INCOMING FIRST YEAR, FIRST-GENERATION COLLEGE STUDENT WORRIES ABOUT COLLEGE

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Abstract

This narrative inquiry study analyzed 190 first-generation students' worries about the first year of college as surveyed upon admission to a four-year university. Five themes emerged from the data: time, connection, academic success, adjusting, and basic needs. The theme of time appeared most frequently in student narratives, suggesting that first-generation students are most worried about managing and understanding the concept of time in college above other academic and personal factors. Future research is needed to explore how staff and faculty can best use these results to inform first year programming for first-generation college students.

Keywords: First-generation, first year, student perceptions, student worry

Introduction

Before students ever spend their first day on a college campus, they anticipate what the experience will be like. Students hold pre-existing beliefs about the social, academic, and financial aspects of college (Thuo et al., 2017). Their perceptions, in turn, impact how students experience campus life, academics, and independent living. For example, student perceptions about self-efficacy (Chemers et al., 2001; Robbins et al., 2004), academic and social integration (D'Amico et al., 2014), emotional and social adjustment (Gerdes & Mallinckrodt, 1994), and sense of belonging (Han et al., 2017) impact college academic success and retention. Additionally, perceptions and worries about academic and family issues (Saw et al., 2013) and parent expectations (Stober & Joormann, 2001) can negatively impact the college experience for students.

It is especially important that student affairs professionals and faculty understand the perceptions that first-generation students hold about college, as this populations experiences additional barriers to college success (Cushman, 2007; Cominole et al., 2004; Ishitani, 2003; 2006; Khanh, 2002). Understanding the relationship between students' perceptions and college outcomes, especially how perceptions impact student success and retention, is critical. Deeper and more nuanced understandings of student perceptions about college can inform programming and student services, resulting in services that are responsive and knowledgeable of student needs.

First-Generation Student Worry

Although studies have explored the perceptions of college students in general, only a small body of literature has explored the worries that students hold; even less research has been conducted on first-generation student worry. The few studies that have been conducted suggest that first-generation students experience high levels of worry about entering college (Bloom, 2007), especially fear of failure (Biu, 2002). Therefore, it is helpful to explore these student concerns in greater depth. This is especially important given that psychosocial factors more strongly predict academic performance than GPA or test scores (Robbins et al, 2004).

Purpose of the Study

To ensure that first-generation students are best supported toward college success and retention, it is paramount that staff, faculty, and administrators accurately understand the beliefs and perceptions that these students are bringing to campus. Understanding the perceptions first-generation students have prior to the first semester of college, when students are adjusting to college and learning to balance academics and personal activities (Whitbourne, 2002), can offer staff and faculty important insight into the transitional perceptions and worries of first-generation students. The literature has yet to explore the specific worries that first-generation students hold as they approach their first year of college. By identifying these worries, college staff can begin to develop and provide resources that align with student needs and belief systems.

Study Setting

This study explored the worries of 190 first year, first-generation college students admitted to college for the 2015, 2016, and 2017 fall academic semesters. The research took place at a small, private university on the West Coast of the United States. For years, this university has maintained a robust first year student program that includes a first year student survey; the survey is administered to every incoming first year student as a required part of the enrollment process and has received high response rates (99% in 2015, 2016, and 2017). In 2016, the university developed a first-generation student program housed in the academic resource center on campus. In an effort to further support this student population, the researcher explored first year survey responses from first-generation college students about their worries upon entering college. These results are intended to be translated directly into first-generation student programming on campus.

Literature Review

Defining the term first-generation college student is complex. First-generation students are generally understood as the first student in the family to attend college, with neither of the student's parents having completed schooling beyond high school (Choy et al., 2000). However, researchers differ in their description of parent education level; some consider first-generation status to include students whom *neither parent* earned a college degree, while others include students whom just *one parent* has not earned a college degree. Other considerations include the type of parental degree pursued and whether the degree was earned (Toutkoushian et al., 2018). In total, there are eight different ways to define first-generation student status (Toutkoushian et al., 2018, p.8-9):

- 1. One parent has completed, at most, a high school degree
- 2. Two parents have completed, at most, a high school degree
- 3. One parent has started, but not completed, an associate's degree
- 4. Two parents have started, but not completed, an associate's degree
- 5. One parent has completed, at most, an associate's degree
- 6. Two parents have completed, at most, an associate's degree
- 7. One parent has started, but not completed, a bachelor's degree
- 8. Two parents have started, but not completed, a bachelor's degree

For this study, the researcher defines first-generation students as students who have one or two parents that have completed, at most, a high school degree; these students' parents have not attended any college at all.

First-generation students experience additional barriers to college success compared to students who have parents that attended college (Cushman, 2007; Hicks, 2003; Ishitani, 2003, 2006; Meuleman et al., 2015; Richardson & Skinner, 1992). Even accounting for demographic differences, being a first-generation student significantly impacts college success (Ishitani, 2003; 2006). These students often feel as though they do not fit in in college (Cushman, 2007), and they are more likely to come from a lower socioeconomic background and be in the ethnic minority, all of which pose barriers to retention and sense of belonging (Khanh, 2002; Cominole et al., 2004). Further, first-generation students are less likely to attend college, with only 47% of first-generation students enrolling in college after high school graduation compared to 85% of their peers (Cominole et al., 2004).

Not only are first-generation students less likely to attend college, but those who attend are also less likely to persist to degree completion (Warburton et al., 2001); first-generation students have first year attrition rates that are four times that of their continuing generation peers (Engle & Tinto, 2008). Those first-generation students who attend college often have trouble adjusting to the college environment. Non-traditional students, including first-generation students, tend to be overwhelmed by the transition to college, finding it difficult to understand the unwritten college norms and expectations (Meuleman et al., 2015). Research shows that first-generation students find college to be surprisingly isolating (Richardson & Skinner, 1992), and they tend to be less engaged on campus than their non-first-generation peers (Lowery-Hart & Pacheco, 2011). Lack of parental support and lower academic preparedness (Hicks, 2003), compared with the above-mentioned factors, can increase the chance of these students being unsuccessful in college.

First-Generation Student Perceptions about College

In addition to the external barriers that first-generation students face, the perceptions that these students hold may pose an internal barrier to success. Khanh (2002)

found that during the first year of college, first-generation students expressed greater fear of failing at the university and greater worry about financial aid than their peers. These students also expected to spend more time studying than their classmates to make up for a lack of preparation for college. This combination of fears and expectations can impact student stress levels, which can in turn impact academic success and persistence in school. Further, first-generation students perceive financial aid, time to graduation, and ability to work during college as important factors in the college decision making process (Engle et al., 2006). This suggests two things: first, that first-generation students may experience added pressure to finish college quickly and spend the least amount possible on tuition and other college costs, or second, that first-generation students may be working during school to pay for college, reducing overall time available to commit to educational activities.

Even some of the positive perceptions that first-generation students hold may negatively impact their experience during college. For example, first-generation Latino students perceive independence as one of the most important aspect to being successful in college, along with the anticipation of being on their own during the experience (Boden, 2011). Although independence is often viewed as a positive developmental factor for students and is a key growth factor infused throughout student development theory, it may impact first-generation students' willingness to reach out for help when needed. Understanding college learning as an independent venture may further isolate first-generation students, exaggerating the feeling of dissatisfaction with the campus environment (Terenzini et al., 1996) and increasing the chance of dropping out.

Lastly, first-generation students may hold perceptions that are different than higher education staff and faculty, which can then impact student satisfaction, communication with staff and faculty, and overall success. One study found that first-generation students believed their non-academic responsibilities impacted their ability to manage time, while the instructors believed that the first-generation students were simply not making time-management a priority (Collier & Morgan, 2007). When students and instructors hold differing beliefs about the priorities and responsibilities of first-generation students, it can lead to misunderstandings, mistrust, and dissatisfaction for both parties.

Student Worry

Compounding upon the perceptions that students hold are the worries that they bring to college. Student worry has only been minimally explored in the literature, with worry defined as mental experiences of concern regarding future events and outcomes (MacLeod, Williams, & Bekerian, 1991). In 2001, Osman and colleagues developed the Student Worry Questionnaire, a six-domain model of student worry which includes worrisome thinking, financial-related concerns, significant others' well-being, social adequacy concerns, academic concerns, and general anxiety symptoms. Since then, scholars have noticed an increase in college student mental health concerns, noting student worry about the academic and financial responsibilities of college (Blom & Beckley, 2005). Worry has been found to correlate with negative outcomes, such as reduced academic success (Owens, Stevenson, Hadwin & Norgate, 2012) and increased alcohol use (Kelly, Markos, & Ashley, 2005), both of which are significant issues for college students.

First-generation students may hold worries that are unique from their non-first-generation peers; these students experience high levels of anxiety and fear regarding the unknowns of the college environment (Bloom, 2007). Other studies have found that first-generation students have higher rates of fear of failure than their peers (Bui, 2002; Khanh, 2002), suggesting that fear may be a common experience among this student group. Another study found that levels of college student worry remain the same from freshman to sophomore year (Swerdzewski, 2008). Using the Student Worry Questionnaire (SWQ-30; Osman et al., 2001), Swerdzewski found that student worry across six domains remained consistent through the second semester of sophomore year (2008). Because student worry lasts beyond the beginning of one's academic career, it is imperative to identify student worries early on and provide resources that negate those worries from negatively impacting academic success and retention.

Method

This exploratory study examined the worries that first-generation students held about college upon admission to a four-year university. An electronic survey was administered by the academic resource center at one private university on the West Coast to all first year students admitted across three years: 2015, 2016, and 2017. All admitted

first year students received the survey during the month of May prior to the first year of their enrollment; students were asked to complete the survey by the end of May as a required part of their enrollment process. Students who did not complete the survey within one week of receiving it were sent a reminder email from the academic resource center on campus. Weekly reminder emails were sent every week until the start of the school year (end of August), or until the student completed the survey.

IRB approval was obtained by the researcher to collect and analyze student responses to the survey, which included narrative responses to the survey question, "What 1-2 aspects of your campus life and studies do you worry most about?" The researcher used narrative inquiry methodology to analyze the narrative survey responses of participants.

Sample

Survey recipients were 2,905 first year students at a small, private university on the West Coast of the United States. Within the sample, 202 respondents identified as first-generation students (7% of the total sample). These 202 students matriculated into the university in fall 2015 (n = 69), fall 2016 (n = 56), and fall 2017 (n = 77). Students identified as female (n = 127) or male (n = 75). Of the 202 first-generation students, 11 (5%) left the open-ended survey question blank, and 1 (<1%) responded that the question did not apply to them. The remaining 190 responses were included in the narrative analysis.

Instrument

During the summer of 2015, 2016, and 2017, a survey was sent to all admitted first year students (N = 2,905) at the university. The survey was created in collaboration by the academic resource center and institutional research office on campus, based on previous institutional research projects that had identified factors predictive of academic performance and college retention. The survey included 275 total questions related to student major and minor interests, high school grades and GPAs, standardized test scores, and student worries about college. Data from three of the survey questions were used in this study. Responses from two survey questions determined first-generation status: "What is the highest level of education your mother/guardian 1 completed?" and "What is the highest level of education your father/guardian 2 completed?" Participants chose one item

among seven options to identify each parent/guardian's highest education level: 1) No high school, 2) Some high school, 3) High school diploma/GED, 4) Some college, 5) Associate's degree, 6) Bachelor's degree, and 7) Graduate degree. Participants also had the option to select *Not Applicable* if they did not have a second parent/guardian or if they did not know one or both parents/guardians' highest education levels. Participants were coded as first-generation if they indicated that *all* of their applicable parent(s)/guardian(s) (one or two) completed an education level of High School Diploma/GED or below (options 1, 2, and 3 above). Data from one open-ended survey question was used in the study: "What 1-2 aspects of your campus life and studies do you worry most about?" The data from the survey (first-generation status and worry) were extracted by the academic resource center staff, stripped of identifying information, and released to the researcher via email.

Data Analysis

Data analysis was performed to investigate the worries of the 190 first-generation, first year college students. During the coding process, the researcher enlisted the assistance of a faculty colleague with expertise in narrative analysis to reduce bias and increase validity. Analysis began with first cycle In Vivo coding (Saldaña, 2015), with the goal of maintaining the student voice during the coding process. Due to the lack of literature on first-generation student worries, In Vivo coding seemed most appropriate to allow for the natural themes in the data to emerge. Each narrative response was reviewed line by line, and quotes and single words were pulled from student narrative responses that represented the essence of each narrative response. Once the narratives had been coded, the researcher reviewed the entire list of In Vivo codes to gain a deeper sense of similarities and differences between codes. *Code mapping* (Saldaña, 2015) was used at this point to identify similarities between codes and combine codes if appropriate. This iterative process resulted in a total of 20 codes.

Following the first cycle coding and code mapping processes, the researcher used second cycle pattern coding (Saldaña, 2015) to identify overarching themes that represented the 20 codes. This process resulted in the 20 codes being sorted under five themes: time, academic success, connection, adjusting, and basic needs. Each student narrative was assigned to all applicable themes, as few as one theme and as many as three

themes. Table 1 presents the five themes along with the codes that were associated with each theme, as well as frequency counts for the number of narratives that were assigned to each theme and each code.

Table 1. Five Themes and Associated Codes with Frequency Counts

Theme (Frequency Count)	Associated Codes (Frequency Count)
Time (89)	Time (63)
	Workload (19)
	Distraction (7)
Academic Success (73)	Academic Rigor (14)
	Academic Skills (15)
	Failing (17)
	Help (12)
	Comprehension (5)
	Motivation (10)
Connection (71)	Fit (15)
	Social (50)
	Missing Out (6)
Adjusting (63)	Campus Life (22)
	Dorm (19)
	Independence (9)
	Homesick (10)
	Course Structure (3)
Basic Needs (20)	Financial (8)
	Basic Needs (5)
	Mental Health (7)

Results

The first and most prominent theme that emerged from the data was *time* (n = 89; 47%), which included student responses that referred to worry about not having enough time, not being able to keep up with college pace, not having time to complete the work required, and experiencing distractions that could reduce available time. Some narratives mentioned time directly, such as "not having enough time to study", while others referred to time indirectly, stating worry related to "waking up for classes" and "falling behind in classes". This theme also included worries about time management, balancing multiple responsibilities, and creating a schedule that allows time for social, academic, and employment activities. Students expressed not only worry about time, but a deeper anxiety and panic about falling behind and not being able to catch back up on time.

The second theme was *academic success* (n = 73; 38%), which included references to academic worries at the college level. Students worried about the academic rigor, saying "I worry about...if my high school prepared me well enough for the rigorous academic courses". Students also worried about whether they had the skills to be academically successful, stating "I'm scared about writing" and "studying for tests". Narratives also mentioned worries about failing a class, not being able to access help when it was needed, and not comprehending the course materials. Fear of failing, in general and specific to academics, was common among narratives under this theme.

The third theme was *connection* (n = 71; 37%), which referred to both social and campus connections, including worries about making friends, fitting in, finding a major that fits, and getting connected to campus activities and events. One student stated that she was afraid that her being a commuter student would cause her to, "miss out on the college experience". Another student mentioned, "I worry about not being as involved as I would like to be". Narratives about making friends cited worry about either "making friends" or "fitting in"; students expressed worry that they would be lonely or alone without the ability to create meaningful relationships. Meaningful relationships also extended to connections that student would make with professors during class or outside of class.

The fourth theme, *adjusting* (n = 63; 33%), was comprised of worries related to being away from home, living independently, navigating the campus, and sharing space

with a roommate. Students worried that they would not be able to adjust, or that adjusting would be difficult. Students shared, "I worry that I will have a difficult time transitioning", and "I worry about not being able to adapt to the college life fast enough". Students referred often to worries about dorm life; 19 student narratives mentioned worry about getting along with their roommate, sharing space with a stranger, or adjusting to the size or environment of the dorm. Within the adjustment theme, the adjustment to dorm life seemed particularly worrisome.

The fifth and final theme, *basic needs* (n = 20; 11%), was a theme comprised of student worries about basic human essentials for survival and wellness: food, housing, health, and finances. One student simply wrote, "Housing and food". Others shared similar worries, stating, "I worry most about not having quality food" and "If I will have enough to eat". One student worried about finances stated, "Not being able to afford room and board". Another student who has severe anaphylaxis to airborne allergens was worried about having her health needs met and sharing this information with staff on campus.

Discussion

The present study explored the worries that first-generation students held about college upon admission to a four-year university, revealing five themes in the data: time, connection, academic success, adjusting, and basic needs. Some interesting findings emerged from this study that offer new insight into the perceptions of first-generation college students.

The most intriguing finding of this study is the frequency of students who shared a worry about the theme *time* in college. Throughout the narrative analysis process, frequency counts of codes were recorded to compare the number of narratives assigned to each of the five themes. Almost half of the participants (47%) mentioned worry about managing time, using time to complete all academic and non-academic tasks, and having enough time to keep up with the pace and workload in college. This may be related to first-generation students' tendency to have more work and family responsibilities off-campus (Curtona et al., 1994), or the expectation that first-generation students hold about spending more time studying than their peers (Khanh, 2002); future studies should investigate where this sense of worry is coming from. Alternatively, this worry about time may stem

from first year students' general struggle with procrastination (Eagan et al., 2016); future studies should investigate whether all first year students share this common worry about time.

A second theme, social connection, was not surprising given previous studies that have connected sense of belonging (Han et al., 2017), campus fit (Li et al., 2012), and social adjustment (Gerdes & Mallinckrodt, 1994) to college success. The Student Worry Questionnaire (SWQ-30; Osman et al., 2001) also identified social adequacy concerns as one of the six domains of student worry during college. However, the findings of the present study deepen the understanding of what students are thinking about in relation to social connection and social adequacy on campus. The first-generation students in this study, much like all first year students, are not only worried about making friends and fitting in, but also getting connected to campus events. Students are longing to engage in campus activities, and they worry that if they do not get connected, they will "miss out" on the real college experience. First-generation students expressed a specific worry about missing out due to living at home and/or commuting to campus; although this is an experience that any first year student might have, it may be more pronounced in the firstgeneration student community. Further research is needed to understand if this experience is more prominent in first-generation students than other first year students. If so, this may suggest that helping first-generation students get involved in campus activities early on is important to reducing the attrition risk.

Lastly, within the basic needs theme, students expressed worry about paying for college and having the financial resources to be successful, which aligns with the Student Worry Questionnaire's domain of financial related concerns (Osman et al., 2001) and Khan's (2002) previous finding that first-generation students worry about financial aid. This finding also aligns with the work of Goldrick-Rab et al. (2018), who found that among 43,000 students across 66 institutions, food and housing insecurity was widespread; 36% of students surveyed were food insecure in the last 30 days, and 36% of students were housing insecure within the previous year. Within the present study, the *basic needs* theme was only present in 9% of student narratives, with some of the narratives referring to non-material basic needs (unrelated to financial aid). This finding requires more information

for interpretation, as it is unclear if financial concerns were not a focus for students when responding to this survey item or if financial needs were less of a worry for this student group. Future studies should investigate this topic in greater depth.

Practical Implications

The present study offers higher education staff, faculty, and administrators important insight into the perceptions and worries of incoming first-generation students. The results have three major implications: deeper consideration of the perceptions of first year students, practical incorporation of student perceptions into practice, and new understanding of first-generation students' perceptions of non-academic obligations.

First, the findings offer a glimpse into the authentic worries of incoming, first-generation college students. These perceptions have never been explored before, and they offer a unique look into the worries that are common among admitted first year, first-generation students. Most of the themes within this study are not surprising given past research; it is the frequency at which students perceive certain factors as worrisome that is surprising. With almost half of participants (47%) expressing worry about time, it may be imperative that college staff offer time management resources to first-generation students as a retention strategy. Future research should explore first-generation student worries in comparison to first year student worries in general. It may be possible that a frequent worry about time management is not exclusive to the first-generation student population.

Second, these results have practical implications for first year and first-generation student programming. Student advisors, orientation staff, faculty, and residence life staff are especially encouraged to consider how these perceptions can inform programming. It may be helpful to include topics of time management in first-generation programming during pre-orientation programs, acknowledging that this topic is a pressing worry for this student population. Pre-orientation programs can offer significant support to students by easing the college transition, connecting students with a peer group, and preparing students academically (Merrill, 2019); they are an easy avenue through which staff can offer time management resources to students right away.

Other themes, including social connections and academic adjustment, should be emphasized in communication sent to students during the summer prior to matriculation.

For example, a 2016 report suggests that admission to college does not guarantee student enrollment; students must be nudged between high school and college to continue their journey toward the first day of college (ideas42, 2016). Using nudge psychology, small but strategic interventions that move individuals toward success, staff can increase the chance that students make it to and through the first day of college successfully. These nudges can take the form of short emails that equip students with advice on how to navigate the upcoming transition to college.

Specific supports related to each of the five themes can be incorporated into practice to influence internal perception change for students who are overwhelmed with worry. Internal change, the process of altering personal perspective through introspection, influences identity status change by helping students come to terms with their emotions and redefine thoughts and beliefs (Kroger & Green, 1996). The beginning of perception change for students can be initiated through conversation and exploration with college faculty and staff, helping students reflect on their assumptions and make meaning for themselves (King & Magolda, 2008). When students perceive the college environment as supportive of exploration and asking questions, they are more likely to search for personal meaning and experience higher life satisfaction (Shin & Steger, 2016). Staff and faculty can engage students in conversations about their worries to begin shifting any negative perceptions that can impact college success.

Lastly, these results may suggest that students' worry about time underlies related college concerns (i.e. academic ability, engaging in activities, and making friends). For example, student narratives referenced academic abilities as a concern because abilities impact the time it takes to complete assignments. Some students worried that they would not have the time to engage in activities to the extent they wanted due to time constraints, while others believed they would not have time to stay close to friends while being successful academically. If staff and faculty are able to respond to this worry and provide first-generation students with the time management skills they need to be successful, many other surface worries may become more manageable.

Limitations and Future Directions

The present study is limited by its strict definition of first-generation status, which only included students for whom neither parent attended any college at all. Other national definitions are more expansive and include students whose parents have attended some college but have not obtained a degree. Expanding the definition to include more students may have influenced the outcome of this study. Additionally, this study depended on student narratives collected by an academic resource center on campus. It is possible that students were hesitant to share their deepest worries with campus staff, especially during the summer prior to the first year of enrollment. The sample size of this study is also a limitation, given the small size of the private university and the small proportion of first-generation students at the school. A future study at a larger school with a larger first-generation student population may find different results.

Additionally, the dataset for this study was limited to one answer from one open-ended question. Completing interviews or focus groups with first-generation students would allow for deeper exploration of the themes that emerged through this study. Lastly, this study did not compare study worries among student demographic groups or between first-generation and continuing generation students. Students of different gender and racial identities may have held worries that differed significantly from one another; this could be further explored in future studies. It is also possible that student worries differ (or do not differ) by status (first-generation vs. continuing generation). This comparison would illuminate whether the worries of these two groups needed to be treated differently through programming and services.

Despite the limitations, the results offer many opportunities for future studies. Scholars should explore ways that time management strategies can be most successfully incorporated into first-generation programming. Future studies should also explore the best time and method to provide supports to first-generation students, whether the supports are offered during summer or during orientation, in-person or online, and through a workshop, class, or one-time presentation. Further exploration will help answer these questions and will serve the body of knowledge well.

References

- Biu, K. V. T. (2002). First-generation college students at a four-year university: Background characteristics, reasons for pursuing higher education, and first-year experiences. *College Student Journal*, *36*(1), 3-12.
- Blom, S. & Beckley, S. (2005, January 28). 6 major challenges facing student health programs. *The Chronicle of Higher Education*. https://www.chronicle.com/article/6-major-challenges-facing-student-health-programs/
- Bloom, J. (2007). Misreading social class in the journey towards college: Youth development in urban America. *Teachers College Record*, *109*(2), 343-368.
- Boden, K. (2011). Perceived academic preparedness of first-generation Latino college students. *Journal of Hispanic Higher Education*, *10*(2), 96-106.
- Chemers, M. M., Hu, L., & Garcia, B. F. (2001). Academic self-efficacy and first-year college student performance and adjustment. *Journal of Educational Psychology*, 93(1), 55-64.
- Choy, S. P., Horn, L. J., & Chen, X. (2000). Transition to college: What helps at-risk students and student whose parents did not attend college. *New Directions for Institutional Research*, 2000(107), 45-63.
- Collier, P. J., & Morgan, D. L. (2007). "Is that paper really due today?": Differences in first-generation and traditional students' understandings of faculty expectations. *Higher Education*, *55*(4), 425-446.
- Cominole, M., Siegel, P., Dudley, K., Roe, D., & Gilligan, T. (2004). *National Postsecondary Student Aid Study (NPSAS:04) full scale methodology report (NCES 2006–180).* U.S. Department of Education. National Center for Education Statistics.
- Curtona, C. E., Cole, V., Colangelo, N., Assouline, S. G., & Russell, D. W. (1994). Perceived parental social support and academic achievement: An attachment theory perspective. *Journal of Personality and Social Psychology*, 66(2), 369-378.
- Cushman, K. (2007). Facing the culture shock of college. *Educational Leadership*, 64(7), 44.
- D'Amico, M. M., Dika, S. L., Elling, T. W., Algozzine, B., & Ginn, D. J. (2014). Early integration and other outcomes for community college transfer students. *Research in Higher Education*, *55*(4), 370-399.

- Eagan, K., Stolzenberg, E. B., Zimmerman, H. B., Aragon, M.C., Sayson, H. W., & Rios-Aguilar, C. (2016). The American freshman: National norms fall 2016. https://www.heri.ucla.edu/monographs/TheAmericanFreshman2016.pdf
- Engle, J., Bermeo, A., & O'Brien, C. (2006). *Straight from the source: What works for first-generation college students*. Pell Institute for the Study of Opportunity in Higher Education. http://www.pellinstitute.org/downloads/publications-Straight from the Source.pdf
- Engle, J., & Tinto, V. (2008). *Moving beyond access: College success for low-income, first-generation students*. Pell Institute for the Study of Opportunity in Higher Education. http://www.pellinstitute.org/publications-Moving Beyond Access 2008.shtml
- Gerdes, H., & Mallinckrodt, B. (1994). Emotional, social, and academic adjustment of college students: A longitudinal study of retention. *Journal of Counseling & Development*, 72(3), 281-288.
- Goldrick-Rab, S., Richardson, J., Schneider, J., Hernandez, A., & Cady, C. (2018). *Still hungry and homeless in college*. Madison, WI: Wisconsin HOPE Lab.
- Han, C., Farruggia, S. P., & Moss, T. P. (2017). Effects of academic mindsets on college students' achievement and retention. *Journal of College Student Development*, *58*(8), 1119-1134.
- Hicks, T. (2003). First-generation and non-first-generation pre-college students' expectations and perceptions about attending college. *Journal of College Orientation and Transition*, 11(1), 5-19.
- Ideas42 (2016, June). Nudging for success: Using behavioral science to improve the postsecondary student journey. http://www.ideas42.org/wp-content/uploads/2016/09/Nudging-For-Success-FINAL.pdf.
- Ishitani, T. T. (2003). A longitudinal approach to assessing attrition behavior among first-generation students: Time-varying effects of pre-college characteristics. *Research in Higher Education*, 44(4), 433-449.
- Ishitani, T. T. (2006). Studying attrition and degree completion behavior among first-generation college students in the United States. *The Journal of Higher Education,* 77(5), 860-886.

- Kelly, W. E., Markos, P. A., & Ashley, L. (2005). An investigation of the relationship between worry and alcohol use. *Journal of Worry & Affective Experience*, 1(3), 89-97.
- Khanh, V. B. (2002). First-generation college students at a four-year university: Background characteristics, reasons for pursuing higher education, and first-year experiences. *College Student Journal*, *32*(1), 3-12.
- King, P. M., & Magolda, M. B. B. (2008). Toward reflective conversations: An advising approach that promotes self-authorship. *Peer Review, 10*(1), 8-11.
- Kroger, J., & Green, K. E. (1996). Events associated with identity status change (identity development in context). *Journal of Adolescence*, *19*(5), 477.
- Li, Y., Yao, X., Chen, K., & Wang, Y. (2012). Different fit perceptions in an academic environment: Attitudinal and behavioral outcomes. *Journal of Career Assessment,* 21(2), 163-174.
- Lowery-Hart, R., & Pacheco Jr, G. (2011). Understanding the first-generation student experience in higher education through a relational dialectic perspective. *New Directions for Teaching and Learning*, 2011(127), 55-68.
- MacLeod, A. K., Williams, J. M., & Bekerian, D. A. (1991). Worry is reasonable: The role of explanations in pessimism about future personal events. *Journal of Abnormal Psychology*, 100(4), 478.
- Merrill, K. C. (2019). A pre-orientation retreat to increase retention and develop competence. In K. Branch, J. Hart-Steffes, & C. Wilson (Eds.), *Applying student development theories holistically: Exemplar programming in higher education* (pp. 17-31). Routledge.
- Meuleman, A. M., Garrett, R., Wrench, A., & King, S. (2015). 'Some people might say I'm thriving but...': non-traditional students' experiences of university. *International Journal of Inclusive Education*, *19*(5), 503-517.
- Owens, M., Stevenson, J., Hadwin, J. A., & Norgate, R. (2012). Anxiety and depression in academic performance: An exploration of the mediating factors of worry and working memory. *School Psychology International*, *33*(4), 433-449.

- Osman, A., Gutierrez, P. M., Downs, W. R., Kopper, B. A., Barrios, F. X., & Haraburda, C. M. (2001). Development and psychometric properties of the Student Worry Questionnaire–30. *Psychological reports*, 88(1), 277-290.
- Richardson, R., & Skinner, E. (1992). Helping first-generation minority students achieve degrees. In L. Zwerling & H. London (Eds.), *First-generation students: Confronting the cultural issues* (pp. 29–43). New Directions for Community Colleges, No. 80. Jossey-Bass.
- Robbins, S. B., Lauver, K., Le, H., Davis, D., Langley, R., & Carlstrom, A. (2004). Do psychosocial and study skill factors predict college outcomes? A meta-analysis. *Psychological Bulletin*, *130*(2), 261-288.
- Saldaña, J. (2015). The coding manual for qualitative researchers. Sage.
- Saw, A., Berenbaum, H., & Okazaki, S. (2013). Influences of personal standards and perceived parental expectations on worry for Asian American and White American college students. *Anxiety, Stress, and Coping, 26*(2), 187-202.
- Shin, J. Y., & Steger, M. F. (2016). Supportive college environments for meaning searching and meaning in life among American college students. *Journal of College Student Development*, *57*(1), 18-31.
- Stober, J., Joorman, J. (2001). Worry, procrastination, and perfectionism: Differentiating amount of worry, pathological worry, anxiety, and depression. *Cognitive Therapy and Research*, *25*(1), 49-60.
- Swerdzewski, P. (2008). Should we worry about the way we measure worry over time? A longitudinal analysis of student worry during the first two years of college [Unpublished Doctoral dissertation]. James Madison University.
- Terenzini, P.T., Springer, L., Yaeger, P.M., Pascarella, E.T., & Nora, A. (1996). First generation college students: Characteristics, experiences, and cognitive development. *Research in Higher Education*, *37*(1), 1-22.
- Thuo, M., Edda, M., Abite, S., Kifle, N., Getachew, M., & Alemeyehu, L. (2017). Transition to university life: Insights from high school and university female students in Wolaita Zone, Ethiopia. *Journal of Education and Practice*, 8(4), 45-54.

- Toutkoushian, R. K., Stollberg, R. A., & Slaton, K. A. (2018). Talking 'bout my generation:

 Defining "first-generation college students" in higher education research. *Teachers College Record*, 120(4), 1-38. https://www.tcrecord.org/library
- Warburton, E. C., Bugarin, R., & Nuñez, A. (2001). *Bridging the gap: Academic preparation and postsecondary success of first-generation students.* NCES Statistical Analysis Report 2001-153. U.S. Department of Education.
- Whitbourne, J. (2002). The dropout dilemma: One in four college freshmen drop out. What is going on here? What does it take to stay in? *Careers and Colleges*, *22*(4), 26–31.