Characteristics and Tendencies of First and Second-Generation University Students

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Abstract

This study examined academic characteristics and tendencies of first-generation and second-generation students. Students at a mid-sized state university in Tennessee were surveyed to determine their preferred learning format, number of hours enrolled, hours applied toward studying outside the classroom, hours working off-campus, and current GPA. Results of the study revealed that first-generation students had slightly higher GPA's than second-generation students and preferred face-to-face instruction over on-line instruction. Researchers noticed that hours studied outside the classroom showed marginally significant differences over all the other categories observed.

Keywords: first generation student, second generation student, student success, student retention

Introduction

Higher education administrators are currently focused on increasing student enrollment as well as increasing retention and graduation rates. Colleges and universities are being held...
more accountable in these specific areas. According to Sanford and Hunter (2011), “Public higher education institutions continue to find themselves involved in a national discourse over concerns of accountability, assessment, and performance” (p. 2). This concern is due to the fact that despite an increase in student enrollment, fewer students graduate (Sanford & Hunter, 2011). Numerous discussions and debates have occurred on how to resolve this situation. Some states are implementing performance-funding, performance-budgeting, and performance-reporting as accountability methods to link state funding and priorities for institutional performance (Sanford & Hunter, 2011). New measures were implemented from enrollment-based funding to performance-based funding and Tennessee is one of the leading states involved in this concept.

Performance-based funding distributes a state’s higher education budget according to specific measures such as course completion, credit attainment, and degree completion, and is contrasted by an enrollment-based funding model (Miao, 2012). Tennessee has been a trend setter and a state for others to emulate after the enactment of The Complete College Tennessee Act of 2010. This Act measures performance on the basis of student retention, degree attainment, and successful completion of remedial courses (Sanford & Hunter, 2011). Sanford and Hunter (2011) state, “For the first time, 75-80% of state institutions’ entire unrestricted appropriations will be allocated based upon outcomes, such as student retention and six-year graduation rates, rather than enrollment” (p. 7). There is a process that all students experience in order to be successful in college: enrollment, registration, persistence, retention, progression, and completion.

In this study, the authors seek to explore several characteristics and preferred tendencies of first-generation students and second-generation students in a medium-sized state university in Tennessee. The following categories were compared and contrasted: students’ preferred method of instruction, enrollment status, the number of hours studied outside the classroom weekly, the number of hours worked off campus weekly, and grade point average.

**Literature Review**

**Characteristics & Tendencies of First-Generation Students**

First-generations students are those whose parents or guardian never attended college or a university (Billson & Terry, 1982; Choy, 2001; Hutchens, Deffendall, & Peabody, 2011; Ishitani,
Prior research has shown that first-generation students struggle to succeed in postsecondary education; specifically, first-generation students appear to be underprepared academically and psychologically (Pelco, Ball, & Lockeman, 2014; Riehl, 1994; York-Anderson & Bowman, 1991). First-generation students are twice as likely to drop out of four-year institutions in their second year (Choy, 2001). Lower income first-generation students are four times more likely to drop-out after their first year; therefore, contributing to lower retention rates (Blau & Duncan, 1967; Engle & Tinto, 2008; London, 1989, 1996).

According to Pike and Kuh (2005), “...first-generation college students are less likely to persist and graduate, surprisingly little is known about their college experiences and the ways those experiences compare to the experiences of students who have college-educated parents” (p. 276).

Parents, teachers, and other influential adults form part of the social force which affects the development of self-motivation and self-efficacy among college students. First-generation college students showed significantly lower levels of academic motivation and self-efficacy (Bandura, 1986; Complete College America, 2012; Hellman & Harbeck, 1996; Schunk & Zimmerman, 1996). Prior research has shown that some first-generation students are less likely to live in campus dorms, develop lasting relationships with faculty members, and do not view faculty as being concerned about their academic development; furthermore, these students also have to work more hours off campus (Mehta, Newbold, & O’Rourke, 2011; Terenzini, Springer, Yaeger, Pascarella, & Nora, 1996). Longer working hours after school makes acclimation to college more difficult, and can negatively affect GPA’s, hours studied outside class, and enrollment status. First-generation students are more likely to have difficulty acclimating college culture, participating in orientations or workshops, developing faculty or peer relationships, and joining academic clubs or organizations (Mehta et al., 2011; Tinto, 1993; Terenzini et al., 1996).

First-generation students have also been found to have lower levels of academic and social integration (Billson & Terry, 1982; Mehta et al., 2011; Tanjula, 2014). Some studies have reported that they have lower GPA’s, more frequently attend school on only a part-time basis, and study less time outside the classroom (Engle & Tinto, 2008; Mehta et al., 2011; Tanjula, 2014). Other researchers have reported that there is no significant difference in GPA’s when comparing first and second-generation students (Zalaquett, 1999). The existing
literature implies that first-generation students may experience lower academic success, which can lead to lower retention and graduation rates.

**Current Student Success Initiatives**

With more recent research emerging, higher education professionals have developed a better understanding of first-generation students. Innovative support programs and best-practices have successfully assisted college and university students along their academic journeys. Federal TRIO Programs serve a wide variety of students, specifically lower-socio economic first-generation students, and assist them with higher education attainment (Perna, 2015). Another supportive program is the Council for Independent Colleges (CIC) and Walmart College Success Awards Program. The main premise of this organization demonstrates commitment to recruitment, retention, and academic success of first-generation students (Strand, 2013).

Complete College America (CCA) is a non-profit organization that was created in 2009 to increase the graduation rates of college students (Complete College America, n.d.). The organization encourages partner states to offer a corequisite remediation approach, which involves allowing students who need remediation to start taking enhanced college courses that offer extra support outside of the regularly scheduled course. According to the organization, a key barrier for first-generation students is lack of academic preparation. They reported a large percentage of first-generation students require remedial courses upon entrance into a post-secondary institution (Complete College America, 2012). According to America’s Promise Alliance (2012), an organization that exists to help youth become successful adults and support increasing graduation rates nationally:

> Students who take remedial education courses are much less likely to persist on to graduation. Specifically, fewer than one in ten community college students taking remedial courses graduate within three years, and only about a third of students graduate with a bachelor’s degree within six years.

> Data suggests that institutions in states which have partnered with CCA to offer a corequisite remediation approach, including Tennessee, have shown improvement in retention rates (Smith, 2016).

In 2014, Tennessee’s state government also implemented a
concerted effort to increase the percentage of state residents who hold a postsecondary degree or credential from 32% in 2014 to 55% by the year 2025. This initiative has paved the way for efforts like the Tennessee Promise, a scholarship program that allows Tennessee residents to earn a two-year degree tuition-free, while also providing support for each student in the form of a volunteer mentor. The same campaign has realized success in an effort known as Advise Tennessee, a program that provides services to over 10,000 high school juniors and seniors across the state to help them select a postsecondary program that is aligned with their interests and abilities (Tennessee Higher Education Commission, n.d.). The “Drive to 55” effort has increased the first-time freshman enrollment in public higher education by 13% in its first two years, and retention rates from year one to year two are strong (Tennessee Higher Education Commission, 2017). Many of these students are first-generation college students who may not have been able to attend college without the tuition waiver.

Nationally, many colleges and universities have implemented first year experience programs to improve student success and retention. One main proposition enlists faculty members as allies to create a safe and creative learning environment. In addition to lecture-based formats, the University of New Mexico developed a peer-learning facilitator program, in which students assist instructors with classroom assignments and activities (Supporting First, 2012). Another program that aims to increase student retention and success was developed at Claflin University. They launched the Learning in Communities for Success Project, which enrolls first-generation students in three linked courses: English, math, and freshman orientation (Supporting First, 2012). Delaware State University developed Project Advance, a learning community in the departments of English, arts, and sciences (Supporting First, 2012). The concepts behind these best practices can also be applied to second-generation students who are struggling academically.

Other studies conducted in an effort to determine manageable, cost-effective ways to support and retain first-generation students have provided various other concrete suggestions to improve these students’ first year experiences. Stephens, Hamedani, and Destin (2014) included a difference-education component (panel discussions in which a diverse group of college seniors shared their real experiences) into the first year experience for first-generation students, in which they highlighted students’ diverse backgrounds, and how these backgrounds can affect the college experience, to eliminate the social-class achievement gap. “The difference-education
intervention...equipped first-generation students to take advantage of college resources and improve their academic performance” (p. 947). The program was also noted to have improved the ease of transition to the college environment for both first- and second-generation students. Researchers have also attempted to improve student success and retention by incorporating social-networking virtual learning communities within their first-year seminar experiences. Results of one study indicated that students in these communities experienced an easier transition to the university and were more satisfied with their institutions (Nalbone et al., 2016). Across the country, first-year experience programs are becoming both more widespread and more innovative in the ways in which they attempt to reach and impact students.

An emerging trend in first-year experiences is providing specialized courses for groups based on various criteria. Students at some universities are taking required credit-bearing “Introduction to the University” courses based on majors, level of academic preparedness, learning communities, etc. Connolly, Flynn, Jemmott, and Oestreicher (2016) found when first-year students who earned a GPA of less than 2.0 were identified in their first semester and participated fully in the specialized first-year experience class for at-risk students during their second semester, their overall academic achievement and GPA’s improved. Another study found that a study-skills course offered to students who entered college with reading deficiencies as part of the first-year experience had a significant positive impact on student retention (Windham, Rehfuss, Williams, Pugh, & Tincher-Ladner, 2014).

Characteristics & Tendencies of Second-Generation Students

Second-generation students are those whose parent or guardian attended a college or university and earned at least one baccalaureate degree (Pike & Kuh, 2005). The main concept differentiating them from first-generation students is that they have a family member to guide or assist them with this higher educational experience. The transition from high school to college may be more difficult for students without strong family support and college educated mentors. Ramos-Sanchez and Nichols (2007) concluded that second-generation students reported higher retention and graduation rates than first generation students. Ramos-Sanchez and Nichols (2007) state, “The advantage of having parents who could guide them in their transition to college likely led to higher confidence in and positive beliefs about their ability to succeed and adjust at a 4-year university” (p. 8).
Prior research has shown that some second-generation students have a better over-all college experience than first-generation students. Terenzini et al. (1996) found that second-generation students had higher educational aspirations than their first-generation counterparts and were more satisfied with the campus environment. Also, second-generation students are more likely to participate in campus clubs or organizations and after school events (Billson & Terry, 1982; Terenzini et al., 1996) and are more likely to successfully adjust to university norms of independence (Stephens, Fryberg, Markus, Johnson, & Covarrubias, 2012). This strong social integration plays a major role with student success and persistence.

While some researchers draw distinct differences between first- and second-generation students, there have been some conflicting studies. Prior research reported first-generation students are less likely to come to college academically prepared versus second-generation students (Richl, 1994; York-Anderson & Bowman, 1991). In contrast, Warburton, Bugarin, and Nunez (2001) found no differences in academic performances when first-generation students took advanced high school courses and graduated in the higher percentile of their high school peers. Cone (1992) found higher academic performance and retention in second-generation students versus first-generation students. In contrast, Zalaquett (1999) reported no significant difference in GPA’s among first and second-generation students.

Methods and Results

To determine differences among the characteristics and tendencies of first-generation and second-generation students, these researchers administered a survey to collect data from students taking courses at a mid-sized state university in Tennessee. Referencing the survey (Appendix A), students were asked to self-report information on their own background, such as gender, enrollment status (full-time or part-time), student status (first- or second-generation), and GPA. Students also reported on the type of learning format they preferred (face-to-face, hybrid, or online courses), the number of hours they studied outside the classroom weekly, and the number of hours they worked off-campus weekly.

Based on the review of literature, the researchers established several hypotheses prior to administering the surveys:

Hypothesis 1: First-generation students prefer on-line instruction less than second-generation students.
Hypothesis 2: First-generation students take fewer course hours per semester than second-generation students.

Hypothesis 3: First-generation students study less than second-generation students outside the classroom.

Hypothesis 4: First-generation students work more hours than second-generation students.

Hypothesis 5: First-generation students’ GPA’s are lower than second-generation students.

The survey was administered to a convenience sample of nine classes during the Fall 2016 semester term. Each course varied in topic, but all were in the discipline of social/behavioral sciences. Five of the classes sampled were on-ground or face-to-face instruction and the remaining four classes were online instruction. The total enrollment for these courses was 201 students. A total of 153 surveys were collected; thus, creating a response rate of 76%. Ten of the surveys had to be excluded from the data analysis due to incomplete information; therefore, leaving an N of 143.

Some observations based on the descriptive statistics include:

- The majority of first-generation students were enrolled full-time (89%).
- A small percentage of second-generation students preferred online instruction (14%).
- Thirty-seven percent of both first-generation and second-generation students had a 3.5 GPA.
- Fourteen percent of both first-generation and second-generation students studied thirteen hours or more outside the classroom.

Additional information collected in the survey was related to student characteristics and tendencies. Students reported their preferences in learning format, which include face-to-face courses, hybrid courses, or online courses. Students also self-reported how many hours they spent studying each week, how many hours they spent working off-campus each week, and their current hours enrolled. Detailed descriptive statistics are shown in Table 1.

Table 1.

<p>| Total Sample (N = 143) | First Generation Students (n = 65) | Second Generation Students (n = 78) |</p>
<table>
<thead>
<tr>
<th></th>
<th>N</th>
<th>% Of total sample</th>
<th>n</th>
<th>% Of subset</th>
<th>n</th>
<th>% Of Subset</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Preferred Learning Format</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Face-to-face</td>
<td>73</td>
<td>51%</td>
<td>36</td>
<td>55%</td>
<td>37</td>
<td>47%</td>
</tr>
<tr>
<td>Hybrid</td>
<td>47</td>
<td>33%</td>
<td>17</td>
<td>26%</td>
<td>30</td>
<td>39%</td>
</tr>
<tr>
<td>Online</td>
<td>23</td>
<td>16%</td>
<td>12</td>
<td>19%</td>
<td>11</td>
<td>14%</td>
</tr>
<tr>
<td><strong>Hours Spent Studying Each Week</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>0 – 3 Hours</td>
<td>24</td>
<td>17%</td>
<td>11</td>
<td>17%</td>
<td>13</td>
<td>17%</td>
</tr>
<tr>
<td>4 – 6 Hours</td>
<td>53</td>
<td>37%</td>
<td>24</td>
<td>37%</td>
<td>29</td>
<td>37%</td>
</tr>
<tr>
<td>7 – 9 Hours</td>
<td>35</td>
<td>24%</td>
<td>16</td>
<td>25%</td>
<td>19</td>
<td>24%</td>
</tr>
<tr>
<td>10 – 12 Hours</td>
<td>11</td>
<td>8%</td>
<td>5</td>
<td>7%</td>
<td>6</td>
<td>8%</td>
</tr>
<tr>
<td>13 or more Hours</td>
<td>20</td>
<td>14%</td>
<td>9</td>
<td>14%</td>
<td>11</td>
<td>14%</td>
</tr>
<tr>
<td><strong>HOURS WORKED OFF-CAMPUS EACH WEEK</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>0 Hours</td>
<td>37</td>
<td>26%</td>
<td>17</td>
<td>26%</td>
<td>20</td>
<td>26%</td>
</tr>
<tr>
<td>1 – 10 Hours</td>
<td>15</td>
<td>10%</td>
<td>7</td>
<td>11%</td>
<td>8</td>
<td>10%</td>
</tr>
<tr>
<td>11 – 20 Hours</td>
<td>23</td>
<td>16%</td>
<td>10</td>
<td>15%</td>
<td>13</td>
<td>17%</td>
</tr>
<tr>
<td>21 – 30 Hours</td>
<td>24</td>
<td>17%</td>
<td>11</td>
<td>17%</td>
<td>13</td>
<td>17%</td>
</tr>
<tr>
<td>31 or more Hours</td>
<td>44</td>
<td>31%</td>
<td>20</td>
<td>31%</td>
<td>24</td>
<td>31%</td>
</tr>
<tr>
<td><strong>Hours Enrolled</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Full (12 Hours or more)</td>
<td>121</td>
<td>85%</td>
<td>58</td>
<td>89%</td>
<td>63</td>
<td>81%</td>
</tr>
<tr>
<td>Medium (7-11 Hours)</td>
<td>8</td>
<td>5%</td>
<td>4</td>
<td>6%</td>
<td>4</td>
<td>5%</td>
</tr>
<tr>
<td>Small (3-6 Hours)</td>
<td>14</td>
<td>85%</td>
<td>58</td>
<td>89%</td>
<td>63</td>
<td>81%</td>
</tr>
</tbody>
</table>
Inferential statistics were calculated to test each hypothesis.

H1: Researchers predicted that first-generation students prefer online courses less than second-generation students.

A chi-square test of independence was performed to examine the relationship between student status (first- and second-generation) and student preference in course format. The relationship between these variables was not statistically significant and only 19% of first-generation students preferred on-line classes. Surprisingly, only 14% of second-generation students preferred on-line instruction. The most popular form of instruction, for both student statuses, was face-to-face or on-ground instruction (55% of first-generation students and 47% of second-generation students). Second-generation students reported that they preferred hybrid instruction more than first-generation students did (39% vs 26%).

H2: Researchers predicted that first-generation students take fewer class per semester than second-generation students.

The chi-square test revealed that first-generation students surveyed did not take a significantly lower number of hours compared to second-generation students. Surprisingly, 89% of first-generation students were enrolled full-time and 81% of second-generation students were enrolled full-time.

H3: Researchers predicted that first-generation students studied less outside the classroom than second-generation students.

A chi-square test of independence was performed to examine the relationship between student status (first- and second-generation) and the number of hours spent studying outside of class. The results indicated that there was a marginally significant difference between the two groups (X² = .09983, p < .01). Almost half of first-generation and second-generation students (46%) surveyed reported they studied seven or more hours each week, outside the classroom. These data results are displayed in Table 2 below.

<table>
<thead>
<tr>
<th></th>
<th>Least</th>
<th>Some</th>
<th>Average</th>
<th>More</th>
<th>Most</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>1st Gen</td>
<td>11</td>
<td>24</td>
<td>16</td>
<td>5</td>
<td>9</td>
<td>65</td>
</tr>
</tbody>
</table>
H₄: Researchers predicted that first-generation students spent more time working off-campus than second-generation students.

The chi squared test of independence revealed that first-generation students work more hours off-campus than second-generation students. The results indicated that there was a marginally significant difference between the two groups ($X^2 = .09996, p < .01$). Forty-eight percent of first-generation and second-generation students reported that they worked at least 21 hours or more weekly (see Table 3 below).

Table 3. Chi Square Tests for H₄-First-generation students spent more time working off-campus than second-generation students.

<table>
<thead>
<tr>
<th></th>
<th>None</th>
<th>Some</th>
<th>Average</th>
<th>More</th>
<th>Most</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>1st Gen</td>
<td>17</td>
<td>7</td>
<td>10</td>
<td>11</td>
<td>20</td>
<td>65</td>
</tr>
<tr>
<td>2nd Gen</td>
<td>20</td>
<td>8</td>
<td>13</td>
<td>13</td>
<td>24</td>
<td>78</td>
</tr>
<tr>
<td>Total</td>
<td>37</td>
<td>15</td>
<td>23</td>
<td>24</td>
<td>44</td>
<td>143</td>
</tr>
</tbody>
</table>

H₅: Researchers predict that first-generation students GPA’s were lower than second-generation students.

No statistically significant differences were found between groups when comparing the grade point averages. Interestingly, first-generation students GPA’s in the 3.5 range or higher were similar to the second-generation students GPA’s. The data showed that 37% of first-generation and second-generation students were in the upper category of a 3.5 GPA or above.

Limitations

One limitation for this study was the sample size. The students surveyed were selected via a convenience sample and administered in a limited number of classes. The sample came from only two departments within the university and data was collected during only one semester. Another limitation pertained to the quantitative research design. This design gave the researchers informative numerical data about
characteristics and tendencies of first- and second-generation students, but lacked the depth a mixed-methods type research would reveal. An additional limitation was related to the makeup of the sample. The majority (78%) of students who responded to the survey were upperclassmen. A study conducted on a larger scale could allow researchers to survey students in a variety of upper and lower-level courses to gain responses from more underclassmen. This could provide a more balanced perspective on first and second-generation students’ study habits and how they might evolve as they progress in their degree programs. Finally, self-reported data poses a possible issue within itself; specifically, the number of hours spent studying and GPA’s may have been aggrandized by the students surveyed. The surveys were anonymous and none of the reported data could be verified.

Discussion

This study offers practical implications for universities, in their efforts to improve student success, retention, and graduation rates. Understanding the type of learning format that first- and second-generation students prefer can lead to decisions that improve their success and retention throughout their academic journey. Every student is unique and has different learning styles, so a variety of instruction is essential to appeal to each student. Pairing the student with their preferred method of instruction ensures the best chances for success. These points may be stressed during freshman orientation and/or registration by their academic advisors. This study’s data revealed that 39% of second-generation students favored hybrid classes to 26% of first-generation students. While university populations may vary in regards to these preferences, it is important to offer a variety of face-to-face, hybrid, and online courses when feasible to accommodate many groups of students.

In order for a student to obtain a four-year degree, a specific number of hours must be completed each semester. This rate of progression also affects graduation rates and financial aid funding. Therefore, it is the university’s responsibility to educate the students about enrollment hours and give them a suggested degree plan that keeps them on a successful track toward degree completion. This can be stressed during freshman orientation, first-year experience programs, and each semester’s registration process, under the supervision of academic advisors. Prior research has shown that first-generation students tend to take fewer hours each semester (Terenzini et al., 1996). In the current study, 11% of first-generation students were enrolled part-time, while the majority
were full-time students. While the university studied has fewer first-generation students enrolled part-time than other comparable institutions, colleges and universities with a different ratio may desire support programs designed to encourage these students to pursue full-time enrollment as a means to improve student success. The university represented in this study also has a strong, fluid first-year experience program in place that has played a supporting role in opening lines of communication between students, faculty, and administrative staff, as well as equipping students with the technical tools needed to monitor their own progress toward degree completion.

Numerous factors influence student success and retention, including the number of hours a student studies outside the classroom. In spite of prior research showing first-generation students studied fewer hours (Engle & Tinto, 2008; Mehta et al., 2011; Tanjula, 2014; Terenzini et al., 1996), the current study showed almost half (46%) of first-generation and second-generation students surveyed reported they studied seven or more hours each week, outside the classroom. The university studied currently offers corequisite mediation for freshman (requiring that students attend study sessions outside of class when placed in enhanced, formerly known as remedial, sections of key core courses), and schedules a student study day on the academic calendar, before final exams each semester. The study day allows the students to dedicate a specific day, outside the classroom, to study in groups or individually for final exams. Increasing the amount of time studying outside the classroom can improve student efficacy and academic performance (Komarraju & Nadler, 2013). While researchers are aware that students may tend to over-state the number of hours they spend studying outside of class, students at other institutions could potentially benefit from implementing these prescribed times of study.

With the increasing costs of a postsecondary degree, many students are working more hours off-campus to help pay for college. The data from this study revealed there was a marginally significant relationship between first- and second-generation students’ hours worked off-campus. These results affirm prior research findings about first-generation students working more hours than second-generation students (Mehta et al., 2011; Richardson & Skinner, 1992; Tanjula, 2014; Terenzini et al., 1996). However, in this study, a full 48% of first-generation and second-generation students reported that they worked at least 21 hours or more weekly. While both groups seem to work a heavy schedule off campus, tracking this
Generally, post-secondary institutions have a minimum GPA requirement in order to graduate and the university studied was no different. Researchers found no statistically significant relationship between first- and second-generation students’ GPA’s. This was consistent with some prior studies, but contradicted others. According to Murphy and Hicks (2006), “Students who had parents with no college experience and students with some college experience did not differ from students who had at least one parent with a bachelor’s degree regarding expected grade point average” (p. 14). Zalaquett (1990) also found no difference in GPA’s among first- and second-generation students. This study’s data concluded that first-generation students GPA’s in the 3.5 range or higher were similar to the second-generation students GPA’s. These results were not similar to other studies mentioned previously, which reported that first-generation students maintained lower GPA’s than second-generation students (Engle & Tinto, 2008; Mehta et al., 2011). This information seems to vary widely by university. Research on the academic performance of first-generation students continues to emerge, and universities should be examining their own populations to add to the body of knowledge. As more patterns emerge in this data, researchers should continue to study these differences and examine their potential causes.

Several productive retention programs thrive because innovative academic teams consisting of mentors, instructors, administrative staff, and academic advisors actively participate in some type of first-year experience program (Nalbone et al., 2016; Stephens et al., 2014; Supporting First, 2012). Understanding learning format preferences could help faculty and university administrators improve student retention and graduation rates. Faculty and university administrators may be able to improve first- and second-generation student success by implementing suggestions made in this study. Many of the efforts mentioned throughout the literature originate with the purpose of helping first-generation students, but are later proven to help an entire student body. The results of the present study provide researchers with new information that can be incorporated into the existing knowledge about first- and second-generation university students.

Recommendations for Future Research
As mentioned previously, this study was not free of limitations. Future researchers interested in this topic could overcome the current study’s limitations by expanding the sample to include a larger sample size, and survey students taking a more diverse array of courses. The data collected could prove to be more robust if the sample was more balanced between underclassmen and upperclassmen, since their study habits and college experiences tend to vary in part based on their stage in school. Additionally, in this study the data was limited by the act of students self-reporting the number of hours they spent studying outside of class each week. In a future iteration of this study, researchers might find it helpful to ask students to keep a weekly log of hours studied each week, so their self-reported number of hours could be considered more reliable.

This study gave the researchers insights into the characteristics and tendencies of first- and second-generations students, but did not analyze several additional factors that impact the study habits, success, and retention of first- and second-generation students. Further research is recommended examining various student experiences and stressors that occur throughout their academic journey. This could be accomplished with a mixed methods type project. Personal interviews could give faculty and administrators better insight into specific student experiences and stressors, which could help administrators provide more appropriate campus support for the students to succeed. Other factors that have previously been reported to affect student study habits and could be examined during future studies using qualitative methods include a residential or commuter status, at-home internet access or the lack thereof, participation in enhanced, or remedial courses, student age, students classification (freshman, sophomore, junior, senior), and the usage of existing student support services.

Prior research has shown the second-generation students have an advantage acclimating to the college culture, because a parent has been through this academic process (Pike & Kuh, 2005; Ramos-Sanchez & Nichols, 2007). The stress for this student often lies in meeting implied expectations for degree completion. On the other hand, the first-generation students may want to be an example for their families and take on the stress of becoming the first in their family to graduate from college. Insight into these areas will help future researchers construct a more complete view of the characteristics and tendencies of first and second-generation college students.

Conclusion
This study offers pragmatic relevance for administrators and
faculty members teaching in any discipline. As first-generation student populations increase, administrators and faculty members should be mindful of the particular characteristics for these student groups. As previously mentioned, first-generation students preferred face-to-face instruction and the majority were enrolled full-time. Faculty and university administrators should take this into consideration, while assisting students on their academic journey of continuing success and increasing retention rates. Nearly half (48%) of students surveyed (both first- and second-generation students) reported that they worked more than 21 hours each week off campus. Campus administrators must consider the demands students are met with today, and prioritize providing flexible options for students who are already strapped for time. Faculty and administrators alike can improve their decision-making, processes, and programming (including organized first-year experiences) based on a deeper understanding of the characteristics and tendencies of their unique student body.

References


Zalaquett, C. P. (1999). Do students of non-college educated parents achieve less academically than students of college-
Appendix A: Student Survey

Background

1. Select your gender:
   - Male
   - Female

2. How would you describe your ethnic background?
   - Black or African American
   - White or Caucasian
   - Native Hawaiian or Pacific Islander
   - Asian
   - American Indian or Alaskan Native
   - Multiple Ethnicity/Other

3. In what state did you graduate high school?
   - TN
   - KY
   - Other

4. Which of these best describes you?
   - Traditional student (18 - 24 years of age)
   - Non-Traditional student (25 or older)

5. Which generation of student are you?
   - First generation (first person in your family to go to college)
   - Second Generation (your mother or father has earned a college degree)

6. What type of learning format do you prefer?
   - Online Courses
   - Face-to-face Courses
   - Hybrid (Both online and face-to-face instruction within the same course)

Academic Information

7. Do you live on campus?
   - I live on campus
   - I live off campus

8. What is your current student classification?
   - Freshman
   - Sophomore
   - Junior
   - Senior
   - Graduate Student

9. How many semester hours are you currently enrolled in?
   - Part-time (3 - 6 hours)
   - Part-time (7 - 11 hours)
   - Full-time (12 or more hours)

10. How many hours per week do you study outside of class?
    - 0 - 3
11. How many hours per week do you spend working off-campus?
0
1 – 10
11 – 20
21 – 30
31+

12. What is your current GPA?
4.0
3.9 - 3.5
3.4 - 3.0
2.9 - 2.5
2.4 - 2.0
Lower than 2.0
Unknown