



Integrated Theoretical Frameworks: Understanding College-Going Culture

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Abstract

College-going culture has been studied using a variety of theoretical frameworks including social capital, funds of knowledge, community cultural wealth and social capital career theories. This article explores the effectiveness of an integrated framework approach in the research of college-going culture for first-generation college students. The research question explored was: “How did first-generation students attending an HSI experience the phenomenon of college-going culture in their high schools and communities?” The authors demonstrate that a synthesized framework provides a more holistic structure for understanding the outcomes of a case study than any single theory could provide.

Subject Areas

Education

Keywords

College-Going Culture, Theoretical Frameworks, First-Generation Students

1. Introduction

College-going culture is described as the development of individual college aspirations, alongside the complementary provision of support to prepare students for college application, enrollment, and success [1] [2]. The purpose of the first author’s dissertation [3] was to explore the ways in which first-generation college students, or those with neither parent having a four-year degree, experienced college-going culture in their high schools and communities. The research question was, “How did first-generation students attending an HSI experience the phenomenon of college-going culture in their high schools and com-

munities?”

Previous research has shown the importance of factors such as capital, secondary school environment, and family to the college-going experience [4] [5] [6]; the first author’s study [3] builds on that body of knowledge. A mixed-method, sequential, explanatory case-study design was used in which the initial quantitative strand informed the development of cases for further study and exploration within the qualitative strand [7]. Quantitative and qualitative data were synthesized in a way that strengthened final assertions.

The significance of the research question and understanding the results through integrated theoretical frameworks are twofold. First, little to no research has examined culture rankings of schools based on the college-going reflections of recent graduates. Second, examining the results through an integrated framework tapestry goes beyond the individual to include the community (*i.e.*, parents and school) of the individual, providing a multifaceted understanding of the college-going experience. This article focuses on the benefits of an integrated framework tapestry to better understand the results of the case study and development of assertions. A full discussion of the mixed-methods study is part of the first author’s dissertation [3].

2. Literature Review

2.1. Theoretical Frameworks

Selecting theoretical frameworks is one of the most impactful decisions a researcher makes. Frameworks guide a study’s flow, explain assumptions, and aid in interpretation of results, as well as inform the research purpose, questions, and methodology [8]. The researcher’s philosophical perspective interacts with the applied theoretical frameworks to allow a study to answer questions with appropriate rigor and thoughtfulness [7].

Because of her role as a university leader in enrollment management and student affairs, the first author approaches higher-education research from a pragmatic perspective with a strong constructivist grounding. The pragmatic approach drives research to contribute to practice and inform policy [7]. In this case, questions of college choice and access are relevant to the first author’s work and contribute to higher education knowledge. The constructivist grounding informs her belief in the value of creating knowledge alongside key stakeholders, developing solutions to address needs of diverse individuals. That belief informed this investigation of how college students frame their personal college-going experiences [3]. The authors’ application of theory in this study aligns with other’s [9] sensitizing use of theory, in which theory helps explain and give perspective to research, to give order to the findings.

While planning a mixed methods case study focused on the college-going culture experiences of first-generation students, the first author identified multiple theoretical frameworks used by previous researchers to study college-going culture. The literature led her to conclude a single framework was not sufficient

for the study, so she explored the idea of synthesizing multiple frameworks, conceptualizing the integrated framework as a tapestry. The frameworks included: Social capital, Community Cultural Wealth, Funds of Knowledge, and Social Cognitive Career Theory.

These theoretical frameworks prevalent in the college-going literature provide ways to more deeply understand how circumstances, relationships, life experiences, and personal beliefs contribute to students' internalization of college-going culture. However, each framework alone does not allow for a complete understanding of college-going culture for first-generation students. This gap leads to the approach of synthesizing multiple theoretical frameworks to contextualize the college-going experiences of first-generation students more fully.

Each of these frameworks was imagined as a theoretical strand woven into a tapestry that depicts an integrated theoretical framework supporting enhanced understanding of college-going culture for first-generation students. The tapestry creates a picture with multiple threads that lend their own colors and textures, with no single thread contributing more to the outcome than the others. This mental metaphor assisted in identifying the interplay among the theories and their respective contributions to the research. Each strand repeats differently for each student and case; some appear repeatedly, and others appear perhaps only once in one area but become more visible in a different part of the larger tapestry.

2.1.1. Social Capital

Social capital has an extensive presence in the literature as a theoretical framework for college-going culture. It is defined as the benefit accrued to an individual from their social networks, and is applicable to classes of people, entire cultures, or other delimited populations [10]. When applied to college-going culture, a lack of social capital is found in the under-resourcing of schools with large first-generation populations [4] [11] and the limited social contacts that force first-generation students to rely heavily on high-school staff for their college-going connections [6] [11] [12]. Researchers [13] highlighted the positive impact of peers with significant social capital on students who lack capital, finding interaction allowed students to expand their access to social networks beneficial to their college-going culture development. Other researchers [14] determined faculty and staff can provide social capital to their students, and a later study [6] demonstrated the importance of student relationships with high school staff to college-going outcomes. Other studies grounded in social-capital theory [15] focused on higher education's reinforcement of social structures, where students with significant social capital gain entrance to competitive institutions and their benefits. College entrance examinations, for which students from higher socioeconomic levels often have greater access to exam preparation services and funds for multiple retests, serve as one limiter, reinforcing systemically unequal college access [15].

2.1.2. Community Cultural Wealth

The CCW framework builds on social- and cultural-capital theories while rejecting deficit framing and centering the experiences of family and community. Like social-capital theory, CCW has roots in theories [10], which framed cultural capital as essential to educational development while simultaneously serving to continue inequitable systems. CCW recognizes cultural and social capital are tied to economic capital and cannot be legitimately separated within a theoretical framework [16].

In an attempt to further the theoretical conversation related to underrepresented populations, the CCW model was proposed based in critical-race theory [17]. It recognizes six forms of capital available to students of color: aspirational, familial, social, navigational, resistant, and linguistic. Researchers [17] envisioned the framework as a tool for empowerment and change, allowing educators to recognize the contributions of students, families, and communities to the educational experience. Other researchers [18] expanded application of the framework to the college-going experience, finding that high schools could use a CCW model to develop college-going programming.

The six forms of capital within this framework were identified in the literature as either indicators of a college-going culture or barriers to its development, wherein a student's aspiration to attend college interacted with family dynamics, social networks, and internalized knowledge of how to navigate systems [17]. Researchers extensively used CCW to explore college persistence and success [19] [20]. Despite the contribution of CCW as a theoretical framework for understanding college-going culture, it has seen relatively limited use in published studies, mentioned as an influence but seldom fully explored.

2.1.3. Funds of Knowledge

FoK was developed to allow K-12 teachers to pedagogically access the ways of knowing most relevant to their students [21] [22]. It was later applied as a theoretical framework for college-going culture to enhance the connection of college-going programs to families [21] [22]. It focuses attention on informal knowledge garnered from students' real-life experiences, ranging from religious or mechanical knowledge to folk medicine [23]. FoK allows an expansion of the learning process beyond memorization or dominant-culture centrality. These funds of knowledge represent practical skills that allow people to work around systemic inequality and a lack of capital, resulting in resilience-focused knowledge that becomes ingrained in a family or community [23].

Researchers [24] used a FoK framework to explore the concept of smartness with first-generation students, focusing on the agency of those who chose to center smartness within a uniquely personal understanding. Integrating social capital and FoK, participants viewed their nontraditional forms of smartness as enhancing their access to capital as they navigated school systems [24]. Within FoK, students' participation in their own learning is key, as is the call to educators to set aside preconceptions and support student learning by more deeply

knowing their students [23]. In relation to college-going culture, this means setting aside a deficit-based assumption that families of underrepresented students know nothing about college, and finding a way to connect their existing knowledge with new information about college [22].

This framework's recognition of the significant family role in the development of students' college-going habitus brings all of a students' knowledge to bear on their choice of college and the decision-making process [25]. It turns from a focus on student deficits and reframes their experiences as alternate forms of knowledge [16].

2.1.4. Social Cognitive Career Theory

SCCT was developed to explain the formation of career and academic interests. This theory considers environmental factors and background contextual factors, while centering the importance of their application to the research subjects [26] [27]. Environmental factors related to college-going culture could include high-school experiences, quality of secondary course offerings, or the availability of funds for college [27].

Although the term career is in the theory name, and many studies using it focus on career pathways, the theorists stated their intent that the theory apply to academic pathways as well [26]. Within this theoretical framework, three factors from the college-going culture literature have significance within academic pathway development: self-efficacy, outcome expectations, and goal representations [26] [27]. Self-efficacy refers to the individual's belief in her ability to perform well within a certain context [26]. Outcome expectations are individual analyses of consequences that can be either positive or negative [26]. Goals within SCCT are the future state that is the result of the current choices, and these components have a complex interaction; for example, one being weak or neutral can impact the others [26]. As applied to college-going culture, it is expected students who do not believe they would perform well in college, or that college would not significantly improve their circumstances, would be unlikely to plan for college.

Within SCCT, individual agency and determination rise as significant aspects of college-going culture. SCCT conceptualizes academic choices as continuously undergoing change, wherein outcomes, rewards, and experiences impact the next stage of choice [26]. For example, a student's decision to attend college and apply to College A could morph after receiving standardized test scores into a decision to still attend college, but to apply to different institutions. Family influence is also a significant part of the SCCT framework and concentric model of environmental influences [27], wherein people closest to the student can filter the student's perception of barriers to college or provide support for successfully navigation of those barriers. This has obvious correlations to research that speak to the influence of families on the development of college-going culture in first-generation students [28] [29].

Researchers [30] selected a SCCT framework for their study of college-going

culture among a first-generation population because of its integration of academic and career goals within the social and cultural context. The researchers developed a revised diagram of the college pathway for first-generation students that considered support systems, perceived barriers, self-efficacy, college-going intentions, and both positive and negative outcome expectations to help predict the likelihood of college enrollment. Other researchers [31] also used SCCT to predict college-going aspirations among first-generation Mexican American students. In 2015, researchers [32] proposed the use of a SCCT framework for action-based research focused on the development of specific interventions to impact college-going decisions.

2.2. Integrating the Theoretical Frameworks

Integrating multiple factors or frameworks is not an unusual practice within educational research. Two researchers [33] took an integrative approach to their research of doctoral students, believing a framework that integrated multiple contexts and factors led to enhanced understanding. A few years later, a researcher [34] reflected that, though theories selected for integration were sometimes viewed as conflicting, “when examined concurrently, they may provide complementary insights that enhance understanding of what drives aspirations” (p. 113). College-going culture literature includes substantial precedent for combining theoretical frameworks, often to better explore the research question [25] or to focus on student agency and combat deficit framing [14] [35]. Higher education researchers [16] [32] have overlaid conceptual and theoretical frameworks in similar ways to expand the understanding of college-going culture within underrepresented communities. In fact, this type of theory integration is encouraged for researchers attempting to bring concerns related to educational equity and access to the foreground [16].

Each of the four key theoretical perspectives has strengths and weaknesses in their application to college-going culture. Shared spaces include applicability of the theoretical constructs to underserved populations of some sort, and also a recognition of disparities in either access or opportunity that likely are not related to a student’s ability. Despite this alignment, there are gaps in coverage between the respective frameworks that an integrated approach fill.

Social-capital theory has two gaps that make it insufficient as a pragmatic, standalone theoretical framework through which to explore college-going culture: it lacks operational detail suitable for use in this area of research, and it relies on a deficit perspective.

Although social-capital theory assists in conceptualizing the inability of students without privileged social networks to gain access to college, it does not provide a logically correlated solution [32]. There is no sustainable method to provide every student with an increased social network, nor does the theory adequately recognize personal agency and determination. As any college enrollment professional knows, many students without extensive social capital enroll

in and graduate from college, and social-capital theory does not provide a sufficient context from which to understand that phenomenon. In addition, social-capital theory continues deficit framing of underrepresented communities by focusing on what they do not have, and the social boundaries in which capital is built generally require acculturation to the mainstream [16] [36]. For students from cultures different from those in which they attend school, the resulting assumption with a singular application of social-capital theory is that they must align themselves with the dominant culture to develop the social capital they need. Because of these gaps, additional theoretical frameworks are necessary to supplement social-capital theory in the exploration of college-going culture.

Similarly, very little research on college-going culture is framed entirely from a CCW perspective. A foundational element of this framework that is a limiting factor in its use as a sole framework for college-going culture research is that CCW was developed to investigate research questions related to students of color [17]. Although many students of color are indeed first generation, and the research site had a large population of students of color, the first author's [3] study was more broadly oriented to all first-generation students. Despite this gap, CCW is a theoretical bridge between social capital and the FoK framework, which expands on the notion of capital and includes research related to students from various underrepresented populations, not solely students of color.

FoK centers the knowledge students bring with them as important to the college-going process, considering family and personal involvement in the educational experience as part of culture development [21] [22]. However, as an asset-focused framework, FoK does not extensively explore the concepts of power, class, and economic barriers that have a known impact on educational attainment and college choice, and that are addressed by social-capital and CCW theories [16]. The inclusion of FoK in a theoretical framework for studying college-going culture is important, but it is enhanced by overlaying frameworks that speak to other factors in the college-going process.

SCCT is a final contributing framework that sheds light on the larger context of student decision making, including personal agency and incentives. Studies using a SCCT framework have demonstrated the importance of understanding context in the development of interventions geared toward impacting college-going culture [30] [31] [32]. Adding the SCCT framework makes it possible to account for the personal choices and individual agency integral to college-going culture.

Table 1 highlights the weaknesses in each theoretical framework as a potential standalone framework for the study of college-going culture among first-generation students. This sets the stage for framework integration that provided the authors with an expanded perspective allowing a more complete understanding of how college-going culture develops within first-generation college students.

Table 1. Application of key frameworks to first-generation, college-going culture.

Framework	Key Concepts	Applicability Gap
Social Capital	Social status/class Access to benefits Capital transfer/capital sharing Social structure reproduction	Deficit framing; no logical solution to provide capital to all; cannot explain agency/how some students access capital
Community Cultural Wealth (CCW)	Nondeficit framing Experience-centered Role of the family/community Narratives/storytelling Six forms of capital	Developed/validated among persons of color, not necessarily valid for first-generation students from other backgrounds; limited attention to agency
Funds of Knowledge (FoK)	Nondeficit framing Learning participation Informal knowledge Role of the family/community Personal agency Dark funds of knowledge	Lack of attention to power, class, and economic barriers; no contextual frame for decision making
Social Cognitive Career Theory (SCCT)	Self-efficacy Personal agency Decision making Aspiration Environmental context Career/academic intent	Incomplete regarding capital, systems, and structures

Source: From Chrissy Holliday, "A mixed-methods investigation of the college-going experiences of first generation college students," PhD diss., Colorado State University, 2020. ProQuest Dissertations & Theses Global (2485510311). pg.54.

3. Methodology

The first author [3] used a mixed-method, sequential, explanatory case-study design, a complex mixed-methods design in which the initial quantitative strand informs the development of cases for further study and exploration within the qualitative strand [7]. The sequential explanatory core design has two distinct phases, in which quantitative data are first collected and analyzed, followed by the collection and analysis of qualitative data, which further explains the statistical results from the quantitative portion of the process [7]. Quantitative and qualitative data are joined at the end and synthesized in a way that strengthens any final assertions and findings. When the case-study design is introduced into the core sequential design, it becomes part of the qualitative strand sequence, with quantitative results informing both the development of multiple cases and the context of data collection in the qualitative strand. Utilizing both quantitative statistical analyses and the themes and factors emerging from the rich description within the qualitative strand, descriptive analysis explains where cases both converge and diverge. The end goal of the design was the generation and description of multiple cases, with emphasis placed on the experience of the participants, and the use of results to inform institutional practice [7].

3.1. Population and Sample Identification

The population for the study included all first-generation college students in their first 2 years of college at the research site, a HSI in a western state. Approximately 1200 students were identified as possible participants. Participants were selected in a two-part process, which began with a random sample in the quantitative strand but evolved into a purposive, nested sample in the qualitative

strand [7].

Of those 1200 possible participants, 391 students were within the delimited sample of currently enrolled first-generation students within 2 years of their high-school graduation at the time of data collection for the quantitative strand of the study. Of the 391 students eligible, 300 were emailed the survey titled Survey of Recent High School Graduates [37] for completion. The survey measured a number of variables with college-going culture as a primary construct. The first author [3] received permission to use a modified version of the survey. Of the 300 students contacted, 44 completed the survey, a response rate of 14.6%. According to current research, email survey responses tend to be 10% lower than other forms of survey research [38]. Within academic research in the computer-information-system discipline, response rates as low as 10% have appeared in published studies that utilized online surveys [39]. The purpose of the survey in the first author's study [3] was to gather quantitative data from responding first-generation students, which then would allow the formation of cases for the qualitative strand of this study. The lower response rate does not invalidate the study because enough responses were gathered to conduct the intended analyses and form cases for in-depth interviews.

The last survey question allowed students to indicate their willingness to take part in the qualitative strand of the research by volunteering for two interviews exploring their experience of the college going culture of their high school and community. Thirty-three, or 75% of respondents, indicated they would be willing to be interviewed. These participants were then identified as representing one of the five school's college-going culture: low, low-moderate, moderate, high-moderate, or high, using a modified version of a classification system [40]. Those culture classifications formed the case assignments for the study.

3.2. Data Collection

The first author conducted a total of 58 various quantitative analyses within SPSS software to determine whether any survey responses demonstrated statistical significance in relation to case assignment, participant demographics, or other factors drawn from the survey. These analyses included cross-tabulations; ANOVAs; odds-ratio calculations; assorted descriptive analyses; and frequency counts. Details emerged that help to paint a picture of the survey respondents, from their family circumstances to the attitudes of school personnel they encountered, and the resources made available to them at their high schools.

A maximal-variation sampling was used [3] to select interview participants [7]. Because more students volunteered than were needed for the study, she used demographic indicators from the survey, such as high school, race/ethnicity, work history, and Pell eligibility to select participants who could contribute the most to the variety of experiences within cases. Based on three primary guidelines for case selection [41]: relevance to the quintain, diversity across contexts, and opportunities to learn about complexity and context, the first author invited

students to participate in the order in which they responded, until the maximum number of participants was reached.

Eight participants were interviewed with 25 primary questions divided between two interview sessions and an assortment of follow-up prompts meant to elicit personal recollections of participants' college-going experience. Interviews were conducted via Zoom and recorded with participant approval. The semi structured interviews explored personal beliefs related to the students' college journey, and also the attitudes, support, and influence of their families, friends, school officials, and the larger community.

3.3. Data Analysis

Analysis of the survey revealed the following: more than 61% of respondents had mothers with a high-school diploma or less; more than 65% of respondents' fathers had this same level of education. Finances were a real concern with 73% reporting Pell eligibility, and more than 68% working at the time of their survey response. Of those who reported having a job, one-third were working more than one job to meet their expenses, and about half worked in an on-campus work-study position. More than half (55%) of respondents indicated a high-school counselor had not explained to them the classes required to attend a 4-year university, and the same percentage indicated either that their school definitely did not provide college counseling assistance, or that they were unsure whether it was available. Only half of respondents were encouraged by their guidance counselors to take college preparatory courses, and 52% indicated they had not learned from a counselor about college. In addition, 14% reported never having spoken with any adult at their high school about how to get into college, and 32% said they never spoke with an adult about how to choose the right college. Interestingly, 46% reported speaking to an adult at the school three or more times about how to get into college, and 31% had three or more conversations about choosing the right college. More than 27% indicated they had never used their school's college planning center, and another 27% indicated their school did not have one. Among those who did use such a center, 25% did so three or more times while in high school. Considered as a whole, the results indicate that students who accessed these resources for help going to college did so repeatedly, while others never took that step at all.

As part of the case-study analysis of both quantitative and qualitative data, the first author [3] sought to identify key constructs related to each framework. Those key concepts, and either correlated or oppositional concepts are shown in **Table 2**.

3.3.1. Theme Development

The first step in case-study analysis served to ground the eventual findings in existing knowledge, by drawing on current literature and topical knowledge. Potential themes were identified from the theoretical frameworks and checked for relevance within the study data. After rating each case's contribution to a greater

Table 2. Key concepts from integrated theoretical frameworks to inform data analysis.

Framework	Key Concepts	Correlated (c) or Oppositional (o) Concepts
Social Capital	Social status/class Access to benefits Capital transfer/capital sharing Social structure reproduction	Deficit framing (c) Power (c)
Community Cultural Wealth	Non-deficit framing Experience-centered Role of the family/community Narratives/storytelling Six forms of capital	Racial focus (c) Traditional capital primacy (o)
Funds of Knowledge	Non-deficit framing Learning participation Informal knowledge Role of the family/community Personal agency Dark funds of knowledge	Traditional capital primacy (o) Narratives/storytelling (c)
Social Cognitive Career Theory	Self-efficacy Personal agency Decision making Aspiration Environmental context Career/academic intent	Choice processes (c)

Source: Chrissy Holliday, "A mixed-methods investigation of the college-going experiences of first generation college students," PhD diss., Colorado State University, 2020. ProQuest Dissertations & Theses Global (2485510311). pg.95.

understanding of each theme, the first author moved into analysis Track III [41], which allowed the identification of key factors arising from participant interviews. In following this process, she drew overarching themes from the four theoretical frameworks underpinning the study, while factors arose from the data itself.

3.3.2. Factor Cluster Development

The analysis Track III process allowed for identification of key factors arising from the interviews. According to the researcher [41], a factor is "a widely found, sometimes influential variable of interest well beyond its situation" (p. 64). Although qualitative researchers traditionally may not refer to patterns within their data as factors, the language provides a way to separate the themes that arise from the larger research topic and theoretical frameworks from the key points that emerge from the case data. This introduction of factors as part of the qualitative analysis is particularly relevant for mixed-methods research [41], and the factors tie in the qualitative interview data with themes previously recognized in the theoretical frameworks, literature, and quantitative survey findings. During the analysis, it was important to keep in mind that the factors should arise directly from the cases themselves; although the factors may be related to the themes, they emerge directly from the collected data and not from the research purpose or larger topic [41]. In this way, themes arise from content and information external to the qualitative strand, while factors emerge directly from the analysis of the qualitative data specific to the study.

The first author [3] created notecards with the qualitative factors, naming the factor and noting the case with which it was associated. The notecards were grouped into clusters, determining whether any of the factors that initially seemed different in each case were actually more broadly related when considered as

part of the larger research objective. Each factor cluster was named in a way that made obvious its meaning and contribution to a better understanding of the college-going-culture phenomenon [41]. Nine factors were identified during analysis, and cases were then associated with the appropriate factor(s) and the number of contributions each case made to a factor. The factors and cases were then connected with the previously identified theory-based themes and examined for relevance and rankings. The rankings gave rise to case-study assertions related to each theme.

3.3.3. Assertion Development

Assertions are a form of generalization that researchers develop based on their observation, larger knowledge, and the study data [41]. This part of analysis was about identifying patterns from the qualitative data that allowed the researcher to more fully describe and explain the cases [42]. The assertions that arise at the conclusion of this interpretive process are considered to be the heart of the research report generated in a multiple case study [41]. The analysis led the first author through a discovery process that allowed her to consider the “prominence, ordinariness, utility, and importance” ([41], p. 72) of various themes, factors, and factor clusters, which gave rise to the assertions.

The following assertions were developed:

- 1) A personal relationship with at least one school staff member who took an interest in the student and the student’s college-going process was of major importance to college access and aspiration for every student;
- 2) Dual-enrollment opportunities contribute significantly to the college-going experience, and are an important part of access to college and aspiration development;
- 3) Financial concerns are a significant presence within students’ first-generation, college-going experiences;
- 4) Family and community members play a significant role in the development of college-going culture and the college-going process of first-generation students;
- 5) Personal agency and aspiration play a large role in the student’s college-going experience and are most evident in the student role as college decision maker; and
- 6) The first-generation, college-going experience as described by participants in this study is relatively stable, with no significant differences detected among the cases.

Figure 1 demonstrates the relationship among the themes, factors, and assertions.

Using the case study process developed by [41], the first author synthesized quantitative and qualitative data at the conclusion of the qualitative strand, bringing the research process full circle to jointly answer the primary research question. The themes and factors came together during the latter stages of cross-case analysis to inform final assertions that contribute to an enhanced overall

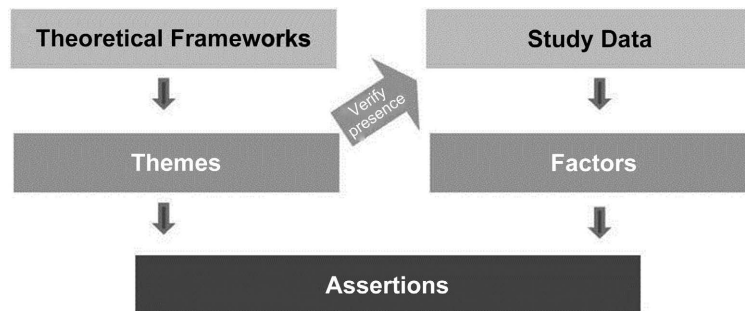


Figure 1. Relationship of themes, factors, and assertions, and their flow within cross-case analysis.

understanding of the college-going-culture experiences of first-generation college students. Assertions are drawn from a growing understanding that convinces the researcher of key truths that emerge during the analysis, all serving the final goal of gaining a more complete understanding of the study focus [41].

Each theme, factor, and assertion from this study describes the college-going experience of the participants and illuminates a particular part of that larger experience. The researchers' answer to the primary research question is that students experience college-going culture as a complex ecosystem formed from the students' interactions with their families, schools, and community environments, which in turn influence the students' internal aspiration and personal agency. Within that ecosystem, factors such as finances, personal relationships with school personnel, and access to dual-enrollment courses all serve as either barriers or gateways to frame the students' overall college access.

4. Results through the Lens of Frameworks

The first author's findings [3] demonstrated strong convergence among the cases, including the importance of family and community to the process, the significance of a personal relationship between each student and a school staff member, family finances, and dual enrollment that includes overall college access, and the role of each student's internal aspiration and personal agency in the development of a college-going culture. **Table 3** is a visual representation of relationships and significant interconnectedness between the study's themes, factors, and assertions. In addition, it demonstrates the importance of each theoretical framework to the identification of relevant themes, factors, and final assertions of the study.

5. Discussion

5.1. Leveraging an Integrated Framework

This study leveraged an integrated framework to provide a better basis for understanding how secondary-school environments, family, friends, and personal agency impacted the college-going experience of first-generation students. The integrated tapestry concept supports enhanced knowledge and has led to the

Table 3. Relationships among theoretical frameworks, themes, factors and assertions.

Themes	Factors	Assertions	Theoretical Frameworks
The presence of personal agency as part of a student's college-going process	Access-related financial concerns, dual enrollment as access, student as decision maker, personal connection with school staff, hard work, personal responsibility for financial role in family	Assertions 1, 2, 3, 5, 6	SCCT, FoK, social capital
Access to benefits and resources that impact the college-going culture and process experienced by a student	Access-related financial concerns, dual enrollment as access, hard work, personal responsibility for financial role in family	Assertions 1, 2, 3, 5, 6	Social capital, CCW, FoK
Role of the family and community in the development of college-going culture and the college-going process for a student	Access-related financial concerns, student as decision maker, hard work, personal responsibility for financial role in family	Assertions 1, 3, 4, 6	Social capital, CCW, FoK, SCCT
The presence of aspiration in the way a student experiences college-going culture	Dual enrollment as access, student as decision maker, personal connection with school staff, hard work	Assertions 1, 2, 5, 6	SCCT, social capital
Transfer or sharing of capital that impacts college-going culture development and the college-going process for a student	Access-related financial concerns, personal connection with school staff, dual enrollment as access, student as decision maker	Assertions 1, 2, 3, 4, 6	Social capital, CCW, FoK

practical application of results that match the first author's pragmatic philosophical approach and desire to conduct research that informs her daily work [7].

Conceptualizing the theoretical frameworks as an integrated tapestry allowed the researchers to identify themes that should be present in the findings based on existing knowledge, and to link those with data and factors drawn directly from the survey results and participant interviews. Those led to broad final assertions that, as shown in **Table 3**, tie directly to the various frameworks. Without each of these frameworks contributing to the study, it would have been easy to miss key data points that led to significant assertions. For example, had the study not been grounded partially in SCCT, the authors would not have had a foundation for the findings related to aspiration and agency, and would have likely missed important interview factors about environmental context that enhanced the understanding of the importance of student-staff relationships. Because of the importance of personal agency and environmental context to the SCCT framework, the analysis was designed to capture that data. Similarly, the importance of family and community stories, including negative storytelling, would not have been recognized without the application of the FoK and CCW frameworks. The fact **Table 3** shows that each assertion ties to between two and four frameworks reinforces the importance of the integrated tapestry approach to this research.

5.2. Delimitations and Limitations

The delimitations were established by the eligibility determinations and focus of the research question. Participants were required to be: undergraduate college

students, ages 18 and older, identify as first-generation students, currently enrolled at the institution where the research took place, and no more than 2 years out from their high-school graduation. The delimitations excluded one group who could conceivably contribute to first-generation college-going research: those who did not attend college.

The case-study methodology required an in-depth qualitative examination of the experiences of a small number of participants selected from the larger, quantitative, survey response pool. Therefore, findings from the case-study cannot be generalized to all first generation college students. This is a limitation.

6. Implications, Future Research, and Conclusion

6.1. Implications

The assertions all inform practical interventions that can be taken by secondary schools and institutions of higher education to impact college-going culture development in first-generation students. The decision to leverage an integrated framework as the underpinning of the study grounded this study in previous knowledge, while providing context for the mixed methods data collected from these participants. Both the findings and the demonstrable importance of the integrated framework to those results, can serve to guide future research efforts related to college-going culture and first-generation students.

6.2. Future Research

The first-generation, college-going experience as described by participants in the first author's study was relatively stable, with no significant differences detected among the cases. Previous literature has demonstrated the importance of a strong college-going culture at the student's school [11] [40] [43], with a focus on the school successfully developing that culture. The first author's study found no significant differences in college-going experience between and among the cases; this suggests a topic for future study.

In addition, research could examine the success of opportunities such as dual-enrollment and connecting first generation college students with engaged staff members to provide one-on-one support. Measuring the success of various implementation strategies such as these, would provide useful, actionable data for practitioners. Lastly, research could examine family engagement in the college-going process, and methods by which universities and K-through-12 institutions can partner within a community to foster a college-going culture.

6.3. Conclusion

In conclusion, this article presented the most pertinent literature surrounding college-going culture and the four frameworks that provided grounding for this research project. Past research supported the authors' decision to use social capital, CCW, FoK, and SCCT as integrated theoretical frameworks for the exploration of college-going culture of first-generation students. The layering of these

frameworks enhances the understanding of the issue in a way that the use of a single framework never could. Making appropriate use of theoretical frameworks within a research study means they are infused throughout the study, from the literature review and development of methodology through the analysis and implications of the study [25]. Their use means more than simply referencing the frameworks at key moments, instead using theory to illuminate the findings [9]. The first author's results [3], paired with past literature, demonstrate the potential benefit to future researchers of an integrated tapestry approach to college-going culture research.

Conflicts of Interest

The authors declare no conflicts of interest.

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