. Although the majority of LIS literature is based in deficit-thinking, there is an encouraging trend: articles published recently had more asset-based language and discussed the strengths of first-generation students than articles published in the early 2000s. 88 percent of the asset-centered codes came from the LIS articles published between 2018-2020. This seems to suggest that the there is a shift in LIS literature to go against the deficit perspective and instead utilize an asset-based
model in discussing FGS. These researchers acknowledge that FGS students are not blank slates when they arrive on campuses and emphasize what students can do with the knowledge they already possess. These researchers utilize asset-based thinking in their studies and indicate ways of working productively with first-generation students when designing services, spaces, and instruction.

**Implications for Librarians**

The first way librarians can move towards asset-based services is to adopt a critical information literacy approach to instruction. Critical information literacy (CIL) aims to understand how libraries participate in systems of oppression and find ways for librarians and students to intervene upon these systems. To do so, it examines information, libraries, and the work of librarians using critical theories. As stated by Lua Gregory and Shana Higgins, critical information literacy “takes into consideration the social, political, economic, and corporate systems that have power and influence over information production, dissemination, access, and consumption” (2013). In the context of first-generation students, CIL empowers FGS by building on existing skills, knowledge, and lived experience in order to foster social change. Librarians would ask themselves, what do we wish students knew when they started college? How can we build on their existing skills, knowledge, and experience? What oppressive systems are at play when they come into the library for instruction? The subsequent instruction would then be centered around these students’ experiences and with the goal of getting students better understanding systems of oppression while also identifying opportunities to take action upon them in the context of their instructional topic. For example, in Eamon
Tewell’s (2016) study on critical information literacy, one librarian described how they adopted critical practices by centering their instruction on student questions. This librarian wrote, “I base the class on their questions…I give them time to talk amongst themselves about what they want to know, then I ask them. I write their questions on the board and tell them I’ll base the class on these questions, and that they should ask more if they have them.” This method “shows the students I want to try to answer their questions – they are the most important” (p. 13). This is similar to what the Wellesley librarians did when they restructured their ‘speed dating’ event for first-generation students after realizing that it was based in the deficit mentality of “what first-generation students lack” and “what we could share with Wellesley’s FGS” (Barbrow et. al., 2020, p. 285). In both of these examples, the power shifts from librarian to student and the focus is on the questions and topics that FGS students find important. Critical information literacy is an asset-based approach to library instruction that uplifts FGS as people with stories to contribute, not only needs to be met.

Other ways librarians can move towards asset-based services and spaces include normalizing help-seeking and diversifying authority. During data analysis, researchers often discussed FGS reticence about getting help from librarians. They described first-generation students feeling like they should already know the answer, expressing stress around finding out the right person to ask, and feeling like they were to only ones who needed help “figuring it out”. While some researchers like Colliers & Morgan (2004) claim that, “students from a more highly educated background not only have a better ability to understand different professors’ expectations but also a better ability to adjust
their own behaviors to accommodate those differences” many other researchers suggest that all students struggle with navigating the college campus and understanding the resources available to them. Librarians can make the process for asking for help less intimidating and actively reassure students that asking questions is exactly what they are there to do.

Libraries can also diversify the authority in first-generation students’ library experiences. This “diversification” can take many forms. Some researchers have suggested creating a program of peer mentors, in both campus wide and first-generation specific programs, that can familiarize mentees with the library (Arch & Gilman, 2019). Citing Karen Neurohr’s doctoral research that studied first-generation students’ perceptions of the library as place, Arch & Gilman explained that participants’ relationships to the Library are fostered by their interactions with peers. In her dissertation Neurohr found that “seeing fellow students studying or doing academic work in the library spaces matters for first-generation students” and that “being around peers who are doing academic work supports their own behavior toward academic work” (p. 213). By creating a system of peer mentors not only are librarians decentering themselves as the sole authority on library usage, but they are also implementing an asset-based approach by recognizing that other FGS have valuable experiences that ought to be shared with younger students.

Another strategy could be to collaborate with other campus units that support first-generation students such as first-year experience programs, academic departments, or student services departments. Parker (2017) worked with a university
program that offered a cohort of support for first-generation students and fully embedding herself in the cohort that meet twice a week. Parker emphasized the value of developing personal connections with students as a whole person, rather than appearing as “an unknown authority figure” in “a series of isolated classroom visits” (p. 28). The trust that emerged from shared experiences allowed Parker to “learn critical information about our first-generation students as they began to navigate social, academic, financial, and administrative challenges at the university” and she noted that as a result of the program, she saw a significant increase in the number of FGS who wanted to meet outside of class for research consultations (p. 26). While Parker’s approach is no doubt unfeasible for many universities and libraries, there are more manageable strategies that still emphasize connecting with students and forming relations. Barbrow et. al. (2020) highlighted the small ways their library built in more structured opportunities for staff to learn from FGS so that students were empowered to co-create programs. These small changes included: surveying students ahead of time about their interests and experiences with libraries and the research process, increasing the mingling time between librarians and student to “set a more open tone and encourage conversation” and reframing the question period as a time for conversation “where students could share their thoughts and impressions” (p. 185). Smaller-scale approaches such as these can have impact by placing students at the center of instruction and services, rather than overwhelming incoming students with complex library procedures from the outset. This does not, however, mean that FGS do not have a genuinely unique needs and deserve additional support. Rather, the goal of
these asset-based approaches is to provide services and resources that address the needs of first-generation students without falsely simplifying them to their challenges.
Limitations

Although this study contributes to the growing shift in literature away from deficit thinking and towards an approach in which libraries recognize the funds of knowledge historically understudied groups like first-generation students possess, it is not without limitations. First, the scope of the data is limited. While the researcher strove to choose a purposive sample of articles that represented LIS literature over time, it is by no means complete or exhaustive. Second, the goal of this paper was to explore the use of deficit-based language by library and information science researchers when discussing first-generation students and to understand the harm it can cause to FGS and the librarians that serve them. Throughout this study, every attempt has been made to only use affirming, asset-based language to describe students. However, there are some instances that have surely been overlooked and unfortunately use deficit-based language. Not only do this show how pervasive deficit-thinking is but it also shows that the researcher, a white, middle-class, heteronormative female, has a subconscious notion of what characterizes a ‘normal’ college student.
Conclusion

The goal of this paper was to understand what first-generation college students’ portrayal in LIS literature reveals about the characterizations researchers make when attempting to identify, explain, and understand the needs of FGS. The desire to conduct this research stemmed from an understanding that as academic institutions in the United States have become increasingly diverse in the 21st century, libraries and librarians have been adapting to the changes in the student body and writing about ways they can expand access to higher education and to increase student success. One of the communities that has been given increased attention in LIS literature is first-generation college students. As of the 2015-16 academic year, 33 percent of undergraduates at public 4-year institutions nationally were first-generation college students and 59 percent of these students were also the first sibling in their family to go to college (National Center for Education Statistics, 2018). With approximately a third of all US undergraduates categorized as first-generation, it is indeed vital for universities and their libraries to understand the needs of these students and to address institutional barriers to FGS success. However, as researchers have attempted to identify, explain, and understand the needs of FGS care and attention has not always been given to how first-generation students are characterized and portrayed.
As the content analysis demonstrated, much of the LIS literature on FGS uses the language of deficit-thinking. Tendencies such as portraying FGS as different than continuing-generation peers, as ignorant to the academic and social cultures of college, and portraying libraries as the expert source for FGS needs negatively impact how librarians relate to first-generation students and design library services, instruction, and spaces for them. There are, however, positive trends as well. Recent LIS literature goes against the prevailing deficit perspective and instead utilizes an asset-based model in discussing FGS by focusing on the funds of knowledge first-generation students bring with them to campus. The portrayal of first-generation students as valuable members of the campus community is an encouraging sign that librarians recognize that while FGS certainly deserve support, they also have much to offer. As first-generation college students continue to enroll in higher education, it will be increasingly important for those who work with students – in libraries or elsewhere – to recognize the field’s historically negative assumptions in order to effectively support and encourage them throughout their college experience. This study aimed to draw attention to these tendencies of deficit-based portrayal in LIS research and to suggest ways in which practicing librarians and LIS researchers might approach FGS students in more productive, asset-based ways such as adopting critical librarianship practices, normalizing help-seeking behavior, and diversifying who can be an authority on the library. By dismantling deficit thinking and instead engaging students with an asset-based approach, academic librarians can acknowledge the unique needs of FGS without diminishing the complexities of their lives. When libraries stop seeing first-generation
students as “at-risk” and instead embrace first-generation students’ strengths and abilities, libraries can design services, spaces, and instruction that are more inclusive of all students.
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Appendix A. Documents Used in Content Analysis


Appendix B. List of Acronyms

1G: First-generation

FGS: First-generation college students

CIL: Critical information literacy

LIS: Library and Information Science

LISA: Library and Information Science Abstracts

POC: Person of color