Examining factors influencing attrition at a small, private, selective liberal arts college

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Despite a diverse body of literature on college student retention, studies focusing on small, private, selective liberal arts colleges are limited. This study utilized a mixed methodology beginning with logistic regression analyses and followed with a qualitative inquiry that included interviews with students who had not persisted. While variables impacting persistence at selective institutions may differ from other types of institutions, the role of student affairs in student success remains critical.

Highly selective institutions, which enroll approximately 9% of all college-going students (College Board, 2011), admit students with high academic ability (Pascarella et al., 2006). Academic ability is strongly and positively correlated to retention rates (Bowen, Chingos, & McPherson, 2009) so it is not surprising that retention and graduation rates at selective institutions are higher than at less selective institutions.

Despite these higher average retention rates, there still exists, “a wide variation in adjusted graduation rates [among institutions with similar selectivity indexes], which suggests other factors..."
are at play” (Bowen et al., 2009, p. 196). As Schuh and Gansemer-Topf (2012) have outlined, for private colleges that rely heavily on tuition and fees, slight fluctuations in retention can have significant impacts on their budget. A 2% decrease in retention on a campus of 2,000 students results in 40 fewer students. With tuition and fees at approximately $40,000 per student (College Board, 2012), the budgetary repercussions, compounded by the financial and emotional costs to students, can be detrimental. Since we know little about the factors that contribute to or impede student success at selective institutions, additional research in this area was warranted.

Two critical factors related to retention stem from academic preparation and ability to pay (Astin & Oseuguera, 2012). By definition, selective institutions attract students with strong academic preparation and ability; thus the influence of precollege academic variables on retention may be minimal. Highly selective institutions also tend to enroll students from higher income levels than their less selective peers, thus minimizing student financial aid concerns (Bowen et al., 2009). If students are not leaving due to academic or financial difficulty, what other factors may influence their attrition? Are there factors that may be more predictive of student attrition at highly selective institutions and if so, what are the implications of these factors for student affairs? Despite the significant amount of research on student persistence, overall student persistence has not dramatically improved (Bowen et al., 2009). Research that focuses on often overlooked institutional types and utilizes a more comprehensive methodology was needed (Reason, 2009; Seidman, 2012).

The purpose of this study was to explore factors that contribute to student attrition at one baccalaureate, small, private not-for-profit, selective liberal arts college. Using a mixed methods approach, this research examined the following questions:

1. What demographic, financial, academic, and behavioral factors influence student first-year attrition?
2. What demographic, financial, academic, and behavioral factors influence student second-year attrition?
3. What demographic, financial, academic, and behavioral factors influence student 4-year graduation rates?
4. Of those students who withdrew from the institution, what factors contributed to their departure?

Theoretical Framework

Tinto's (1993) theory of student departure guided the development of this study. Tinto's model seeks to explain reasons students choose to stay or leave an institution, which is an appropriate framework for this study of college student attrition. Tinto's model approaches attrition as a combination of students' pre-entry characteristics, personal goals, and their experiences upon enrolling. By engaging in qualitative research methods, this study also sought to understand why students chose to leave. Whereas many studies analyze quantitative data to predict student attrition, this study, by following up with students after they had withdrawn, attempted to better understand the impact of the college experiences that may have contributed to their departure.

Pre-entry Characteristics and Personal Goals

Pre-entry characteristics, such as academic ability, student demographics, and family income, which have been found to influence student persistence (Astin & Oseuguera, 2012) were included in this study. These variables included: gender, ethnicity, family income, financial aid, and admissions

Additional student demographic variables in the study included: distance of college from a student’s home (Bista & Foster, 2011), first-generation student status (Longwell-Grice & Longwell-Grice, 2008; Soria & Stebleton, 2012), whether the student had visited campus prior to enrolling (Chimes & Gordon, 2008), and expressed interest in a STEM field (Chen, 2009). Specific major was not included in this study, since students in this study do not choose a major until the middle of their sophomore year.

Student characteristics and experiences were considered at four different points in time: end of first-year, end of second-year, graduation, and post-withdrawal. Past research on time to degree supports this approach (e.g., DesJardins, Ahlburg, & McCall, 1999, 2006).

Institutional Experiences

In this study, the institutional context as a small, private, selective liberal arts institution provided a distinctive and understudied backdrop for researching retention. While other research has examined the role of institutional selectivity in student persistence (Bowen & Bok, 1998; Carnevale & Rose, 2003; Melguizo, 2008), few studies have examined the specific variables within selective institutions that contribute to retention. Selective institutions enroll students who are more academically prepared for college, which subsequently, plays a direct role in student persistence (Titus, 2004; Pascarella & Terenzini, 2005). Evidence also suggests that selectivity influences persistence indirectly through the institutional messages and peer interactions (Bowen et al., 2009). As Hirt’s (2006) examination of the role of student affairs at different types of institutions and Bergquist and Pawlak’s (2007) analysis of academic cultures demonstrate, institutional context factors create unique environments that shape student behavior and experiences. This study focused on institutional selectivity, which subsequently influences institutional experiences that impacts student attrition. Three variables related to institutional experiences were included in quantitative analyses: (a) first-year college GPA (Allen, Robbins, Casillas, & Oh, 2008; Gifford, Briceno-Perriott, & Mianzo, 2006); (b) participation in a precollege transition science program (Raines, 2012), and (c) student hiatus (stop-out) (DesJardins et al., 2006).

Methods

This study utilized a mixed methods approach. Quantitative methods were first utilized to highlight general categories of variables that may impact attrition. Qualitative methods were subsequently employed as a way to “explain specific aspects of the quantitative results” (Plano Clark, Creswell, O’Neil Green, & Shope, 2008, p. 369). Research Questions 1–3 employed quantitative methods, specifically logistic regression.

Research Question 4 was approached as phenomenological research that employed in-depth individual interviews (Moustakas, 1994). In-depth individual interviews sought to explore the academic and social experiences of former students who had been situated in a particular context (Denzin, 1978). The epistemological approach was anchored in the constructivist tradition to create knowledge, understanding, and meaning through human interactions (Marshall & Rossman, 1999).

Sample

For the first two research questions, first-time, full-time students who enrolled in the college from 2000 to 2008 (N = 3,600) were included in the analyses. For the 4-year graduation analysis
in Research Question 3, first-time full-time students who entered 2000 to 2007 \((N = 3,139)\) were included. Of this sample, 54% of the students were female, 67% were White, 17% were domestic ethnic minority students, and 10% were international students. Approximately 14% were first-generation students, and 35% received a Pell Grant. The demographic and academic characteristics of this sample mirrored the overall student population.

For Research Question 4, a purposeful sample (Creswell, 2007; Patton, 2002) of students who had voluntarily withdrawn from the institution (fall 2010 to fall 2012) was used. The preliminary quantitative analysis found that the majority of students who left the university did so while still in good academic standing. Because this study sought to understand students’ decisions to leave an institution, only those students who had voluntarily left the institution in good standing (i.e., students who willing left and were not dismissed for low GPA or disciplinary problems) were contacted for individual interviews. One hundred sixty-eight students were contacted and 13 (eight females and five males) completed an in-depth phone or Skype interview. Eleven of the students were out-of-state students. Students’ majors were not explored because students do no select a major until the second year, and the majority of the students left in their first year.

Data Collection and Analysis

Institutional data were collected to address the first three research questions. Table 1 includes the list of independent by category (i.e., demographic, academic, financial). First-year GPA was used to predict first-year and second-year retention, and overall GPA and personal/medical leave indicators were used to predict 4-year graduation. Logistic regression analyses were employed to identify factors that might predict student attrition to examine the effectiveness of the entire model in predicting attrition (Mertler & Vanatta, 2001). Variables were entered in the regression equations in blocks to determine the influence each block of variables had in predicting retention and graduation rates.

The final research question sought to examine the experiences of students who withdrew from the institution in order to better understand why they left. Phenomenological research describes an individual’s experience and thoughts about said experience of a phenomenon (Glesne, 1999).

The individual interviews used a semistructured interview technique (Patton, 2002); a list of open-ended prescribed questions, which allowed for follow-up questions by the interviewer. During interviews, the researcher engaged participants about their academic and social experiences during their time at the institution. Since many of the questions were open-ended, discussions often became conversational, which allowed the researcher and participants to mutually share experiences and encourage deeper reflection among participants. Some examples of the questions include: (a) “How did you feel about the academic expectations of the College?,” (b) “What factors outside of the academic program interfered with academic achievement?,” (c) “Why did you leave the college?,” and (d) What factors contributed to you making this decision?”

Data were analyzed using constant comparative analysis (Jones, Torres, & Arminio, 2006). Interviews were conducted and notes recorded, the researchers read through research notes and made self-reflective notes to help form initial themes. These notes included questions and speculations about the data and themes that emerged.

The researchers used feedback from peer reviewers to ensure credibility (Merriam, 1998). This process engaged the researchers in a series of ongoing discussions about the meanings made of the participants’ experiences throughout the research process (Jones et al., 2006).
Results

This study used mixed methods to gain a comprehensive understanding of factors that contributed to student attrition. Following are the results from the logistic regression and student interviews.

Factors Influencing First-Year Attrition

The results of the descriptive analysis indicated that the average first-year GPA of students who left the institution was 3.02 and students who stayed at the institution was 3.30. Of those who left the institution, 9% had a first-year GPA below 2.0.

Logistic regression results indicated that the overall model fit for the first-year attrition was questionable (-2 Log Likelihood = 1523.37; H-L Goodness of Fit: $\chi^2 = 10.75, p = .01$). Overall, the model correctly classified 70.1% of the students: 52.4% were correctly classified for students who left the institution; 71.2% for students who stayed. Students who had lower GPAs were less likely to remain at the institution (see Table 2).
### Table 2

#### Logistic Regression Predicting Student First-Year Retention

<table>
<thead>
<tr>
<th>Variables</th>
<th>B</th>
<th>SE</th>
<th>Wald χ²</th>
<th>Odds Ratio</th>
<th>95% CI Lower</th>
<th>95% CI Upper</th>
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<tbody>
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<td><strong>Block 1</strong></td>
<td></td>
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<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Gender</td>
<td>0.187</td>
<td>0.147</td>
<td>1.615</td>
<td>1.206</td>
<td>0.904</td>
<td>1.609</td>
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<tr>
<td>Race</td>
<td>0.070</td>
<td>0.175</td>
<td>0.159</td>
<td>1.072</td>
<td>0.690</td>
<td>1.545</td>
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<tr>
<td>First Generation</td>
<td>0.014</td>
<td>0.231</td>
<td>0.004</td>
<td>1.014</td>
<td>0.952</td>
<td>1.073</td>
</tr>
<tr>
<td>Contiguous States</td>
<td>-0.232</td>
<td>0.194</td>
<td>2.260</td>
<td>0.793</td>
<td>0.133</td>
<td>1.073</td>
</tr>
<tr>
<td><strong>Block 2</strong></td>
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<td></td>
<td></td>
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<td></td>
<td></td>
</tr>
<tr>
<td>Financial Need</td>
<td>0.000</td>
<td>0.000</td>
<td>6.098</td>
<td>1.000</td>
<td>1.000</td>
<td>1.000</td>
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<tr>
<td>Admission Rating</td>
<td>0.022</td>
<td>0.018</td>
<td>1.481</td>
<td>1.022</td>
<td>0.720</td>
<td>1.574</td>
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<td>0.062</td>
<td>0.200</td>
<td>0.097</td>
<td>1.064</td>
<td>0.759</td>
<td>1.594</td>
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<td></td>
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</tr>
<tr>
<td>STEM Major</td>
<td>0.157</td>
<td>0.160</td>
<td>0.964</td>
<td>1.170</td>
<td>0.326</td>
<td>3.037</td>
</tr>
<tr>
<td>First-Year GPA</td>
<td>1.149</td>
<td>0.166</td>
<td>47.901</td>
<td>3.154</td>
<td>1.000***</td>
<td>10.000**</td>
</tr>
<tr>
<td>GSP Participation</td>
<td>0.464</td>
<td>0.300</td>
<td>1.974</td>
<td>1.590</td>
<td>0.160</td>
<td>3.037</td>
</tr>
</tbody>
</table>

**Nagelkerke R Square**: 0.064

*p < .05, **p < .01, ***p < .001"
Factors Influencing Second-Year Attrition

The results of descriptive analysis indicated that the average first-year GPA of students who left the institution was 2.77, and students who stayed at the institution was 3.37. Of those who left the institution, 17% had a first-year GPA below 2.0.

The results of logistic regression analysis demonstrated that the overall model for second-year retention fit well (-2 Log Likelihood = 1017.83; H-L Goodness of Fit: $\chi^2 = 10.58, p = .23$). Overall, the model correctly classified 67.1% of the students (56.2% were correctly classified for students who left the institution; 67.6% for students who stayed). Students who were not first-generation students and students with a lower first-year GPA were more likely to leave the institution (see Table 3).

Factors Influencing 4-Year Graduation

Logistic regression results indicated the overall model fit for 4-year graduation was questionable (-2 Log Likelihood = 1781.06; H-L Goodness of Fit: $\chi^2 = 67.88, p = .00$). Overall, the model correctly classified 84.6% of the students (86.3% were correctly classified for students who left the institution; 76.7% for students who stayed). Students who had a personal or medical leave and students with a lower overall GPA were more likely to leave the institution (see Table 4).

Summary of quantitative analysis results.

The quantitative analyses illustrated that, on average, students who left the institution in their first 2 years, were in good academic standing (i.e., had a GPA above a 2.0 and were not dismissed for academic reasons). Students with lower GPA were less likely to remain at the institution than students with higher GPAs. Nonfirst-generation students were more likely leave the institution in the second year than their first-generation peers, and students with a medical or personal leave during their enrollment were less likely to graduate. Precollege academic characteristics and academic or financial variables had no statistically significant impact on student attrition. The demographic variable of first-generation and the academic variable of college GPA did influence attrition. The behavior variable of personal/medical leave did influence students’ persistence to graduation. The relatively low ability of these logistic regression models to correctly classify students who would leave the institution provided additional support for engaging in the qualitative phase of this study.

Factors Contributing to Student Departure

Three salient themes emerged from the interviews: struggling with college transition, realistic expectations of academic rigor, and social integration. The following sections provide a summary of each theme. Thirteen former students (eight females and five males) completed an in-depth phone or Skype interview.

**Struggling with college transition.** The transition to college can be daunting and difficult. The first major theme of college transition struggles is intertwined with the remaining two themes. Multiple students shared that they had issues transitioning to their new college and experienced homesickness. The location of the institution, which was much smaller than their hometowns, left them feeling isolated. In three cases students shared they experienced some forms of mental health issues during their first year.

One student complained about the process of receiving assistance for mental health issues. Ryan stated that “the student health center was very difficult to schedule an appointment with and I was referred to the local county health clinic.”
Table 3

**Logistic Regression Predicting Student Second-Year Retention**

<table>
<thead>
<tr>
<th>Variables</th>
<th>B</th>
<th>SE</th>
<th>Wald $X^2$</th>
<th>Odds Ratio</th>
<th>p</th>
<th>95% CI</th>
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<tr>
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<td></td>
<td></td>
<td></td>
<td>Upper</td>
</tr>
<tr>
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<tr>
<td>Gender</td>
<td>0.353</td>
<td>0.188</td>
<td>3.523</td>
<td>1.423</td>
<td>0.061</td>
<td>0.985–2.057</td>
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<tr>
<td>Race</td>
<td>0.279</td>
<td>0.214</td>
<td>1.701</td>
<td>1.321</td>
<td>0.192</td>
<td>0.869–2.009</td>
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<tr>
<td>First Generation</td>
<td>0.674</td>
<td>0.321</td>
<td>4.400</td>
<td>1.963</td>
<td>0.036*</td>
<td>1.045–3.685</td>
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<td>Contiguous States</td>
<td>0.318</td>
<td>0.205</td>
<td>2.396</td>
<td>1.374</td>
<td>0.122</td>
<td>0.919–2.054</td>
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<td></td>
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</tr>
<tr>
<td>Financial Need</td>
<td>0.000</td>
<td>0.000</td>
<td>0.146</td>
<td>1.000</td>
<td>0.702</td>
<td>1.000–1.000</td>
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<td>0.022</td>
<td>1.272</td>
<td>1.025</td>
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<td>0.982–1.071</td>
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<td>Campus Visit</td>
<td>0.009</td>
<td>0.242</td>
<td>0.001</td>
<td>1.009</td>
<td>0.971</td>
<td>0.628–1.620</td>
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<tr>
<td><strong>Block 3</strong></td>
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<td></td>
</tr>
<tr>
<td>STEM Major</td>
<td>-0.258</td>
<td>0.194</td>
<td>1.774</td>
<td>0.773</td>
<td>0.183</td>
<td>0.529–1.129</td>
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<tr>
<td>First-Year GPA</td>
<td>1.361</td>
<td>0.219</td>
<td>38.757</td>
<td>3.900</td>
<td>0.000***</td>
<td>2.541–5.986</td>
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<td>GSP Participation</td>
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<td>0.371</td>
<td>1.140</td>
<td>1.486</td>
<td>0.286</td>
<td>0.718–3.077</td>
</tr>
</tbody>
</table>

Nagelkerke $R$ Square .086

* $p < .05$, ** $p < .01$, *** $p < .001$
### Table 4
Logistic Regression Predicting Student 4-Year Graduation

<table>
<thead>
<tr>
<th>Variables</th>
<th>B</th>
<th>SE</th>
<th>Wald X²</th>
<th>Odds Ratio</th>
<th>p</th>
<th>95% CI Lower</th>
<th>95% CI Upper</th>
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<td><strong>Block 1</strong></td>
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<td></td>
<td></td>
</tr>
<tr>
<td>Gender</td>
<td>0.231</td>
<td>0.129</td>
<td>3.220</td>
<td>1.260</td>
<td>0.073</td>
<td>0.979</td>
<td>1.622</td>
</tr>
<tr>
<td>Race</td>
<td>0.145</td>
<td>0.150</td>
<td>0.923</td>
<td>1.156</td>
<td>0.377</td>
<td>0.860</td>
<td>1.552</td>
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<tr>
<td>First Generation</td>
<td>0.111</td>
<td>0.199</td>
<td>0.311</td>
<td>1.118</td>
<td>0.577</td>
<td>0.756</td>
<td>1.651</td>
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<tr>
<td>Contiguous States</td>
<td>-0.154</td>
<td>0.134</td>
<td>1.330</td>
<td>0.857</td>
<td>0.249</td>
<td>0.660</td>
<td>1.114</td>
</tr>
<tr>
<td><strong>Block 2</strong></td>
<td></td>
<td></td>
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<td></td>
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<td></td>
</tr>
<tr>
<td>Financial Need</td>
<td>0.000</td>
<td>0.000</td>
<td>4.029</td>
<td>1.000</td>
<td>0.045</td>
<td>1.000</td>
<td>1.000</td>
</tr>
<tr>
<td>Admission Rating</td>
<td>0.001</td>
<td>0.015</td>
<td>0.006</td>
<td>0.999</td>
<td>0.377</td>
<td>0.940</td>
<td>1.029</td>
</tr>
<tr>
<td>Campus Visit</td>
<td>0.307</td>
<td>0.167</td>
<td>3.352</td>
<td>1.359</td>
<td>0.067</td>
<td>0.979</td>
<td>1.887</td>
</tr>
<tr>
<td><strong>Block 3</strong></td>
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<td></td>
<td></td>
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<td></td>
<td></td>
</tr>
<tr>
<td>STEM Major</td>
<td>0.233</td>
<td>0.138</td>
<td>2.833</td>
<td>1.262</td>
<td>0.092</td>
<td>0.926</td>
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</tr>
<tr>
<td>Overall GPA</td>
<td>2.689</td>
<td>0.160</td>
<td>282.134</td>
<td>14.714</td>
<td>0.000</td>
<td>0.023</td>
<td>10.575</td>
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<td>Personal/Medical Leave</td>
<td>-3.402</td>
<td>0.245</td>
<td>442.283</td>
<td>0.033</td>
<td>0.000</td>
<td>0.042</td>
<td>14.976</td>
</tr>
</tbody>
</table>

Nagelkerke R² Square: 0.501

* p < .05, ** p < .01, *** p < .001
Another student, Sam, shared that he was depressed during his first and only year at the institution. Sam experimented with drugs and alcohol and thought it was because he was severely depressed. Olivia specified that she left towards the end of her first semester at the institution due to an eating disorder that started during high school. Olivia also experienced depression that she said was sparked by the difficult transition she had to the college.

Students who expressed issues with mental health recommended the institution improve the mental health resources for students by addressing transition issues, feelings of isolation, and suicidal thoughts.

**Adjusting to academic rigor.** The majority of students shared their thoughts on the academic rigor at the college. Participants stressed that they did not expect the level of academic rigor they experienced. Making the transition from high school coursework to the expectations at the institution was very difficult.

Elizabeth admitted, “I was not prepared for the amount of reading and always felt overwhelmed.” The academic pressure that Elizabeth felt led to issues with her social life and feelings of homesickness. Sam shared his frustration with his academic transition:

> A lot of hard work and restless nights . . . didn't expect to work so hard for just a B-! I didn't expect it to be as hard as it was . . . I really was burdened with the amount of work I had to do for each class.”

Sam admitted that the academic stress led him to experience with illegal drugs.

Only a few students shared that they appreciated the academic rigor. One student, Emma, expressed that she appreciated the academic challenge and the way instructors facilitated learning in the classroom. Emma stated that “the college was rigorous academically, but I never felt overwhelmed and appreciated the challenge.” Other students had similar responses and wanted to stress that academic rigor was not the reason they left. Olivia came from a very small private high school, and appreciated how, “[the college] was a place where I could experience multiple views of the world . . . it [the college] really pushed me to think differently . . .”

For Olivia, other issues like feelings of homesickness and difficult social transitions were the primary cause of departure and these struggles eventually impacted their academic performance. The struggle with academics went beyond the rigor of the curriculum and was complicated by other factors such as high-risk social behavior, lack of interpersonal relationships, and feelings of isolation.

**Social integration/developing interpersonal relationships.** Students who participated in this study consistently highlighted poor relationships with peers and faculty as contributing factors to their difficult transition to college. The lack of interpersonal relationships can be attributed to mental health issues, adjusting to academic rigor transition, and lack of social integration at the institution. Elizabeth shared that she “felt prejudged and it was difficult to meet friends and establish relationships because I felt relationships were formed within groups of people” (e.g., athletes, choir, international students).

Students explained that since they have left the institution and attended other colleges and universities, relationships have matured. After reflecting back on her time at her former institution, Claire stated, “I found out a lot about myself and I don't think I was mature enough to handle meaningful relationships with others.” Claire stressed that she did appreciate her time at the college; she learned through those experiences that she needed to grow and mature.
Some students shared that they formed strong relationships with peers and these relationships were the best part about attending the institution. Students shared that they could see their personal growth and development since they left the college and that their experience, although not always positive, did contribute to this learning.

**Discussion**

The results of this study supported the approach of integrating Tinto’s (1993) theory of student departure as a way to understand student retention. First-generation status, a precollege characteristic, was significantly and positively related to second-year retention, meaning that first-generation students were more likely to persist. Other factors previously found to impact student retention (i.e., ethnicity, gender, socioeconomic status) were not significant. These results are contrary to previous research (e.g., Astin & Oseguera, 2012) and suggest that perhaps there are unique campus features such institutional policies and culture that support diversity and financial aid that played a role in the success of these student populations.

Student experiences at the institution were more salient reasons for leaving an institution than precollege academic characteristics. This finding was not surprising given the unique nature of selective institutions. By definition, selective institutions attract students with strong academic ability. The results of this study suggest that it may be less about a students’ overall performance, as indicated by grades, and more about students’ ability to process and navigate a new, more rigorous academic environment.

College GPA was positively related to student retention. This finding, consistent with and not surprising given past research on student persistence (DesJardins et al., 1999), is simultaneously intriguing as the majority of students who left the institutions, did so in good academic standing. Subsequently, those students who took a voluntary leave from the institution were less likely to graduate—a finding similar to other studies (DesJardins et al., 2006; DesJardins & McCall, 2010).

Interviews with students provide support for Tinto’s focus on the importance of getting involved within the institution. Student interviews illustrated the lack of connection or “fit” within the specific institutional culture. This sense of isolation may have resulted in a student taking a personal leave that ultimately led to the students’ withdrawal from and transfer to another institution. Student experiences and the ways they interacted with their institutional context over time provided a more comprehensive view of factors related to student attrition at a highly selective institution.

Findings from the student interviews are consistent with college student development research. Students were looking to external formulas to make meaning of their experiences (Baxter Magolda, 2001), struggling to develop mature interpersonal relationships (Chickering & Reisser, 1993), and coping with difficult transitions (Schlossberg, 2005). The themes highlighted in the qualitative findings highlighted issues students faced before they decided to leave the institution. Transitioning to college, struggling to develop friendships, and unexpected academic rigor were compounded, in some instances, by mental health issues and high-risk out-of-class behaviors that ultimately led to student departure.

The mixed-methods approach provided valuable insights into the causes of student attrition at small, selective institutions. While caution is needed in interpreting the significance of the results based on the 13 students, the themes helped illuminate the quantitative results. For instance, while the quantitative results suggested that academic ability was not a reason why students left, the qualitative portion of the study provided a more nuanced view of academic ability. Future studies...
composed primarily of first-generation students or students who had a personal or medical leave could also illuminate the quantitative results of the study.

**Implications for Student Affairs**

Several implications for student affairs emerge as result of the methods and findings of this study: (a) the value of student affairs work within small, private selective institutions; (b) the need to understand and attend to student mental health and interpersonal issues; and (c) the importance of utilizing mixed methodologies in the study of attrition and student success.

**Value of Student Affairs Work in Selective Liberal Arts Institutions**

This study illustrates the critical role that student affairs professionals can play in student retention and persistence—they are critical to institutional sustainability and viability. The majority of students who left the institution did so in good academic standing; students were leaving for reasons other than their ability to succeed in the classroom.

In institutional discussions on student retention, a focus tends to be on getting students to succeed academically, thereby emphasizing the responsibility of academic affairs units to improve persistence and retention (Seidman, 2012). At highly selective institutions that admit high-academic ability students, and where students leave for nonacademic reasons, student affairs professionals must assume a more central role. Focusing solely on improving the academic support services or classroom teaching without addressing other interpersonal and out-of-class activities, may do little to improve student persistence.

This study reiterates the importance of what Nuss (2003) considers an “enduring, distinctive concept” (p. 65) of student affairs: “persistent emphasis on and commitment to the development of the whole person” (p. 65). Student affairs professionals can play a significant role in improving student persistence through their attention to emotional, interpersonal, and social needs of students.

Ironically, as Hirt (2006) found in her research on student affairs practitioners, the work of student affairs may be least valued by faculty and administrators at highly selective, liberal arts institutions, when in reality, the work of may be even more critical and necessary. Institutions who want to improve student persistence will need to go beyond their focus on academic skills and rigor, and involve student affairs professionals in examining and improving the interpersonal, out-of-classroom experience.

**Need to Understand and Attend to Interpersonal and Mental Health Issues**

Student affairs professionals need to be cognizant of the impact on interpersonal relationships and mental health issues on college student success. Scholars in higher education considered the capacity to form interpersonal relationships a critical component in a student’s development. Chickering and Reisser’s (1993) seven vectors described developmental tasks that contributed to a student’s identity formation.

The formation of mature interpersonal relationships signified a student’s interdependence and ability to construct a relationship with mutual give and take. As Levine and Dean (2012) have found, college students, while more connected through social media, have more difficulty with face-to-face interpersonal communication and are less likely to be involved in social and community activities (Levine & Dean, 2012).
Students attending highly selective institutions are academically competent but may lack the interpersonal and social competence to navigate through a new environment. Interacting with faculty, reaching out to student affairs staff for assistance, or confronting peers are necessary skills that are assumed to be mastered by college students. While students were academically prepared for college, they struggled with the social/emotional competency that the college experience required. These results support the recommendations as outlined in ACPA/NASPA's (2004) Learning Re-considered that call for more integrated learning opportunities including focusing on outcomes related to interpersonal and intrapersonal skills.

Levin and Dean's (2012) work also illustrated that students, under the protective care of their parents, may have been shielded from experiencing failure. Students attending small, private highly selective institutions have been academically successful in high school and most likely have also been successful in other areas: music, athletics, and writing. These talented individuals may have had little experience overcoming adversity or failure and consequently, may have had little opportunity to practice resiliency (Bernard, 2004; Thomsen, 2002). Do students faced with a difficult situation have the skills and ability to bounce back from a negative experience? A new environment, first experience of failure, and a lack of skills to negotiate these challenges may be significant factors in student attrition.

Student affairs offices have focused on providing quality programming and activities with the assumption, that when students participate, they will become more engaged. The recent research on college students suggests that student affairs professionals may need to devote more time helping students develop interpersonal skills and illustrating the importance of participating in out-of-class activities (Levine & Dean, 2012). Adding more activities and programs, without helping students to understand the importance of such activities or helping them achieve interpersonal competencies, may do little to improve student engagement and persistence.

Student affairs may also need to assist students in developing their resiliency (Bernard, 2004; Thomsen, 2002). A recent study of resiliency in college freshmen (Meyer, 2008) suggested that this behavior can be learned. Student affairs professionals who are able to identify students facing challenges and provide opportunities for students to learn and practice resiliency, may contribute to overall student persistence.

Students who were interviewed mentioned mental health concerns as a significant reason for withdrawing from the institution. This finding mirrors similar trends within the college student populations. Students with mental health illness are becoming more prevalent on college campuses (Hunt & Eisenberg, 2010; Kadison & DiGeronimo, 2004; Kitzrow, 2003), which can negatively impact their experience. A report based on the results of a college student survey disseminated by the National Alliance of Mental Illness stated, “An overwhelming majority of survey respondents who said they are no longer in college . . . are not attending college because of a mental health related reason” (Gruttadaro & Crudo, 2012, p. 8). More students are coming with more serious illnesses but institutions have been slow to respond to increasing numbers and severity of illness (Gruttadaro & Crudo, 2012). Students in the survey, similar to students interviewed for this study, expressed a need for better mental health services.

Although many student affairs professionals are trained in advising and counseling, most lack the specialized training to handle severe mental illness (Harper & Peterson, 2005). Student affairs professionals are called upon to assume roles of collaborator and educator; working closely with counseling centers to ensure students are getting the assistance, educating students about the campus resources and the importance of seeking help, and raising awareness among faculty, staff, and administrators (Kitzrow, 2003). By strengthening the outreach of mental health services, and
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assisting faculty and staff in understanding the common signs or signals of mental health illness, student affairs play a valuable role in assisting students with mental health conditions.

Importance of Utilizing Mixed Methodologies

The quantitative analyses illustrated that the variables in this study were neither consistent nor highly effective in predicting student persistence. College GPA was the most significant predictor of retention yet, of those who withdrew from the institution in the first year, less than 10%, of students had earned less than a 2.0 GPA. Student leave status was a significant predictor for 4-year graduation rates, but the majority of students who stopped out were in good academic standing. The qualitative portion of this study evolved from the unique results of the quantitative analysis.

The methodology used in this study has implications for the direction of student affairs research. As listed in the ACPA/NASPA Professional Competencies (2010), student affairs professionals should be proficient in both quantitative and qualitative methodologies and this study illustrates why. The majority of studies on retention have used either a qualitative or a quantitative methodology and student affairs professionals tend to be more comfortable using one approach or the other. If the intricacies and complexity surrounding the student persistence question can be best understood through mixed methodologies, student affairs professionals must look to a variety of research methods to best understand critical issues within higher education.

Implications for Future Research

The results of this study confirm the value of past research and theoretical models related to student retention and graduation, but also challenge individual institutions to engage in their own research and assessment to uncover variables that may be unique to their institution. For example, first-generation status, which is widely believed to be negatively related to retention and graduation, was positively related. Perhaps there is something unique within the institutional culture studied that supports first-generation students. A closer investigation of institutional factors may assist in understanding this occurrence and could subsequently be used to assist other institutions who struggle with retaining this population of students.

This study was focused on one small, liberal arts selective institution; and 13 students were interviewed. Results may not be generalizable to other campuses or the larger student body. Nevertheless, this study is useful in better understanding how factors at selective institutions may differ from other institutions, and data from the interviews help explain the quantitative analysis.

The quantitative analysis focused primarily on those precollege characteristics such as demographics and academic ability but did not include variables related to mental health or social and interpersonal skills. As more students come to college with mental health illness and struggle with interpersonal skills, these factors will continue to play a role in student attrition and are worthy of additional research.

Conclusion

This study, by focusing on a currently understudied institutional type, provides additional insights into those experiences that may contribute to student attrition. While situated within the context of a small, private, highly selective institution, the results and implications for student affairs are far reaching. By engaging in a variety of research methods and paying particular attention to the out-of-class variables contributing to student retention, student affairs professionals play a significant role in overall student success.
References


