

Review

# First-Generation College Students and Family Support: A Critical Review of Empirical Research Literature

Samantha LeBouef \* and Jodi Dworkin

Department of Family Social Science, University of Minnesota, St. Paul, MN 55108, USA; jdworkin@umn.edu

\* Correspondence: lebou006@umn.edu

**Abstract:** The majority of empirical literature on first generation college students (FGCSs) in the U.S. asserts that because their parents did not attend college, FGCSs are lacking important resources to be successful in college. However, this results in a deficit-based approach to the study of FGCSs that tends to highlight the differences between first-generation and continuing-education students. However, FGCSs possess a wealth of resources from parents and families that make them successful, and that are often ignored in research. Asset-based approaches to the study of FGCSs are becoming more frequent in the form of books, book chapters, and white papers; however, published empirical research has yet to adopt this approach. As a result, a deeper understanding of FGCSs' experiences is essential to advancing diversity and equity in higher education. To begin to address this gap, a systematic literature review of empirical studies following the PRISMA framework was conducted on first generation college students and family support; the literature was critically reviewed and future directions for the field were identified. Applying a critical, cultural, and familial lens to the study of first-generation college students will contribute to reframing the research narrative towards an asset-based narrative.



**Citation:** LeBouef, S.; Dworkin, J. First-Generation College Students and Family Support: A Critical Review of Empirical Research Literature. *Educ. Sci.* **2021**, *11*, 294. <https://doi.org/10.3390/educsci11060294>

Academic Editor: Han Reichgelt

Received: 23 April 2021

Accepted: 10 June 2021

Published: 15 June 2021

**Publisher's Note:** MDPI stays neutral with regard to jurisdictional claims in published maps and institutional affiliations.



**Copyright:** © 2021 by the authors. Licensee MDPI, Basel, Switzerland. This article is an open access article distributed under the terms and conditions of the Creative Commons Attribution (CC BY) license (<https://creativecommons.org/licenses/by/4.0/>).

**Keywords:** first generation college students; family support; PRISMA

## 1. Introduction

College can be a challenging time for any young student, but it can be especially difficult for first-generation college students (FGCSs) defined as those college students whose parents did not go to college. FGCSs must navigate the collegiate system without the knowledge of parents who have already done it. Previous research in the U.S. has found that FGCSs are more likely to come from low socioeconomic status families, to be an ethnic or racial minority, and are more likely than non-first-generation students (also known as continuing education students) to leave college without a degree [1]. Despite families of FGCSs often having limited information or experience with college, many FGCSs look to their family as their first source of both emotional (e.g., listening, encouraging, advising) and instrumental (tangible, physical, financial) support during the transition to college and throughout college. Research findings on the amount and types of support received from these relationships have been mixed; some FGCSs have reported that emotional support from family members and friends from home was one of their main reasons for not dropping out of college [2], while other research [3] found that FGCSs had less social support from family and friends than their continuing education peers.

Most research articles on FGCSs begin by highlighting the challenges that make it look like the odds are stacked against FGCSs. Even when family is recognized as a source of support and contributing to increased rates of motivation and degree completion, that is often followed with how higher education peers have different and more support. The result is that most of the empirical FGCSs literature has done an excellent job highlighting the differences between FGCSs and their continuing education peers, but using a deficit approach. As other sources of information such as books, book chapters, and research reports begin to challenge this approach, research on FGCSs needs to take a deeper dive

and explore the things that make FGCSs successful. One critical next step is conducting research on FGCSs family relationships and support. As Gofen [4] suggests, FGCSs succeed because of their family backgrounds not despite them. Whether chosen or biological, everyone comes from a family. Families are where individuals are socialized—where they learn cultural norms, customs, and beliefs. FGCSs gain their status from their family; they are the first to go to college. While a majority of the previous empirical literature and discourse may see this as a disadvantage or something that these students are lacking in the collegiate system, it should instead be viewed as a strength. A critical race perspective and theoretical models such as the Community Cultural Wealth Model [5] and Family Capital [4] are key examples of lenses that focus on the strengths families provide to their FGCSs and more specifically on the cultural wealth students of color possess. This pivot can help to build an asset-based narrative in research that will contribute to improving equity and diversity in higher education.

A deeper understanding of FGCSs experiences is undoubtedly essential to advancing diversity and equity in higher education. To begin to address this gap, the empirical literature on FGCSs and family support was critically reviewed. Specifically, the aim of this critical review was to understand how the role of family support for FGCSs has been conceptualized and operationalized in the published empirical literature and to identify gaps in the field for future research. Knowledge provided by this critical review can help social scientists and researchers in identifying potential frameworks, conceptualizations, and next steps to further the FGCSs literature in the U.S.

## 2. Search Process

The goal of this critical review was to examine the empirical literature on FGCSs in the U.S. and the support they receive from their families. This review included empirical, peer reviewed studies about FGCSs and the support they did or did not receive from family members during the transition to or during college. Family support either had to be mentioned in the study title, abstract, methods, or results/discussion sections. Book chapters, blogs, and other non-empirical sources were not included. While the authors recognize that the work in many of these non-peer-reviewed outlets take an asset-based approach to the exploration of FGCSs experiences, the goal of this review was to critically review peer-reviewed empirical research; exploring books and grey literature that appear outside of traditional academic publication outlets is an important opportunity for future work.

A systematic literature review following the PRISMA framework was conducted to ensure the inclusion of all relevant articles (see Figure 1). Databases that were searched included PsychInfo, Academic Search Premier, EducationSource, ERIC, Scopus, Social Service Abstracts, Business Source Premiere, and Google Scholar. Search terms combined three main categories; FGCSs, family relationships, and support to reveal a total of 550 articles across all sources. See Table 1 for a complete list of search terms and combinations. The abstracts and full text of the 550 articles were examined based on the inclusion criteria below resulting in the final 12 article sample. Once the 12 articles had been identified, the second author as well as two additional researchers met to evaluate the chosen articles. Articles were reviewed following the inclusion and exclusion criteria below, and approved by all four researchers.

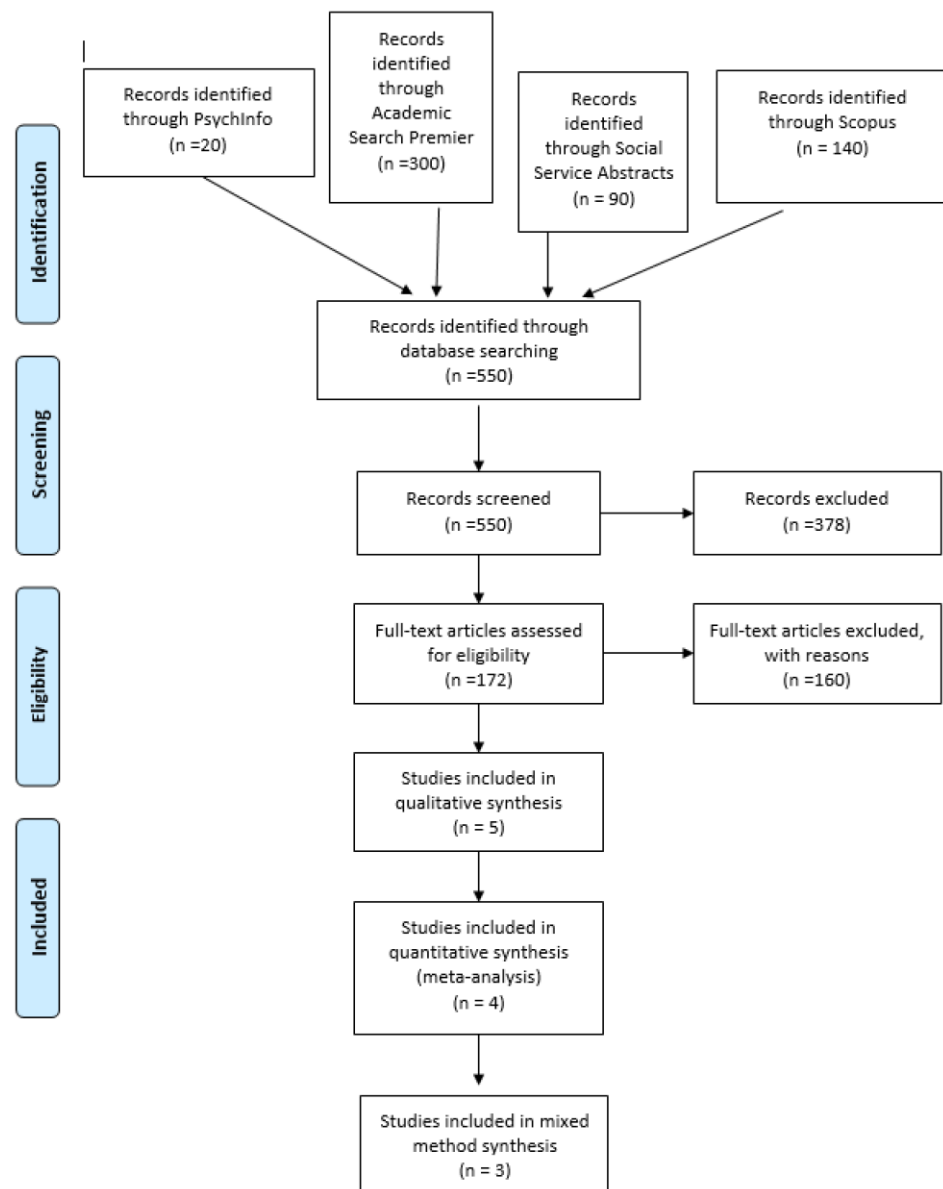


Figure 1. PRISMA Model for Article Inclusion.

Table 1. Search Terms.

Combine the Concepts with AND			
	<i>First-Generation College Students</i>	<i>Family Relationships</i>	<i>Support</i>
Combine the search terms with OR	First in family students	Family relationships (parent-child, mother, father)	Family support
	Post-secondary education	Social networks	Family inclusion
	Low income students	Social capital	Family engagement
	TRIO	Networks	Family influences
	Underrepresented students	Social connections	Social support
		Network analysis	Parental support

### 3. Inclusion and Exclusion Criteria

To be included in the critical review several criteria had to be met. First, only those studies that were conducted with students who attended four-year universities in the United States were included. Community colleges and two-year associate degree programs are generally nonresidential campuses, and the experiences of FGCSs are likely to be very different than the experiences of FGCSs at four-year universities. Limiting the geographic location to the United States ensures that the participants in these studies were experiencing some of the same challenges within the educational system. For example, students in a country that does not have student loans may have a very different experience compared to FGCSs in the United States. While institutions across the United States may have different policies and practices, limiting the government policies and systems around higher education allows researchers the ability to compare FGCSs' experiences. Additionally, the United States has a complicated and unique history of ethnic and social class divisions. Limiting the scope of the research to the United States allows us to better examine these specific impacts on FGCSs in the U.S. The researchers, however, acknowledge that there is a wealth of FG studies centered in other countries, including the UK [6]; the field would be well served by a critical review of this research as well.

Second, articles were only included if they had been published during the past 10 years (from 2010–2019) and included a sample of participants who were current students during that time frame; studies that only included college counselors or parent samples were excluded, with the expectation that the experiences of college students are best told by college students themselves. This timeframe was based on the economic recession that occurred in the United States from 2007–2009. During the 2011–2012 academic school year, 62% of undergraduate students were either first in their families to attend college or their parents had some college experience but not a bachelor's degree [7]. However, the recession increased the cost of attending college and with it came a more frequent questioning if college was "really worth it". Therefore, to obtain a more accurate sense of the current FGCS experience, the search was limited to the last ten years, after the economic recession. It is important to note the limitations of publication dates, as data are often collected, analyzed and conceptualized several years before the official publication date; focusing this review on recent literature helps ensure it reflects the most current empirical literature.

In this paper, the theoretical approaches utilized in this group of articles will be examined, followed by a review of the methods and analyses as well as a review of findings. Critiques and suggestions for future research will be integrated throughout.

### 4. Personal Interpretive Framework

In order to continue with the critical review of the existing literature, it is important to first situate both authors' personal, ontological, epistemological, and axiological beliefs to set the context for the following critique. The first author who took the lead on conceptualizing and identifying the scope of this review starts from a social constructivist interpretive framework. Keeping in line with this framework, this critique was conducted with the ontological belief that there are multiple realities and these realities are constructed through our lived experiences and interactions with others, the epistemological belief that this reality is co-constructed between the researcher and participants and is shaped by individual experiences, and the axiological belief that individual's values should be privileged [8]. When applied to this critical review of the literature, it is recognized that each FGCSs' experience of college is their own reality and is shaped by their personal lived experience, background, and identities; privilege or oppression based on race or ethnicity, class, gender, mental abilities, gender identity, and sexual preference directly impact and shape a person's experiences and realities [8].

### 5. Theory

Of the twelve articles reviewed, eight articles utilized or made mention of a theoretical framework [2,9–14] while two mentioned a specific theory in the literature review but did

not explicitly state how they applied or were guided by the theory [15,16], and the final study utilized a guiding framework [17].

### 5.1. Social and Cultural Capital Theories

Social and cultural capital theories have been widely used across the higher education literature to examine the various inequalities FGCSs face in the college environment as compared to their continuing education peers. Social capital is defined as the “networks together with shared norms, values and understandings that facilitate co-operation within or among groups” [18], p.103. Cultural capital is defined as the skills, knowledge, and attitudes of the dominant culture [19]. Applied to FGCSs, the general premise of these theories is that because the parents of FGCSs did not go to college, and the families tend to be of lower socioeconomic status, the students are unprepared for college and/or are “lacking” the support and resources that are needed for a successful college career (because college is structured by White, middle- and upper-class values and norms).

From a social capital perspective, the more capital a person has, the more successful they will be. Two of the articles specifically discussed social capital in terms of college as a form of social mobility [12,20]; however, they did so in different ways. Hinz [20] utilized cultural capital theory as a rationale for how social classes are culturally distinct while Lee and Kramer [12] focused specifically on Bourdieu’s [21] concept of Habitus, which the authors conceptualized as fluid with constantly changing characteristics. In addition, Hinz [20] attempted to replicate or expand on the class identity reformation model. Developed by Hurst [22], this model is based on the argument that college students will have to choose either their working-class identity or their new middle-class identity because the two oppose one another.

Two other articles utilized social capital theory [13,14]; however, they focused on parental support (emotional and informational) or the parent’s role during the transition to college. Interestingly, Nichols and Islas [21] conceptualized cultural capital as an enactment of social capital and operationalized this as a concerted cultivation parenting style. Although they mentioned Bourdieu, they used Lin’s [23,24] conceptualization of social capital which focuses on access to resources through network ties. They examined three forms of social capital: resources embedded in social structures, accessibility to those resources, and use of those resources. Sy et al. [14] mentioned social capital theory and used Coleman’s [25] conceptualization to link social support to social capital theory. However, they only have one sentence on this theory and no application of social capital theory to FGCSs.

### 5.2. Atheoretical

Three articles did not use a theoretical framework. The first [15] included three studies on FGCSs that were integrated into one paper and had no formal theory section. The second article [3] used the concept of academic acculturative stress to examine the idea that higher education settings have a certain middle- and upper-middle-class culture that FGCSs do not have, and the transition to this environment can create stress for FGCSs. However, the authors do not articulate a theoretical argument to support this claim. The third article [17] approached the study of family support from a communications perspective and utilized memorable messages as a guiding framework. This framework highlights the important messages that FGCSs remembered receiving from family members and provides a glimpse into family socialization processes.

### 5.3. Additional Theoretical Perspectives Applied to Family Support

The remaining six articles each used different theories to address varying topics that surround family support and FGCSs. Roksa and Kinsley [16] utilized Tinto’s [26] theory on college student departure to make the case for including family support in the college student literature. In his book, *Leaving College: Rethinking the Causes and Cures of Student Attrition* [26], Tinto identified three reasons for student departure: academic difficulties, the inability of individuals to resolve their educational and occupational goals, and failure

to become or remain immersed in the intellectual and social life of the institution. In 2006, Tinto revised his theory to integrate family support, consequently removing the expectation from the model that students need to separate from family to be successful [27]. Roksa and Kinsley [16] utilized this theory to argue that those students who integrate more fully into college and have more family support will have stronger commitments to their educational goals and the institution. These strong commitments would in turn increase students' wanting to complete their degree.

Irlbeck and colleagues [11] tested Astin's [28] involvement theory and the Input (previous circumstances; e.g., parental/family encouragement)–Environment (current experiences during college)–Outcome (satisfaction with the college and university) model to examine motivations for enrollment and students' support systems. This theory is very similar to Tinto's [26] in that both suggest that the more involved students are in college and the more support students have, the more successful they will be. School involvement, such as participating in clubs, groups, or other university activities has been linked to increased retention and better academic outcomes for FGCSs [29]. For example, RTI International [1] found that one of the main reasons for FGCSs dropping out was lacking a sense of belonging on the college campus. The finding that FGCSs often lack a sense of belonging on campus has been supported by other studies that suggest that FGCSs are less likely than their continuing education peers to be involved in campus groups and clubs such as recreation sports teams, sororities and fraternities, as well as other on-campus social clubs [30].

Covarrubias and colleagues [10] utilized cultural mismatch theory to examine family roles and two forms of independence for FGCSs. Cultural mismatch theory states that when the cultural norms of college do not match the norms of the institutions' underrepresented social groups, inequality is produced. This theory is similar to some of the tenets of cultural capital theory as well as Tinto's theory of student departure. For example, all three contend that there is a dominant culture of the academic system that FGCSs are not a part of, and this mismatch between the academic culture and students' home culture leads to disparities (such as higher dropout rates and less student engagement) for this underrepresented group.

Azmitia and colleagues [2] used Erikson's [31] lifespan theory of identity development and social identity theory [32]. Erikson proposed that young adults are in a transition period, as family, friendships, and romantic relationships begin to shift. These transitions are impacted by culture, group membership, and historical context. Social identity theory examines the portion of an individual's self-concept that is derived from their membership in a social group [33]. Azmitia and colleagues [2] utilized these theories together to highlight first generation status as a social identity and argue that college is a critical transition period in terms of shaping this identity. They further explored how this identity influenced feelings of belonging on campus and persistence to degree completion.

Finally, Covarrubias and colleagues [9] extended Piorkowski's [34] theory of survivor guilt to FGCSs by examining achievement guilt. Achievement guilt is the guilt FGCSs feel when becoming more educated than their family members; this guilt may be more salient in groups that place high value on the family. Covarrubias and colleagues [9] argued that the family context is important for the adjustment and success of FGCSs. Of the studies which used theory to inform our understanding of family support, Covarrubias et al. [9] is one of only three articles that begins to look specifically at the family context as a source of support beyond students inheriting the FGCSs label from their parents.

#### 5.4. Theory Critique

Each article in this review addresses a different issue that FGCSs face, from social mobility and achievement guilt, to family support and changing family relationships. However, the common theme among them is that the structure of the higher education system is culturally and financially different from what FGCSs or their parents have previously experienced. Despite recognizing the family as an important support system,



source of motivation, and also a source of potential stress, only three of the twelve articles integrated a theory that put family at the center of analysis.

FGCSs gain their status of first in their family to attend college from their parents. Their values, morals, and culture are also learned from their family. Therefore, it is important for researchers to place the family in a more central role when examining the experiences of FGCSs. However, the theories applied in this group of articles are not specific to college or to family systems. Tinto's model of institutional departure and Astin's Input-Environment-Outcome Model were the only theories mentioned that originated to specifically examine the college experience. While achievement guilt is applied specifically to FGCSs, it is not a formal theory but instead a concept extended from the larger survivor guilt theory. This extension of theory, however, is a model of how scholars can use theoretical perspectives and conceptual models to place FGCSs and their families at the center of research questions, and data analysis. In their article on memorable messages, Wang [17] utilized a communications framework in order to center FGCSs and their families. Wang [17] examined the important messages that FGCSs remembered receiving from family members about college and demonstrated how critical family socialization processes are for FGCSs.

Finally, a number of studies utilized social and cultural capital theories. However, a major disadvantage of using social and cultural capital theories is the wide range of ways in which social and cultural capital have been theorized, conceptualized, and applied throughout the higher education literature. These frameworks have been critiqued as being too simplistic in their explanation of inequalities between FGCSs and their continuing education peers as they ignore the structural and systemic issues of prejudice in the collegiate system [5]. A further critique is that some conceptualizations of social capital do not account for student's own resilience and agency. Applying a systemic or critical race lens in conjunction with these theories may be a first step towards understanding the family strengths and supports of FGCSs. For example, utilizing a critical race perspective, Yosso [5] critiqued the way Bourdieu's concept of cultural capital has been conceptualized in education research. While the general premise may be that the more capital a person has, the more successful they will be, Bourdieu contends that the collegiate system is ruled by White, upper-middle-class values and ideals. Yosso [5] states that "his [Bourdieu's] theory of cultural capital has been used to assert that some communities are culturally wealthy while others are culturally poor. This interpretation of Bourdieu exposes White, middle-class culture as the standard, and therefore all other forms and expressions of 'culture' are judged in comparison to this 'norm'" (p. 76).

Using this lens, students who are not White and middle class are inherently lacking in some way. To begin to create a counter narrative, Yosso [5] developed the Community Cultural Wealth model comprised of six different types of capital: aspirational, navigational, social, linguistic, familial, and resistant. This alternative approach to thinking about capital highlights the "knowledge, skills, abilities, and contacts possessed and utilized by Communities of Color to survive and resist macro- and micro-forms of oppression" (p. 77). In this model, familial capital is a form of cultural wealth defined as "those cultural knowledges nurtured among familia (kin) that carry a sense of community, history, memory, and cultural intuition" (p. 79). Utilizing a theoretical framework that is centered on the wealth students of color possess shifts the focus of research away from a deficit-based model towards research that can transform the educational system to create and sustain diversity and equity in higher education [5].

Despite articles published prior to 2010 being excluded because they were considered to not be representative of the current challenges FGCSs face given the current economic state, all the theories presented date back at least twenty years. So much has changed in the last twenty years in terms of our thinking and understanding of culture, family, diversity, and society. As the COVID-19 pandemic continues, the impacts and implications on college education are only just starting to come into view; post-2020 will perhaps be another critical area for study. For example, Jaschik [35] reported that preliminary data from The Common

App suggests that while undergraduate acceptances for the Fall 2021 semester are up at the larger competitive institutions, applications from FGCSs and fee waiver students are down, even with several big universities having waived college admission fees, as well as not requiring SAT or ACT scores. If we are committed to diversity and equity in higher education, particular attention will need to be paid to the gaps the COVID-19 pandemic has widened.

In searching for studies on family support, these twelve articles were identified as focusing on family, and all twelve used a different theory or different conceptualization of the theory. Theory is crucial to research because it guides the researcher. Once tested and proven, a theory not only helps to explain a phenomenon or behavior but also informs the researcher on what to pay attention to in future studies in terms of selection of concepts to study, use of validated measures, and expected associations. Placing FGCSs and their families at the center of theoretical consideration may provide the missing link to help unify studies so that results may be more easily compared across studies. Explicitly, this would mean, first, centering the family (and opening family to include family beyond parents, including kin). Second, an agreed upon definition of FGCSs (discussed further in the sampling critique section) is needed. Third, studies and conceptual models must be built around the contemporary higher education context, which includes an urgent need to advance diversity and equity in higher education and consider how the current pandemic may be systematically disadvantaging low income FGCSs of color.

## 6. Methods

### 6.1. Study Design

Five of the reviewed studies were qualitative [10 ( $n = 34$ ); 20 ( $n = 16$ ); 11 ( $n = 10$ ); 15; 17 ( $n = 30$ )]. Longwell-Grice et al. [15] used a collection of three separate studies that all included qualitative methods ( $n = 9$ ,  $n = 14$ ,  $n = 40$ ) for a total of seven qualitative studies.

Of the seven qualitative studies, six utilized face-to-face semistructured interviews [10,11,15,17,20]. Irlbeck et al. [11] conducted two interviews via telephone due to scheduling conflicts while study three in the Longwell-Grice [15] collection utilized focus groups and follow-up individual interviews. Qualitative approaches, when mentioned, included grounded theory [10], case studies [11], an interpretive paradigm [17], symbolic interactionism [15] (study 2), and a naturalistic constructivist paradigm [20]. One-time interviews and focus groups ranged from 30 min to three hours, with one study including two, three, or four 30–45-min interviews with participants [15] (study 2). While each type of qualitative method has its strengths and weaknesses, in general, qualitative studies can be extremely useful for research exploring an underexplored topic without established measures or a body of research to inform future work, for research designed to center participants' voices or experiences or their understanding of their experiences, or to gather rich and detailed information about a phenomenon. The utilization of case studies, focus groups, and individual interviews provides researchers with rich detail and the ability to ask participants follow-up questions to clarify their responses and researchers' understanding rather than make assumptions or reduce participants' experiences to a quantitative mean. Qualitative data has frequently been used by FGCSs researchers in order to understand FGCSs diverse and individual unique experiences.

Four studies were conducted using cross sectional quantitative methodologies [2,9,14,16] of which three conducted online surveys [2,9,14]. Roksa and Kinsley [16] utilized secondary data from the Wisconsin Financial Aid Study (WicAid). Cross-sectional data examines data at one time point, limiting the ability of researchers to be able to determine causality and the possibility of bidirectionality in relationships. However, specifically examining FGCSs family relationships using cross sectional quantitative data begins to illuminate the possible relationships between FGCSs and family support and provides important directions for future research.



## 6.2. Sampling

All studies utilized convenience sampling but approached it in different ways. Convenience sampling is a nonrandom type of sampling that is popularly utilized in the study of FGCSs due to researchers' ease of access to student samples at their own institutions; it enables researchers to collect data quickly and at a very low cost. Recruitment occurred in undergraduate psychology or other courses [2,9,10,13], through university listservs or admissions records [11,15] (Study 2), [14,17], and a FGCSs organization [20].

Though convenience sampling has its benefits, it is not without its disadvantages; samples recruited for convenience are not chosen at random. It is unlikely that a convenience sample will be representative of the population being studied and would certainly not be representative of FGCSs. This impacts the generalizability of findings. In addition, sampling from only one university further limits the generalizability of findings to other institutions. While studies in this critical review represented both public and private institutions, few studies used national samples, and the majority instead settled on convenience sampling. While it is impossible for every study to have a nationally representative sample, more attention needs to be paid to the geographic distribution of FGCSs studies. For example, only one of the 14 articles examined results from the Southern United States while the vast majority sampled from California, the Midwest, and the upper east. There are not enough studies to know if geographic location or going out of state may influence FGCS experiences; admissions processes and supports available for FGCSs certainly differ across the country. Therefore, it is important for researchers to consider the location and types of institutions sampled and the potential generalizability of study results.

Although sampling is more typically considered in quantitative research and the goal of many types of qualitative research is not to be generalizable across all populations, qualitative FGCS researchers have unique sampling challenges. FGCS researchers should pay particular attention to the limitations in their sampling to ensure sampling allows them to capture the diversity of FGCS experiences and supports research questions/aims/goals that address gaps in the literature.

## 6.3. Sample Characteristics

### 6.3.1. First Generation Status

FGCS status was defined a number of ways across these studies. Four studies defined FGCSs as students whose parents did not have a college degree [14–16,20]. Five studies defined FGCSs as those students whose parents had earned a high school diploma or less or those students with parents who did not have a 4-year college degree [10,11,13,17]. The remaining two studies defined FGCSs as the first person in one's immediate family to attend college [2,9]. However, Covarrubias et al. (2015, [9]) reported that if participants answered no to being the first person in their immediate family to go to college, students were prompted with which parent went to college, suggesting they did not include siblings in their criteria of immediate family.

Lee and Kramer [12] never refer to their sample as FGCSs. Instead, they use the term "nonelite" to describe three groups of participants; low income (family made less than \$40,000 a year and neither parent had a 4-year college degree), working class (family made above \$40,000 a year, neither parent had a 4-year degree, and parents worked blue collar jobs), and lower-middle class (income below \$80,000 and only one parent had a 4-year degree).

How studies define FGCSs is important not only to the interpretation but also to the implications of a given study. In the FGCSs literature, there is some debate among researchers on how group inclusion should be determined. Some believe the term applies to those whose parents have never gone to college while others define it as those whose parents never received a 4-year college degree. Others argue it does not apply only to parents, but to be a FGCS you must be the first person in your family (sometimes specified as immediate) to complete college. Many studies use definitions set by federal programs such as TRiO, and acceptance and eligibility for Pell Grants, both programs define FGCSs as those whose biological parents did not complete a four-year college degree. In 2018

Toutkoushian and colleagues [36] analyzed eight different definitions of FGCSs and found that, depending on the definition, the percent of FGCSs in the full sample of the Education Longitudinal Study varied from 22% to 77%. The inconsistency in definitions of FGCSs makes it difficult to compare results across studies or even know who is a FGCS. For example, in this critical review, this inconsistency means that a potential FGCS participant in the Roksa and Kinsley [16] study may not have been eligible to participate in the Hinz [20] study if their parent had an associate's degree, and would not have been eligible to participate in the Jenkins et al. [2] study if they had an older sibling who went to college. Unless research can show that these various definitions produce statistically insignificant differences and differences that do not impact the FGCSs experience, it is crucial researchers create one consistent definition of FGCSs in order to further the field of FGCSs. Additionally, one study did not define their sample as first generation and instead used the term "nonelite" even though grouping was determined by parents' education level and Pell Grant financial status [12]. Labeling a group of students as "nonelite" suggests a deficit approach and what is perhaps an unsupported distinction between groups of students. This brings to light the issue of researchers not labeling FGCS samples as such and begs the question of what the FGCS label really means.

### 6.3.2. Age and Grade Level

Only two of the seven qualitative studies provided the mean age of participants and ages ranged from 19–22 [10,17]. Participant ages for the quantitative studies ranged from 18–20, with one study not reporting participant ages [16]. None of the mixed methods studies reported the age ranges of participants. One study [13] reported the age range of all students at the university where the study was conducted as between ages 18–22.

Across the seven qualitative studies there was representation of all collegiate grade levels including first year students, sophomores, juniors, seniors, 5th year undergraduates, graduate students, and one recent college graduate. All four quantitative studies sampled undergraduate FGCSs. Two quantitative studies as well as one mixed methods study [13] specifically focused on first-time, first-year students [14,16]. The other two quantitative studies did not mention the grade level of participants. All mixed methods studies were longitudinal [2,12] with the baseline being when students were in their first year of college.

FGCSs report higher dropout rates than continuing education students after the first year and are more likely to be older students and students who are returning to school [37]. Therefore, knowing the age and grade level of study participants is essential to being able to apply findings to other FGCSs samples, and to understanding the support needs of FGCSs who are a demographically diverse group of students. For example, many studies on FGCSs tend to focus on the transition to college and the first year of college. This makes sense because FGCSs are more likely to drop out after the first year [37]. Examining what is happening during this transition and first year is a crucial first step in understanding how to increase FGCSs retention and degree completion. However, more studies are needed that explore beyond the first year of college because the college experience is undoubtedly different depending on the grade level of the student. There are also very few studies on FGCSs after degree completion and throughout their transition to work. Only one is presently known to the authors [38]. If the final years of college are mentioned, it is usually only statistics reporting graduation rates and time to degree completion. There are very few studies examining the life experiences of FGCSs after college. As the cost of tuition continues to rise, FGCSs are likely considering the costs (literal and figurative) and benefits associated with going to college. When people go to college, it is with the expectation/hope of "better" employment and so considering trajectories through college and to the post college experience is important to determining if it is "worth it" for FGCSs. Understanding more thoroughly the goals of college for FGCSs would aid in helping to develop specific supports for FGCSs both during and after college. A first step in achieving this aim is to move beyond the transition to and the first year of college and implement longitudinal studies on the entire college experience of FGCSs.

If the field of FGCSs is to move forward and improve strategies for supporting FGCSs then research needs to use an asset-based approach that does not center on the deficits of FGCSs but on the strengths. Having a deeper understanding of the assets that enable FGCSs to succeed will help universities, counselors, and families better support FGCSs not just during that critical transition to college and during the first year but also throughout college.

### 6.3.3. Race/Ethnicity and Gender

FGCSs are more likely to be racial and ethnic minorities than their continuing education peers. However, three of the qualitative studies included predominately White samples. A recent report from The U.S. Department of Education [39] found that 49% of FGCSs were White as compared to 70% of continuing education students. Black students represented 14% of FGCSs, compared to 11% of continuing education college students, and Hispanic students represented 27% of FGCSs, compared to 9% of continuing education students. This means that there are fewer White FGCSs than White continuing education students, and the majority of FGCSs are ethnic minorities; however, White FGCSs make up the majority of the FGCSs samples in the literature which is counter to advancing diversity and equity in higher education. There were two exceptions to this: one study focused specifically on Latin American men [15] (Study 3) and one study was conducted at a Hispanic serving institution [10]. Study 2 in the Longwell-Grice collection [15] and Irlbeck et al. [11] did not report demographic information on participants. In addition, only four of the seven qualitative studies reported participant gender [10,15] (Study 3, 17, 20), and of these studies, only one reported more male than female participants [15] (Study 1).

All four quantitative studies utilized both continuing education and FGCSs samples and had more female than male participants and were split on race and ethnicity with two including predominately White samples and two including predominately Latina or students of Mexican descent. Sy and colleagues [14] had an all-female sample ( $N = 339$ ); 25% were White, 49% Latina, 19% were Asian American, and 7% were other. Jenkins and colleagues [2] had  $N = 1647$  participants with  $n = 368$  being FGCSs. Of those 368 FGCSs; 70% were female, 52% were White, 15% African American, 5% Asian, 24% Hispanic, and 4% other. Covarrubias and colleagues [9] had  $N = 255$  participants and 195 were female. Covarrubias et al. [9] reported 49 participants were FGCSs but did not provide the specific gender breakdown for the FGCSs; there were 14 White FGCSs and 35 Mexican descent FGCSs. Covarrubias et al. [9] reported overall race and ethnicity as 102 Mexican-descent students (40%) and 153 White students (60%). Roksa and Kinsley [16] had  $N = 728$  participants in their sample; however, the reported statistics for gender and race were uninterpretable (a mean and standard deviation for gender and race in which they grouped together African American, Hispanic, Southeast Asian, Native American, and multicultural students). Means and standard deviations are not the appropriate statistics for reporting gender or race and ethnicity. There was no additional information outside of the table with participant demographics; therefore, the gender and race distribution of the sample could not be determined.

For the mixed methods studies, Lee and Kramer [12] did not provide any demographic information on interview participants but the quantitative data consisted of participants with the following demographics: 27.8% White, 25.7% Black, 12.2% Hispanic, 19.9% Asian, 14.4% multiracial; 59.8% female. Nichols and Islas [13] reported an interview sample of 43% male participants: 34.1% European American, 31.7% Latino/Hispanic, 29.3% Asian American/Pacific Islander, 0% African American, and 6.8% multiracial participants. Azmitia and colleagues [2] reported a primarily female sample with their 6-year study of 214 students; 79 FGCSs; 67% female; 35% White, 21% Latinx, 17% Asian Pacific Islander, 20% Black, and 4% Native. Their cross-sectional study [2] consisted of 361 FGCSs; 60% female; 48% Latinx, 19% Asian, 15% White, 10% Pacific Islander, 5% mixed, and 3% other.

Yosso [5] conceptualizes a culture of wealth by highlighting previous research that has utilized a critical race lens to center the cultures of students of color. She discusses

research that has been conducted to demonstrate the ways in which culture can nurture and empower students of color [40,41] and ways in which extended family members provide critical access to community knowledge [42,43]. For example, African American students have access to community strengths including solidarity, family traditions, and “the deeply spiritual values passed from generation to generation in most African American communities” [44], p. 123.

While it is important to study every group’s experience, the college experience of each group is markedly different, as highlighted by Yosso. For example, many FGCSs are from lower-income families and minoritized racial and ethnic groups and, as a result, may have experienced more stressful situations (e.g., discrimination) while growing up and also different barriers to higher education because of race and gender as compared to White FGCSs and their continuing education peers [2].

In order to better develop and enact change that is beneficial for students, research needs to include a representative sample of the FGCSs population. Specifically, this means that FGCSs have multiple identities other than their first-generation status, including gender and race. One way that researchers may be able to better understand the FGCSs experience is to oversample students with intersecting identities. Oversampling is the recruiting of respondents to participate in a study so that a group makes up a larger share of the sample than they do in the population. By weighting the oversampled groups in analyses, statistics reflect trends in the larger population; this approach helps ensure results are more representative while limiting the potential for bias [45]. Study 3 in Longwell-Grice et al. [15] and Covarrubias et al. [10] are examples of purposeful oversampling; Latin American men and students from a Hispanic serving institution were sampled. However, these results cannot be generalized outside their specific institutions as these institutions provide very different contexts for college students than primarily White institutions. Other researchers must also begin to recognize the intersecting identities of FGCSs as central to their research questions and interpretation of results.

While purposeful sampling is one strategy for improving research on FGCSs, it is not the only approach needed to understand the various barriers facing FGCSs. Nguyen and Nguyen [46] caution researchers against “using the FGS term as a proxy for social class or conflating it with another category of analysis not only diminishes the complicated nature of social inequality [47], it also wipes away the multiple, intricately tied paths of other categories of analysis that operate across time and space, hindering the opportunity to effectively address students’ challenges” (p. 164). For example, a White male continuing education student will face fewer barriers and challenges to his college education compared to a Latina female. Therefore, it is important researchers begin to ask more sophisticated research questions and use measures that capture the complexity of students’ experiences to understand how the intersecting identities of FGCSs impact their varied experiences.

Research participants recruited from college campuses using convenience sampling tend to include samples that are primarily White and female [48]. Consistent with this, most of the articles in this review contained more female than male participants, unless a male sample was specifically sought out. Research has shown that first generation students are not only more likely to be female [49], they are also less likely to persist to graduation [50] and more likely to experience higher levels of stress compared to their male counterparts [14]. However, none of the studies included genders other than male or female. We know gender is not binary and is instead a fluid spectrum. Studies that only include response options for sex assigned at birth (i.e., male and female) fail to recognize the experiences of transgender students. Room must be made for students to be able to report their gender identity. It is important for researchers to ensure that all populations’ experiences are being heard and examined; therefore, it is essential that research studies provide accurate and descriptive information on their research participant samples as well as consider other recruitment methods to recruit more diverse samples. FGCSs are not a homogenous group, and therefore, they should not be treated as such.

Several studies did not report or accurately report the race/ethnicity or gender of their sample. This is particularly alarming for several reasons. At its most basic level, researchers should provide enough information in their articles that others can replicate their method. If basic descriptive information on the sample is not provided or the wrong statistics are reported, resulting in confusion or uncertainty regarding participants, then it is not meeting the very base level qualifications of research. Second, if research is to inform practice, policy, or contribute to equity and diversity in higher education, it is crucial that the characteristics of the sample be accurately provided so that researchers, community leaders, universities, and policy makers know what populations the given results apply to. Journal editors and reviewers must ensure that the research that is being published and disseminated includes the essential component of participant demographics and is inclusive of all gender identities.

#### *6.4. Measures of Family Support*

Due to the broad scope of this critical review, a wide range of family supports were measured. Wang [17] examined the memorable messages FGCSs remember from parents and family about college. Sample interview questions included, "Describe a memorable message you received from a parent or parental figure about the role that a college education should play in your life" and, "Describe a memorable message you received from a parent or parental figure about the role that family should play in your life". In Study 1 and Study 2 in the Longwell-Grice et al. [15] collection, participants were specifically asked about the FGCS experience and changes to family relationships. For example, in Study 1, participants were asked, "Can you describe how being the first in your family to go to college has changed your relationship with your parents and siblings?"; while in Study 2, participants were encouraged to tell the researcher about their family and describe what it is like being the first person in their family to attend college. Hinz [20] asked participants to "give a holistic view of their undergraduate experiences including family issues". Although Study 3 in the Longwell-Grice et al. [15] collection of articles did not provide sample questions related to family, the nature of semi-structured focus groups and individual follow-up interviews is such that not all interview questions are set ahead of time and come up as topics emerge. Therefore, it is likely that the topic of family emerged naturally from the conversations and data.

Three of the four quantitative studies examined a range of parental supports, including emotional, informational, financial, and perceived social support. Sy and colleagues [14] examined parent emotional and informational support. Parent emotional support was defined as the degree to which parents understand their child's college experience. It was measured with five items ( $\alpha = 0.82$ ) with an example question being, "My parents understand what I will need to succeed in college". Parent informational support was defined as the help or guidance a parent provides with college decisions and preparations for college. It was measured with seven items ( $\alpha = 0.85$ ) that asked how much help the participant received from either of their parents in preparation for college. Example items included learning about college requirements, searching for a college, and preparing college applications. Roksa and Kinsley [16] also examined family emotional support, but they used a single item measured on a 5-point Likert-type scale which asked participants to rate "the extent of emotional support they received from family since the start of the academic year". In addition, Roksa and Kinsley [16] examined parent financial support using three items on a 5-point Likert-type scale ( $\alpha = 0.87$ ) that asked participants to "rate the amount of financial support they received for college tuition and fees, rent or college housing costs, and books, a computer, or other supplies for college". Jenkins and colleagues [2] examined perceived (subjective) social support using the Multidimensional Scale of Perceived Social Support (MSPSS). The MSPSS contains 12 items separated into three subscales (friends, family, significant others) measured on a 7-point Likert-type scale ( $\alpha = 0.92$  for the FGCSs family subscale). A sample question includes, "I can talk about my problems with my family".



Finally, Covarrubias and colleagues [9] examined family achievement guilt. Family achievement guilt was measured with 3 items adapted from the Interpersonal Guilt Questionnaire (IGQ) using a 4-point Likert-type scale ( $\alpha = 0.70$  for FGCSs). Questions included, “I conceal or minimize my academic success around my siblings or parents”, “I feel uncomfortable if I am more successful than my siblings or parents”, and “I feel uncomfortable because I have more academic opportunities than my siblings or parents”.

Due to the many different types of support that parents and family members can provide their students, as well as the many ways to measure these types of support, it is difficult to summarize exactly where the FGCS literature stands on family support for FGCSs. Support from family can be emotional (e.g., listening, encouraging, advising) or instrumental (tangible, physical, financial). Individuals, however, determine subjectively and based on individual perception if the support they are receiving is the type of support they need. Things become even more challenging when you consider capital. There is a body of FGCS literature that conceptualizes familial support as different types of capital; either social, cultural, human, or familial capital. However, even this literature is divided, with conceptualizations of these terms varying greatly. In addition, most of these scales and questions pertained to support from parents. Researchers could begin to examine in a more nuanced way the support families provide from previously identified categories of support (such as emotional versus functional). In addition, in order to take an asset-based approach, researchers should also utilize measures that include potential supports from all family members (not just parents but including kin and chosen family) that are culturally relevant and relevant to diverse family systems.

## 7. Analysis

### 7.1. Qualitative

Depending on the research questions/aims and approach taken by the researchers, data analysis of qualitative interviews and focus groups can vary. Of the seven articles that used qualitative methodologies, two reported using grounded theory [10,11], and Hinz [20] reported specifically using a constructivist approach to grounded theory. Grounded theory is a widely used method for qualitative analysis and enables researchers to develop theory from the data itself using a specific coding method that includes open coding, axial coding, and selective coding. Study 2 in the Longwell-Grice et al. [15] collection of articles utilized a symbolic interactionism approach recognizing that participants make meaning of their experiences through interactions.

Wang [17] conducted a thematic analysis and followed Owen’s [51] method of theme interpretation. Thematic analysis is a coding method that allows for the identification and analysis of themes within qualitative data. It requires a detailed record of the coding and interpretation process in order to ensure quality and trustworthiness of results.

#### 7.1.1. Critique

Qualitative methods can provide rich and insightful data into the lives and perspectives of FGCSs. Qualitative methods allow researchers the ability to get at the deeper meanings and realities of what family support means to FGCSs and to their lived experience. While the majority of the extant FGCS literature is either partially or fully qualitative, only three of the seven qualitative articles provided thorough and detailed information regarding coding processes or the identification of paradigms of biases. Accurate and transparent reporting of these processes are essential not only to the validation of the qualitative methodology and data but also to the continuation and extension of the FGCSs literature.

#### 7.1.2. Reflexivity

No one person is free from bias; therefore, the transparent declaration of these biases by researchers can aid in the validity of study findings. Statements of reflexivity are important in that they help reviewers, stakeholders, and other readers understand the context of the study (research questions, motivations, choice of participants) and help ensure that

the researcher has addressed or considered how their background and own biases may have impacted the study and/or findings. Though not a FGCS herself, Wang [17] provides a detailed description of being an outside member as well as her process for checking results and creating the interview protocol. Covarrubias et al. [10] provide a similar paragraph disclosing her FGCS status and how her personal background and experiences influenced interview questions. Hinz [20] disclosed that her association with the university may have influenced her interpretation of results and that because she was not a FGCS herself, she felt “as if (she) were standing on the periphery of their experience, looking in” (p. 290). Irlbeck et al. [11] included a sentence stating that the researcher established and monitored bias throughout the research process. However, Irlbeck and colleagues [11] did not describe what the potential bias was, which researcher reported their bias, or how bias was monitored throughout the research project. None of the studies in the Longwell-Grice [15] collection included reflexivity statements.

### 7.1.3. Credibility and Transferability

While not bound by formulas and numbers like quantitative data, there are still systematic methodological and analytic processes qualitative researchers can follow to ensure their data, findings, and implications are as credible as quantitative methodologies [52]. Clear and transparent reporting of methods used to determine themes, oftentimes known as audit trails [53] can help in establishing the trustworthiness of findings and of the researcher. Irlbeck et al. [11] reported using audit trails as well as creating thick descriptions of the data in the transcripts and field notes.

Hinz [24], Longwell-Grice (2016, [15]; study 2 and study 3), and Wang [17] utilized member checking to establish the validity of findings. In member checking, the researcher brings the findings back to the participants and allows them to determine if the results accurately reflect or match their experiences [53]. Covarrubias et al. [10] utilized multiple researchers to strengthen validity through analyst triangulation.

Two other methods that were utilized to improve the credibility and validity of results were negative case analysis and prolonged engagement. In negative case analysis, researchers go back through the data looking for information that disconfirms results and ensures that these negative cases do not outweigh the support for a theme [53]. Prolonged engagement or working with people for an extended period of time was utilized by Hinz [20] when they attended a weekly FGCSs group throughout the semester. This prolonged engagement with participants increases validity of the findings by not only developing rapport with participants but also allowing time for researchers to examine the phenomenon. Hinz [20] used extended engagement as a tool to overcome her outsider perspective.

## 7.2. Quantitative

The four quantitative studies used a variety of statistical methods/techniques to compare the means of variables of interest between groups. More specifically, as previously mentioned, all quantitative studies in this collection included both first-generation and continuing-generation college student samples, so it is no surprise these methods were chosen for analysis. For example, one study used *t*-tests to test for differences between family achievement guilt by generation status while another utilized MANOVAS to test for differences in mental health (depressive symptoms and life satisfaction) by generation status and gender.

The remaining six studies utilized a variety of association analyses; correlations were conducted as preliminary analyses. Multiple linear hierarchical regressions were used to test hypotheses such as, “at higher levels of family achievement guilt FGCSs will report significantly more depressive symptoms than non-FGCSs and Mexican descent students will report significantly more depressive symptoms than White students” [9], p. 2033. Logistic regression was used to examine the influence of family emotional and financial support on academic outcomes such as grades, credit accumulation, and persistence.

### Critique

The quantitative methods used in the four articles were appropriate to answer the desired research questions or test the presented hypotheses. Due to the cross-sectional nature, more sophisticated techniques could not be used. Testing the differences between continuing education students and FGCSs adds to the literature by continuing to find and bring attention to the factors that may prevent FGCSs from succeeding at the same rates as their continuing-education peers. Further dissecting those differences by race, ethnicity, and gender are important in understanding how intersecting identities are interacting with collegiate systems. In order to move past identifying factors that differentiate FGCSs from their continuing education peers and towards exploring the different pathways through college for FGCSs, more asset-based cross-sectional studies as well as longitudinal studies are needed. Longitudinal data would provide an opportunity to examine students' experiences at various points during their college career and after college to determine if the benefits of college outweigh the potential costs. This would aid in the identification of key intervention points and in identifying what factors matter more than others for student success.

In addition, there has been an ongoing debate about the relevance of reflexivity in quantitative studies. Reflexivity involves the researcher reflecting on their own personal roles within a given study, examining their biases and motivations; reflexivity is common in qualitative research. While none of the quantitative studies reviewed included reflexivity statements, some researchers have argued that as quantitative data moves from a positivist to interpretive paradigm, reflexivity may be helpful in shedding light on potential biases in quantitative data. Some examples of reflexivity in quantitative studies are the triangulation of results from multiple reporters and statements related to the manner of data existence [54]. Interpretive quantitative research studies with reflexive methods can help to make results "more meaningful, more understandable and more applicable (from a policy standpoint) than those achieved through conventional positivist approaches (p. 453)" [54].

### 7.3. Mixed Methods

The three mixed methods studies included both qualitative and quantitative methodologies. Similar to the quantitative studies in this collection, the three mixed-methods studies utilized correlations, frequencies, *t*-tests, regressions, and ANOVAs. Unlike the qualitative studies, however, only one mixed methods study included an articulation of their coding method. Following Lareau's [55] parenting typology for deductive and open coding, Nichols and Islas [13] utilized deductive content analysis.

### Critique

Despite two of the three mixed-methods studies using large longitudinal datasets, quantitative analyses were relatively simple and qualitative results seemed to be the main focus of the studies. In these studies, the quantitative data were used mainly to identify differences between FGCSs and continuing education students, reinforcing the deficit approach so often taken in FGCSs studies. Even with a main qualitative focus, two of the three studies provided little to no information related to coding procedures. It is crucial for researchers to report exactly how results are extrapolated from interview data as previously mentioned in order to establish credibility. None of the three mixed methods studies discussed how credibility, transferability, confirmability, or dependability of results were maintained.

Mixed-methods studies can be particularly useful by ensuring study findings are grounded in participants' experiences [56]. The use of large longitudinal datasets presents researchers with the ability to conduct more advanced analyses and ask different types of research questions. However, mixed-methods studies often require an interdisciplinary team and are more time intensive compared to quantitative or qualitative studies alone. Additionally, no research is free of ethical considerations and research biases. Although most frequently used in qualitative studies, reflexivity was not mentioned in any of the mixed methods studies. Walker et al. [57]

suggests the use of reflexive diaries specifically in mixed-methods studies as a way to document researcher biases as well as maintain credibility.

## 8. Findings

This critical review revealed several gaps in the published empirical literature on FGCSs that, if addressed, would greatly improve the research being conducted on the FGCS experience. This research can in turn inform institution and policy changes that assist in the success of all FGCSs. Research must move beyond a deficit-based approach, develop a consistent definition of FGCSs, place the family at the center of analysis, apply a critical race perspective, and examine not only the transition to college and the first year but the entire college experience as well as the transition to career.

The majority of the literature on FGCSs examined in this review uses a deficit model, assuming that because parents did not attend college, FGCSs are inherently lacking or missing something important. In contrast to this perspective, findings from this collection of articles revealed that FGCSs simply look different than their continuing education peers. FGCSs reported significantly higher levels of family achievement guilt [9], higher levels of PTSD and depressive symptoms [2,9], less effective social support from family and friends [2,14] perceived less emotional and informational parental support [14], and benefited less from family financial support (Roksa & Kinsley, 2019, [16]). However, just focusing on what students are missing does not contribute to solutions. Researchers, academics, practitioners, and policy makers could benefit from understanding the strengths that make FGCSs successful, including how the intersecting identities of FGCSs give students the skills and strengths to be successful. For example, FGCSs described surmounting numerous challenges and results of several studies demonstrated their resilience, persistence, self-reliance, and independence. Clegg [58] suggests that in order to transform the education system and support students of color, “we need curriculum, pedagogies and approaches that go beyond neoliberal aspirations towards mobility and employability and towards a recovery of the values of critical pedagogy found in feminist and critical race theories” (p. 94).

Parents are undoubtedly a source of support for college students and are often strong motivators for FGCSs to want to attend college. FGCSs described family as one of the most important support systems in deciding to enroll and persist in college; family emotional support has been found to be beneficial in terms of academic outcomes, psychological well-being, and student engagement. Nichols and Islas [13] described family emotional support as what pushes FGCSs through college. Researchers should consider the family as the place to start, focusing on family as a source of resilience and strength. By reframing the dominant narrative (that families of FGCSs are not equipped to provide support), research can better contribute to the success of FGCSs. For example, just because the parents of FGCSs did not attend college does not mean that they do not value a college education. It is possible that parents could not afford college, or simply chose a different path in life that did not require a four-year degree but still hold a college education as important for their child. Theories specifically designed for exploring family and the college experiences in today’s world are essential to understanding how we can improve satisfaction with and sense of belonging during the college experience, and ultimately rates of degree completion.

However, there is evidence that for some FGCSs, relationships with parents are not always supportive [59]; FGCSs may also feel unsupported by friends and family back home because of social mobility, cultural transitions, and feeling like being part of two separate worlds that are often conflicting. Thus, when considering the family, it is imperative that researchers not only consider parents and siblings as sources of support for FGCSs but also include extended and chosen family as potential sources of familial support. In a recent study, Capannola and Johnson [60] interviewed eight FGCSs and explored their family experiences as they transitioned to and navigated college. Capannola and Johnson [60] found that students talked about their parents, siblings, and extended families as important sources of support (both financial and emotional). When FGCSs find support outside

immediate family, this demonstrates resilience, perseverance, and self-determination in finding the support they need to achieve their dreams.

A challenge and perhaps the greatest weakness of the FGCS literature is the lack of a universal definition of who is considered a FGCS in the United States. As demonstrated in this critical review of 12 articles, the same students would not qualify as a FGCSs for all 12 studies. Determining who is a FGCS will help bring the literature together and allow results to become more representative of the FGCS population. Standardizing a definition of FGCS would also create space for recognizing the different pathways students will take through college.

Previous literature shows that the first year is critical for FGCSs. For example, if FGCSs are going to drop out they tend to do so after the first year [37]. However, researchers need to look past the over studied first year and the transition to college and examine the entire college experience as well as the transition from college to career. From a methodological standpoint, a longer time period of study would allow researchers the ability to detect not only individual- but also group-level changes in experience and trajectory throughout college. The challenges and struggles FGCSs face likely do not end after the first year; there could be other opportunities for university and policy improvement that are not detected in examining the first-year experience alone.

Despite the anticipated benefits of a college education, research is mixed as to whether FGCSs benefit from the degree as much as their continuing education peers. For example, a primary benefit of a college degree is access to higher paying jobs and more employment opportunities. Some studies find no differences in the income or employment rates of continuing-generation and first-generation students [61,62] whereas others find that FGCSs actually have lower levels of income and employment upon college graduation as compared to their continuing education peers [63,64]. In fact, Manzoni and Streib [65] found that 10 years after graduation, FGCSs were still earning less than their continuing education peers. It may be that FGCSs need continued support or mentoring after college around job possibilities, the job application process, and negotiating salary. Lower earnings after graduation could also be confounded by gender and race, as women and people of color tend to be less likely to negotiate salary or other benefits [66], further highlighting the need for research to pay particular attention to the intersecting identities of FGCSs. If research fails to address the post-college trajectories for diverse students, it will be much harder to articulate the real costs and benefits of college for diverse students—and ultimately harder to diversify college campuses.

## 9. Conclusions

Whether they are a source of stress or support, families of FGCSs play a critical role in their enrollment, completion, success, and well-being during college. Therefore, a major shift in the FGCS literature should be toward understanding the role of family in supporting college student success. The current critical review highlights a number of ways in which family can be considered theoretically and methodologically in future research.

Still, this critical review is not without its limitations. In searching such a broad topic as family support, strict inclusion and exclusion criteria were set that may have resulted in missed articles. As more FGCSs enroll in college, this field should continue to expand, providing institutions and families with critical information to make sure every student is successful. Although FGCSs may not have the same resources as continuing education students, that does not mean they are arriving at college with nothing. By exploring the family support of FGCSs, we can gain a better understanding of the specific resources that FGCSs bring with them to college and take a strengths-based approach to FGCSs' success. The articles presented in this critical review of the literature suggest that the road to college completion involves more than academic and financial support and that peer and family relationships play a critical role in college retention and success.



**Author Contributions:** Conceptualization, S.L.; Methodology, S.L.; Writing—Original Draft Preparation, S.L.; Writing—Review & Editing, J.D.; Supervision, J.D. Both authors have read and agreed to the published version of the manuscript.

**Funding:** This research received no external funding.

**Data Availability Statement:** Not applicable.

**Conflicts of Interest:** The authors declare no conflict of interest.

## References

- RTI International. *First-Generation College Students: Demographic Characteristics and Postsecondary Enrollment*; NASPA: Washington, DC, USA, 2019; Available online: <https://firstgen.naspa.org/files/dmfile/FactSheet-01.pdf> (accessed on 23 April 2021).
- Azmitia, M.; Sumabat-Estrada, G.; Cheong, Y.; Covarrubias, R. “Dropping out is not an option”: How educationally resilient first-generation students see the future. *New Dir. Child Adolesc. Dev.* **2018**, *2018*, 89–100. [[CrossRef](#)]
- Jenkins, S.R.; Belanger, A.; Connally, M.L.; Boals, A.; Durón, K.M. First-generation undergraduate students’ social support, depression, and life satisfaction. *J. Coll. Couns.* **2013**, *16*, 129–142. [[CrossRef](#)]
- Gofen, A. Family capital: How first-generation higher education students break the intergenerational cycle. *Fam. Relat.* **2009**, *58*, 104–120. [[CrossRef](#)]
- Yosso, T.J. Whose culture has capital? A critical race theory discussion of community cultural wealth. *Race Ethn. Educ.* **2005**, *8*, 69–91. [[CrossRef](#)]
- Spiegler, T.; Bednarek, A. First-generation students: What we ask, what we know and what it means: An international review of the state of research. *Int. Stud. Sociol. Educ.* **2013**, *23*, 318–337. [[CrossRef](#)]
- Cataldi, E.F.; Bennett, C.T.; Chen, X. *First-Generation Students: College Access, Persistence, and Postbachelor’s Outcomes*; Stats in Brief. NCES 2018-421; National Center for Education Statistics: Washington, DC, USA, 2018. Available online: <https://nces.ed.gov/pubsearch/pubsinfo.asp?pubid=2018421> (accessed on 23 April 2021).
- Creswell, J.W.; Poth, C.N. *Qualitative Inquiry and Research Design: Choosing among Five Approaches*; Sage Publications: Thousand Oaks, CA, USA, 2016.
- Covarrubias, R.; Romero, A.; Trivelli, M. Family achievement guilt and mental well-being of college students. *J. Child Fam. Stud.* **2015**, *24*, 2031–2037. [[CrossRef](#)]
- Covarrubias, R.; Valle, I.; Laiduc, G.; Azmitia, M. “You never become fully independent”: Family roles and independence in first-generation college students. *J. Adolesc. Res.* **2018**, *34*, 381–410. [[CrossRef](#)]
- Irlbeck, E.; Adams, S.; Akers, C.; Burriss, S.; Jones, S. First generation college students: Motivations and support systems. *J. Agric. Educ.* **2014**, *55*, 154–166. [[CrossRef](#)]
- Lee, E.M.; Kramer, R. Out with the old, in with the new? Habitus and social mobility at selective colleges. *Sociol. Educ.* **2013**, *86*, 18–35. [[CrossRef](#)]
- Nichols, L.; Islas, A. Pushing and pulling emerging adults through college: College generational status and the influence of parents and others in the first year. *J. Adolesc. Res.* **2016**, *31*, 59–95. [[CrossRef](#)]
- Sy, S.R.; Fong, K.; Carter, R.; Boehme, J.; Alpert, A. Parent support and stress among first-generation and continuing-generation female students during the transition to college. *J. Coll. Stud. Retent. Res. Theory Pract.* **2011**, *13*, 383–398. [[CrossRef](#)]
- Longwell-Grice, R.; Adsitt, N.Z.; Mullins, K.; Serrata, W. The first ones: Three studies on first-generation college students. *NACADA J.* **2016**, *36*, 34–46. [[CrossRef](#)]
- Roksa, J.; Kinsley, P. The role of family support in facilitating academic success of low-income students. *Res. High. Educ.* **2019**, *60*, 415–436. [[CrossRef](#)]
- Wang, T.R. “I’m the only person from where I’m from to go to college”: Understanding the memorable messages first-generation college students receive from parents. *J. Fam. Commun.* **2014**, *14*, 270–290. [[CrossRef](#)]
- Keeley, B. *Human Capital: How What You Know Shapes Your Life*; OECD Publishing: Paris, France, 2007.
- Sullivan, A. Cultural capital, cultural knowledge and ability. *Sociol. Res. Online* **2008**, *12*, 91–104. [[CrossRef](#)]
- Hinz, S.E. Upwardly mobile: Attitudes toward the class transition among first-generation college students. *J. Coll. Stud. Dev.* **2016**, *57*, 285–299. [[CrossRef](#)]
- Bourdieu, P. The forms of capital. In *Handbook of Theory and Research for the Sociology of Education*; Richardson, J.G., Ed.; Greenwood Press: Westport, CT, USA, 1986; pp. 241–258.
- Hurst, A.L. *The Burden of Academic Success: Loyalists, Renegades, and Double Agents*; Lexington Books: Lexington, KY, USA, 2010.
- Lin, N. Building a network theory of social capital. In *Social Capital: Theory and Research*; Lin, N., Cook, K., Burt, R.S., Eds.; Routledge: Oxfordshire, UK, 2001; pp. 3–30.
- Lin, N. *Social Capital: A Theory of Social Structure and Action*; Cambridge University Press: Cambridge, UK, 2002.
- Coleman, J.S. Social capital in the creation of human capital. *Am. J. Sociol.* **1988**, *94*, S95–S120. [[CrossRef](#)]
- Tinto, V. *Leaving College: Rethinking the Causes and Cures of Student Attrition*; University of Chicago Press: Chicago, IL, USA, 1987.
- Tinto, V. Research and practice of student retention: What next? *J. Coll. Stud. Retent. Res. Theory Pract.* **2006**, *8*, 1–19. [[CrossRef](#)]

28. Astin, A.W. *Assessment for Excellence: The Philosophy and Practice of Assessment and Evaluation in Higher Education*; Macmillan Publishing Company: Basingstoke, UK, 1993.
29. Pike, G.R.; Kuh, G.D. First-and second-generation college students: A comparison of their engagement and intellectual development. *J. High. Educ.* **2005**, *76*, 276–300. [CrossRef]
30. Gibbons, M.M.; Shoffner, M.F. Prospective first-generation college students: Meeting their needs through social cognitive career theory. *Prof. School Couns.* **2004**, *8*, 91–97.
31. Erikson, E.H. *Identity: Youth and Crisis*; W. W. Norton & Company: New, York, NY, USA, 1968.
32. Tajfel, H. Individuals and groups in social psychology. *Br. J. Soc. Clin. Psychol.* **1979**, *18*, 183–190. [CrossRef]
33. Tajfel, H.; Turner, J.C. The social identity theory of intergroup behavior. In *Political Psychology: Key Readings in Social Psychology*; Jost, J.T., Sidanius, J., Eds.; Psychology Press: New York, NY, USA, 2004; pp. 276–293.
34. Piorkowski, G. Survivor guild in the university setting. *Pers. Guid. J.* **1983**, *61*, 620–622. [CrossRef]
35. Jaschik, J. The Full Story on Admissions. Inside Higher Ed. Available online: <https://www.insidehighered.com/admissions/article/2021/02/01/full-story-admissions-isnt-just-what-youve-been-reading> (accessed on 1 February 2021).
36. Toutkoushian, R.K.; Stollberg, R.A.; Slaton, K.A. Talking 'Bout my generation: Defining “first-generation college students” in higher education research. *Teach. Coll. Rec.* **2018**, *120*, n4.
37. Choy, S. *Students Whose Parents Did Not Go to College: Postsecondary Access, Persistence, and Attainment*; (NCES 2001-126); U.S. Department of Education, National Center for Education Statistics, U.S. Government Printing Office: Washington, DC, USA, 2001. Available online: <https://nces.ed.gov/pubs2001/2001126.pdf> (accessed on 23 April 2021).
38. Olson, J. “Chasing a passion”: First-generation college graduates at work. *Educ. Train.* **2016**, *58*, 358–371. [CrossRef]
39. Redford, J.; Hoyer, K.M. *First-Generation and Continuing-Generation College Students: A Comparison of High School and Postsecondary Experiences*; (NCES 2018-009); U.S. Department of Education, National Center for Education Statistics: Washington, DC, USA, 2017. Available online: <https://nces.ed.gov/pubs2018/2018009.pdf> (accessed on 23 April 2021).
40. Bernal, D.D. Learning and living pedagogies of the home: The mestiza consciousness of Chicana students. *Int. J. Qual. Stud. Educ.* **2001**, *14*, 623–639. [CrossRef]
41. Delgado-Gaitan, C. *The Power of Community: Mobilizing for Family and Schooling*; Rowman & Littlefield Publishers: Lanham, MD, USA, 2001.
42. González, N.; Moll, L.C. Cruzando el puente: Building bridges to funds of knowledge. *Educ. Policy* **2002**, *16*, 623–641. [CrossRef]
43. Gonzalez, N.; Moll, L.C.; Tenery, M.F.; Rivera, A.; Rendon, P.; Gonzales, R.; Amanti, C. Funds of knowledge for teaching in Latino households. *Urban Educ.* **1995**, *29*, 443–470. [CrossRef]
44. Foley, D.E. Deficit thinking models based on culture: The anthropological protest. In *The Evolution of Deficit Thinking: Educational Thought and Practice*; Valencia, R.R., Ed.; The Palmer Press: Bristol, PA, USA, 1997; pp. 113–131.
45. Mercer, A. *Oversampling Is Used to Study Small Groups, Not Bias Poll Results*; Pew Research Center: Washington, DC, USA, 2016. Available online: <https://www.pewresearch.org/fact-tank/2016/10/25/oversampling-is-used-to-study-small-groups-not-bias-poll-results/> (accessed on 23 April 2021).
46. Nguyen, T.H.; Nguyen, B.M.D. Is the “first-generation student” term useful for understanding inequality? The role of intersectionality in illuminating the implications of an accepted—Yet unchallenged—Term. *Rev. Res. Educ.* **2018**, *42*, 146–176. [CrossRef]
47. Wildhagen, T. “Not your typical student”: The social construction of the “first-generation” college student. *Qual. Sociol.* **2015**, *38*, 285–303. [CrossRef]
48. Henrich, J.; Heine, S.J.; Norenzayan, A. The weirdest people in the world? *Behav. Brain Sci.* **2010**, *33*, 61–83. [CrossRef]
49. Chen, X. *First-Generation Students in Postsecondary Education: A Look at Their College Transcripts*; National Center for Education Statistics: Washington, DC, USA, 2005. Available online: <https://files.eric.ed.gov/fulltext/ED485756.pdf> (accessed on 23 April 2021).
50. Lohfink, M.M.; Paulsen, M.B. Comparing the determinants of persistence for first-generation and continuing-generation students. *J. Coll. Stud. Dev.* **2005**, *46*, 409–428. [CrossRef]
51. Owen, W.F. Interpretive themes in relational communication. *Q. J. Speech* **1984**, *70*, 274–287. [CrossRef]
52. Patton, M.Q. Enhancing the quality and credibility of qualitative analysis. *Health Serv. Res.* **1999**, *34*, 1189–1208.
53. Creswell, J.W.; Miller, D.L. Determining validity in qualitative inquiry. *Theory Pract.* **2000**, *39*, 124–130. [CrossRef]
54. Babones, S. Interpretive quantitative methods for the social sciences. *Sociology* **2016**, *50*, 453–469. [CrossRef]
55. Lareau, A. *Unequal Childhoods: Class, Race, and Family Life*, 2nd ed.; University of California Press: Berkeley, CA, USA, 2011.
56. Wisdom, J.; Creswell, J.W. *Mixed Methods: Integrating Quantitative and Qualitative Data Collection and Analysis While Studying Patient-Centered Medical Home Models*; No. 13-0028-EF; Agency for Healthcare Research and Quality: Rockville, MD, USA, 2013; Volume 13, pp. 1–5.
57. Walker, S.; Read, S.; Priest, H. Use of reflexivity in a mixed-methods study. *Nurse Res.* **2013**, *20*, 38–43. [CrossRef] [PubMed]
58. Clegg, S. Cultural capital and agency: Connecting critique and curriculum in higher education. *Br. J. Sociol. Educ.* **2011**, *32*, 93–108. [CrossRef]
59. London, H.B. Breaking away: A study of first-generation college students and their families. *Am. J. Educ.* **1989**, *97*, 144–170. [CrossRef]

60. Capannola, A.L.; Johnson, E.I. On being the first: The role of family in the experiences of first-generation college students. *J. Adolesc. Res.* **2020**. [[CrossRef](#)]
61. Pfeffer, F.; Hertel, F. How has educational expansion shaped social mobility trends in the United States? *Soc. Forces* **2015**, *94*, 143–180. [[CrossRef](#)]
62. Torche, F. Is a college degree still the great equalizer? Intergenerational mobility across levels of schooling in the United States. *Am. J. Sociol.* **2011**, *117*, 763–807. [[CrossRef](#)]
63. Witteveen, D.; Attewell, P. Family background and earnings inequality among college graduates. *Soc. Forces* **2017**, *95*, 1539–1576. [[CrossRef](#)]
64. Zhou, X. Equalization or selection? Reassessing the “meritocratic power” of a college degree in intergenerational income mobility. *Am. Sociol. Rev.* **2019**, *84*, 459–485. [[CrossRef](#)]
65. Manzoni, A.; Streib, J. The equalizing power of a college degree for first-generation college students: Disparities across institutions, majors, and achievement levels. *Res. High. Educ.* **2019**, *60*, 577–605. [[CrossRef](#)]
66. Bowles, H.R.; Babcock, L. How can women escape the compensation negotiation dilemma? Relational accounts are one answer. *Psychol. Women Q.* **2013**, *37*, 80–96. [[CrossRef](#)]