

RESEARCH STUDY

Linking Student Satisfaction and Retention

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Student satisfaction is of compelling interest to colleges and universities as they seek to continually improve the learning environment for students, meet the expectations of their constituent groups and legislative bodies, and demonstrate their institutional effectiveness. Unlike service industries, which hold satisfaction as a goal in and of itself, colleges and universities typically perceive satisfaction as a means to an end. Higher education tends to care about student satisfaction because of its potential impact on student motivation, retention, recruitment efforts, and fundraising. But as Astin (1977) asserted more than three decades ago, “it is difficult to argue that student satisfaction can be legitimately subordinated to any other educational outcome” (p. 164).

There is surprisingly little research empirically linking student satisfaction to retention, despite the widespread belief that there is indeed a positive relationship between the two. In an effort to determine whether student satisfaction is predictive of retention the following year (beyond what can be predicted about retention based on student and institutional characteristics), we conducted a study of 27,816 students at 65 four-year institutions. What follows is a description of the study, its major findings, and the implications for four-year colleges and universities. Practical recommendations are included so that institutions can use these results immediately to impact their policies and practices.



The Participating Students and Institutions

A total of 65 four-year institutions participated in this study. Institutions were invited to participate in this study if they had administered the online version of the *Student Satisfaction Inventory™* (SSI) (Schreiner & Juillerat, 1994) to a sample of students during the 2005-2006, 2006-2007, and/or 2007-2008 academic years. Participating institutions provided us with the current enrollment status of each responding student for the following fall term after the SSI had been administered. Once the data were collected and screened for missing values, a total of 27,816 students had complete records for analysis.

The 65 institutions represented the spectrum of Carnegie classifications, size, and selectivity, as can be seen in Table 1. Almost three-fourths of the institutions were private; 40.0 percent were Baccalaureate only, 38.5 percent were Master's level, and 15.4 percent were Doctoral institutions. The institutions were from all areas of the United States, but a disproportionate number (43 percent) were from the Midwest. Data were collected about each institution's selectivity (measured as percent of applicants admitted), its gender balance on campus, total enrollment, cost of tuition, percent of students receiving financial aid, percent of students of color on campus, percent of students living on campus, and first-time, full-time student retention rate. The institutions admitted an average of 72 percent of their applicants, had an average gender balance of 60 percent women and 40 percent men, and averaged about 20.9 percent students of color on campus. Retention rates at these institutions ranged from 59 percent to 91 percent, with an average of 74.8 percent—slightly higher than the national average of 72.9 percent for four-year institutions (ACT, 2008).

The 27,816 student participants were evenly distributed across the four class levels (see Table 2). In addition to 65.9 percent of students being female and 74.4 percent Caucasian, 66.5 percent of the students were attending their first-choice institution. Most intended to achieve a bachelor's degree and 70 percent of the sample were employed while attending classes. Commuters and students living on campus were equally represented in the sample.

The Instrument

The *Student Satisfaction Inventory* is a 79-item instrument published by Noel-Levitz that assesses satisfaction on two continua. Items are phrased as positive expectations that the institution may or may not meet (for example, "Most students feel a sense of belonging here"). Students are asked first to assess how important it is to them that the institution meets each expectation, using a seven-point response scale from *not at all important* (1) to *very important* (7). Then they are asked to rate their level of satisfaction that the institution has met this expectation, using a seven-point response scale from *very dissatisfied* (1) to *very satisfied* (7). Reliability of the SSI is high, with internal consistency of $\alpha = .98$ and three-week test-retest $r = .87$. Construct validity has been adequately established and this current study adds to the predictive validity of the instrument. The means and standard deviations of the 20 items with the highest important scores on the SSI are summarized in Table 3.

Logistic regression enabled us to measure the extent to which student satisfaction predicted actual retention four-to-twelve months later, after accounting for students' demographic characteristics as well as features of the institution.

Findings

Two methods were used in this study to determine the extent to which student satisfaction predicted subsequent student retention. The first was a logistic regression analysis, using students' enrollment status (0=dropped out, 1 = returned) as the dependent variable. No other study to date has utilized this methodology to determine the relationship between student satisfaction and retention. Logistic regression enabled us to measure the extent to which student satisfaction predicted actual retention four to twelve months later, after accounting for students' demographic characteristics as well as features of the institution. Such demographic characteristics included the students' gender, ethnicity, choice of institution at enrollment, living situation, and employment status. For upper-level students, it also included their GPA. The institutional features that were controlled in this study included Carnegie classification, selectivity, gender and racial balance, size, and cost of tuition.

The second method was a hierarchical multiple regression analysis, with students' response to the question, "All in all, if you had it to do over again, would you enroll here?" used as the criterion variable. This method enabled us to determine the relationship between students' satisfaction levels and their immediate sense of whether they made the right choice of institution. By using both methods, we were able to determine the longitudinal impact of student satisfaction ratings on actual persistence (through logistic regression) as well as the concurrent relationship between students' levels of satisfaction and their sense of whether they would "repurchase" —a common method used in consumer satisfaction research. Each of the methods and their results will be described in greater detail below.

For each of the class levels, satisfaction indicators almost doubled our ability to predict retention beyond what demographic characteristics and institutional features could predict.

Predictors of Student Retention

A logistic regression analysis was conducted on each class level separately, using actual enrollment status as the dependent variable. The predictor variables (independent variables) were entered directly in three blocks: (1) students' gender, ethnic group, degree goal, commuter status, employment status, and whether the institution was their first choice; (2) institutional selectivity, size, cost, Carnegie classification, location, gender balance, control (public or private), racial composition, and percent of students living on campus; and (3) indicators of student satisfaction from the SSI scores. Four different models assessed the predictive ability of student satisfaction: (1) a model utilizing **global indicators** of student satisfaction ("Rate your overall satisfaction with your experience here thus far"); (2) a model utilizing eight **scales** that were created via principal components analysis of the satisfaction items; (3) a model using **gap scores** of the items where importance levels were at least a six on a seven-point scale and satisfaction scores were three or below; and (4) a model utilizing all the **satisfaction items** that applied to both residents and commuter students. Each model was tested for its ability to fit the data, compared to the predictive ability of students' demographic characteristics and features of the institution alone.

Satisfaction Matters. Across all the models and class levels, the satisfaction indicators added significantly to our ability to predict student retention. Given the complexity of student retention decisions and that we were using satisfaction ratings from four to twelve months *before* the student actually left the institution, the total predictive ability was moderate, as expected (statistically, the Nagelkerke R^2 ranged from .09 to .25, and the area under the curve ranged from .65 to .74, depending on the satisfaction indicator used). For each of the class levels, satisfaction indicators almost doubled our ability to predict retention beyond what demographic characteristics and institutional features could predict. Logistic regression provides us with "odds ratios" for each predictor in the equation. These ratios tell us how much the odds of persisting increase or decrease with a one-point difference in the predictor (measured on a seven-point scale). For example,



students whose satisfaction scores on the Climate scale are only one point higher than their peers have an 80 percent better chance of persisting. From this statistic, we can conclude that Campus Climate is not only an important factor in students' decisions to remain enrolled, it is the most important factor (which we will explain later in this paper).

The More Specific, the Better. Although global indicators of satisfaction, such as the item "Rate your overall satisfaction with your experience here thus far," were significantly predictive of retention, the best predictive models occurred when all the satisfaction items were used or when the gap scores from the most important items were used. Although we saw this pattern across all class levels, it was particularly true for sophomore retention. This finding confirms the importance of utilizing more than one global item to measure student satisfaction and of having a wealth of information about student satisfaction at your finger tips. Some of these predictive items were collapsed into scales, which enable an institution to focus on key areas that potentially influence retention decisions most. (Note that these scales are slightly different from the scales in the original development of the survey.)

Creating an Inviting Climate on Campus. The scale that was significantly predictive across all class levels was **Campus Climate**, comprised of items such as *Most students feel a sense of belonging here, I feel a sense of pride about my campus, It is an enjoyable experience to be a student on this campus, Students are made to feel welcome on this campus, and I generally know what's happening on campus.* Higher scores on this scale increased a student's odds of persisting by as much as 80 percent. Comparing this factor across the four class levels, its greatest predictive ability was among first-year students. Clearly an important part of starting students off right is to help them feel at home on campus. Students who feel welcome, know what's happening on campus, and feel that they belong are more likely to return the following year.

Where a Student Goes to School Matters – A Little. Although the institutions participating in this study were quite different from one another, with a wide range of retention rates, these differences were not as predictive of student retention as the satisfaction indicators were, particularly among first- and second-year students. Typically demographic characteristics accounted for about 1-4 percent of the variation in persistence, and institutional features accounted for another 3-4 percent of the variation. The satisfaction indicators, by contrast, accounted for up to 17 percent of the variation. However, institutional features became more predictive the longer a student was enrolled, so that among juniors and seniors this impact was most pronounced.

Many institutional characteristics were highly correlated with one another. For example, selectivity, expense, and retention rate were significantly related to one another: the more selective the institution, the higher the tuition and the higher the retention rate. After accounting for these relationships, the institutional features that mattered most were Carnegie classification, gender balance, and institutional selectivity. A first-year student's odds of persisting more than quadrupled if he or she attended a university with a Carnegie classification of Research/High or Very High, for example. As we know from retention research, institutional selectivity is a key predictor of retention, and that was the case in this study as well. The role that the campus gender balance plays in predicting retention is also an important consideration: the further the gender ratio deviated from 50/50, the lower the odds of an individual student returning the following year. Thus, while the role of institutional features explained relatively little about retention patterns as a whole, there are some characteristics to keep in mind that appear to be related to students' decisions to remain enrolled.

Institutional features are not always fully under the control of an institution, particularly in the short term. Thus, for institutions that cannot afford to be highly selective, a conscious decision to provide better support for the students enrolled is likely to result not only in greater satisfaction, but also a higher likelihood of such students returning for another year. Likewise, institutions that are not research-intensive (and thus may not have the same scope of resources or majors) may choose to focus more intentionally on the advising experience and providing a high level of instructional

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effectiveness to compensate for fewer majors or less resources. Finally, institutions could take a long-term view of their gender balance and make the decision to admit fewer students in order to keep the gender ratio in better balance. However, each of these institutional features are not as predictive of retention as student satisfaction with the campus climate and the learning experience.

Satisfaction Varies by Class. The predictors of retention differed across each class level. Although demographic characteristics did not predict much of the variance in retention, they were more predictive among the upper class levels. GPA became an increasingly powerful predictor of retention with each rising class level, as one might expect. Institutional features were more predictive than individual student characteristics and appear to be most influential in explaining sophomore retention in particular.

However, it was the role of the satisfaction indicators that varied most by class level. Global satisfaction ratings were most predictive of first-year student retention and became less powerful predictors with each rising class level. The Campus Climate scale was most predictive of retention across all class levels, but it was more predictive at the lower class levels. The satisfaction scales as a whole were most effective at predicting sophomore retention, especially with the addition of Instructional Effectiveness and Advising to the mix of significant predictors. Thus it is important to survey student satisfaction across all four class levels, rather than focus on only selected class levels, as the student experience is different at each level and campus programming and communication could be tailored to the needs of each class.

To summarize the class differences in the ability of satisfaction indicators to predict retention:

- *First-year student retention* is best predicted by Campus Climate, although global satisfaction is also a strong predictor. Beyond attending a selective research institution with a good gender balance on campus, the items that were most predictive of students returning for their sophomore year included: satisfaction with being a student, meeting their expectations for advisor availability, feeling a sense of belonging, perceiving their future major to have valuable course content, believing that student fees are used wisely, and feeling that the campus is a safe place.
- *Sophomore retention* is best predicted by a combination of GPA, attending a selective research institution with a good gender balance on campus, and experiencing strong satisfaction with the Campus Climate, as well as global student satisfaction. For sophomores, satisfaction with Instructional Effectiveness and Advising increases their chances of persisting to the junior year, as does satisfaction with course content in their major, the variety of courses offered, enjoying being a student, feeling a sense of belonging on campus, feeling that faculty are fair and unbiased in their treatment of students, meeting their expectations for career services, and being satisfied with having a comfortable place to spend time in between their classes.
- *Junior retention* is best predicted by a combination of GPA, attending a selective research institution, and specific items from the SSI. Global satisfaction and Campus Climate are significant predictors, but not as predictive as individual items or gap scores. Higher levels of satisfaction with advisors knowing graduation requirements, faculty availability outside of class, ability to experience intellectual growth on campus, and having a comfortable place to spend time in between classes increase the odds of juniors returning for their senior year.
- *Senior retention* might appear to be a moot point, but almost 10 percent of the seniors in this study had not graduated and yet did not return to the same institution the following year after completing the SSI. Students with higher GPAs were 37 percent more likely to return, but institutional features explained most of the variation in persistence at this level. Students at private institutions, Baccalaureate-Diverse, and research institutions were significantly more likely to persist, and a gender imbalance, high percentage of white students, and low selectivity of a campus combined to significantly reduce the odds of persistence for these seniors. Their satisfaction mattered little to their persistence at this stage of their college careers.

But Would I Do It Again?

An ultimate indicator of student satisfaction, one that translates into loyalty after students graduate, is whether those students would choose the institution they graduated from if they could experience their college careers all over again. Actual retention is a complex phenomenon that is impacted by so many features beyond an institution's control—the student's financial means, the family situation, personal difficulties, work demands—that even highly satisfied students may end up leaving an institution. But if they have positive feelings about their experiences and would make the same decisions again, then an institution's word-of-mouth reputation remains strong and can contribute to future success in recruiting and retaining students.

With this factor in mind, we conducted a separate set of hierarchical multiple regression analyses by class level, using the item "All in all, if you had it to do over again, would you enroll here?" as the criterion variable. As with the logistic regression, we controlled for students' demographic characteristics and features of the institution by entering them in separate blocks of the analysis before entering the satisfaction indicators. Because this method was a concurrent one—asking students to rate their satisfaction with 79 items at the same time that they were asked to rate their likelihood of going back and re-enrolling—the predictive ability was much stronger than the logistic regression method that had a longer time span between measurements. Regardless of class level, we were able to predict an *additional* 35 percent of the variation in students' responses to the re-enrollment item—above and beyond what demographic characteristics and institutional features could predict—by knowing how they responded to the eight satisfaction scales we had created. The models incorporating these scales and the student characteristics and institutional features explained a total of 45-47 percent of the variation in students' desire to re-enroll.

Campus Climate remained the most predictive scale, but additional scales were also significantly predictive of a student stating that he or she would enroll again. These scales included Instructional Effectiveness and Responsiveness (particularly in admissions, financial aid, and avoiding the run-around). We also found that some of the scales magnified the effects of Campus Climate; for example, on campuses where students were highly satisfied with safety and security or the provision of specific services (library, technology, bookstore, health services, tutoring, etc.), the climate of the institution became an even better predictor of whether students would enroll again.

Our major conclusion from these two types of analyses is that satisfaction indicators from the *Student Satisfaction Inventory*—whether items, gap scores, scales, or global indices of satisfaction—are significant predictors of students' desire to enroll again, as well as of their actual enrollment the following year—even after taking into consideration students' demographic characteristics and important features of the institution. Institutions can have the greatest impact on their retention rate when they (a) utilize targeted marketing strategies to recruit students for whom the institution is their first choice (when possible), (b) pay attention to gender balance and selectivity, and (c) focus on creating a welcoming and responsive campus climate that enhances students' learning experiences, especially for students who did not have the institution as their first choice. An important contributor to students' perceptions of the campus climate is their academic experience; when students have a positive experience in the classroom and are supported by advisors who are helping them navigate the system and reach their educational goals, they are much more satisfied with the role of being a student.

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Implications for Practice

The results of this first-ever empirical study linking student satisfaction and retention offer many fruitful areas for campuses to explore. The following strategies and recommendations are based on this research and targeted to each class level separately. To uncover even more ideas and suggestions for your campus, consider conducting focus groups with students in order to understand how their campus experiences are affecting their satisfaction and persistence.

First-Year Students: Communicate Care. Retention among first-year students is more likely to occur when students feel a sense of community—a feeling that they belong on campus and are welcome. Campus Climate is especially crucial in this first year. Because financial issues and concerns about safety and security are also paramount in the first year, it is important to communicate to students regularly about how their money is being spent, as well as to reassure them about the responsiveness of the campus to security issues and emergencies. First-year students are also most likely to persist when they perceive their advisors to be readily available and approachable, and when they are impressed with the content in the major they have chosen or are considering. Students whose significant gap scores indicate that they do not find it enjoyable to be a student are 60 percent less likely to return as sophomores; those with significant gaps in sense of belonging are 39 percent less likely, and those who have difficulty contacting their advisor are 17 percent less likely to return.

Thus an institution wishing to increase first-to-second-year retention may consider a first-year seminar or learning community where the instructor also serves as the students' advisor, to strengthen the likelihood of connecting to an advisor relationally as well as in terms of easy availability. First-year seminars and learning communities also offer good opportunities for creating a sense of community in the classroom, providing a "home" for first-year students struggling to navigate a new environment, which can enhance their satisfaction with the campus climate. Particularly if your institution was not a student's first choice at enrollment, the way you communicate with them throughout the first half of their first semester sends strong signals about how welcome they are and how likely they will be to perceive a good fit with your campus.

Sophomores: Connect Them to Their Future.

As national research indicates that we may have postponed student attrition to the sophomore year with many of our good programs focused on first-year students, it is important to note that the SSI results become particularly useful in understanding and predicting sophomore retention. Satisfaction with the campus climate, specifically experiencing a sense of belonging and enjoying being a student, is still the most significant predictor of sophomore retention. But student characteristics and institutional features are also important elements of sophomore retention. Sophomores with higher GPAs are almost three times as likely to return their junior year, for instance. Institutional selectivity and gender balance become more important in the sophomore year as well.

Some suggestions for increasing sophomores' satisfaction with the campus climate focus on reducing their sense of "invisibility" on campus, as the institution turns its collective attention to the incoming first-year students. Creating sophomore programs, designing courses in the general education curriculum that focus on the sophomore year, and finding ways to connect them to engaging faculty are likely to increase their satisfaction in the sophomore year. Since many sophomores become commuters, having a place to spend time between classes can become a more important contributor to their satisfaction with the campus.

Sophomore persistence also poses unique challenges that need to be addressed. Advising, variety of courses offered, unbiased faculty, valuable content in the major, and meeting their expectations for career services all significantly predict the likelihood of sophomores returning as juniors. The common thread that weaves these issues together is connecting sophomores to their futures. When

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sophomores are connected to faculty who are able to engage them in the learning process and help them connect what they are learning to the future they desire for themselves, sophomores are more likely to feel they belong on this campus. Through an advising process that helps them explore potential careers, settle on a rewarding major, and successfully enroll in the necessary courses at an appropriate time, sophomores can begin to envision a possible future that energizes them and positions their institution as the place where that future can become reality.

Juniors: Focus on Faculty. If the sophomore year is the time for helping students envision a possible future, the junior year is when they need the support from faculty to translate their vision into reality. For juniors to be successful in their chosen majors, they must be academically successful—higher GPAs more than double the odds of persisting to the senior year. But this academic success is strongly connected to knowledgeable advisors, to students' ability to grow intellectually, and to faculty availability outside of class.

Thus one implication of this study for institutional planning in the junior year is to focus on the faculty who are available to foster students' intellectual engagement and guide them through their major requirements. Advising in the major becomes an important strategic priority in the junior year as students are preparing for internships, studying abroad, planning for graduate school, and completing their requirements in a timely manner. An effective advisor for juniors not only knows the major requirements, but can customize the best of what the major has to offer to the individual needs of the student. And the more faculty are available outside of class to augment the advisor's role, the greater the chance of student success and persistence. Research partnerships with faculty, mentoring relationships, and availability to engage in academic discussions that extend learning outside of class all can contribute to juniors' intellectual growth and satisfaction with their experiences.

Conclusion

Several encouraging results emerged from this large-scale empirical study. First is that student satisfaction is indeed connected to student persistence, as well as to the word-of-mouth reputation of an institution. Above and beyond what can be predicted by students' characteristics or features of the institution, increasing student satisfaction—particularly with the campus climate—can increase the odds of persisting, as well as significantly influence students' opinion that if they had the chance to do it all again, they would choose this same institution. The second piece of good news is that we can better understand the challenges of sophomore retention by using student satisfaction indicators—and the more specific those indicators are, the better. And finally, we learned that satisfaction levels not only differ across class level, but contribute differently to student persistence at each level. As a result, the importance of disaggregating SSI data by class level provides your most detailed road map of how to strategically address the retention challenges your institution faces.

Above and beyond what can be predicted by students' characteristics or features of the institution, increasing student satisfaction—particularly with the campus climate—can increase the odds of persisting, as well as significantly influence students' opinion that if they had the chance to do it all again, they would choose this same institution.

Table 1
Summary of Characteristics of Participating Institutions (N = 65)

Characteristic	N	Percentage
Carnegie Classification		
Baccalaureate—Diverse	20	30.8%
Master’s Colleges and Universities (medium programs)	12	18.5%
Master’s Colleges and Universities (larger programs)	7	10.8%
Baccalaureate-Arts and Sciences	6	9.2%
Master’s Colleges and Universities (smaller programs)	6	9.2%
Research Universities (high research activity)	6	9.2%
Doctoral/Research Universities	3	4.6%
Research Universities (very high research activity)	1	1.5%
Special Focus Institutions—Other	1	1.5%
Special Focus Institutions—Schools of business and management	1	1.5%
Special Focus Institutions—Theological seminaries, Bible colleges, and other faith-related institutions	1	1.5%
No information	1	1.5%
Region		
East	15	23.1%
South	12	18.5%
Midwest	28	43.1%
West	9	13.8%
International	1	1.5%
Location		
City	26	40.0%
Suburb	14	21.5%
Town	21	32.3%
Rural	3	4.6%
No information	1	1.5%
Type		
Public	16	24.6%
Private	49	75.4%

Characteristic	Minimum	Maximum	Mean	Standard Deviation
Percent of applicants admitted	29%	98%	71.9%	16.1%
Percent females	34%	95%	59.6%	10.8%
Percent Caucasian	1%	97%	74.4%	18.7%
Percent living on campus	15%	100%	55.6%	22.6%
Percent receiving financial aid	61%	100%	91.3%	9.8%
First-time fall retention rate	59%	91%	74.8%	7.4%
Total cost	\$8,782	\$47,330	\$28,410	\$9,319
Total enrollment	724	28,327	4,662	5,620
Undergraduate enrollment	349	19,977	3,723	4,280

Table 2
Demographic Characteristics of the Student Sample (N = 27,816)

Characteristic	N	Percentage
Gender		
Female	18,335	65.9%
Male	9,434	33.9%
No response	47	0.2%
Ethnicity		
African American	1,884	6.8%
American Indian or Alaskan Native	245	0.9%
Asian or Pacific Islander	1,175	4.2%
Caucasian	20,685	74.4%
Hispanic	1,813	6.5%
Other	684	2.5%
Prefer not to respond	1,203	4.3%
No response	127	0.5%
Employment		
Full-time off campus	2,395	8.6%
Part-time off campus	8,100	29.1%
Full-time on campus	1,663	6.0%
Part-time on campus	7,184	25.8%
Not employed	8,335	30.0%
No response	139	0.5%

Table 2 continued
Demographic Characteristics of the Student Sample (N = 27,816)

Characteristic	N	Percentage
Residence		
On-campus	14,997	53.9%
Off-campus	12,775	45.9%
No response	44	0.2%
Educational Goal		
Associate's degree	403	1.4%
Bachelor's degree	19,366	69.6%
Master's degree	4,551	16.4%
Doctorate or professional degree	3,140	11.3%
Certification	55	0.2%
Self-improvement/pleasure	38	0.1%
Job-related training	48	0.2%
Other	157	0.6%
No response	58	0.2%
Age		
18 and under	3,156	11.3%
19 to 24	21,882	78.7%
25 to 34	1,784	6.4%
35 to 44	592	2.1%
45 and over	322	1.2%
No response	80	0.3%
Class Level		
Freshman	6,283	22.6%
Sophomore	6,368	22.9%
Junior	7,180	25.8%
Senior	7,985	28.7%

Table 2 continued
Demographic Characteristics of the Student Sample (N = 27,816)

Characteristic	N	Percentage
GPA		
1.99 or below	290	1.0%
2.00 – 2.49	1,820	6.5%
2.50 – 2.99	5,269	18.9%
3.00 – 3.49	9,465	34.0%
3.50 or above	9,645	34.7%
No response	1,327	4.8%
Choice of Institution at Enrollment		
1st choice	18,495	66.5%
2nd choice	6,822	24.5%
3rd choice or lower	2,384	8.6%
No response	115	0.4%

Table 3
Means and Standard Deviations of 20 SSI Items with the Highest Importance Scores

Item	Satisfaction Mean	Standard Deviation
The content of the courses within my major is valuable.	5.67	1.24
The instruction in my major field is excellent.	5.66	1.26
My academic advisor is knowledgeable about requirements in my major.	5.81	1.42
Nearly all of the faculty are knowledgeable in their field.	5.90	1.12
I am able to register for classes I need with few conflicts.	5.18	1.63
The quality of instruction I receive in most of my classes is excellent.	5.62	1.24
Tuition paid is a worthwhile investment.	5.16	1.56
It is an enjoyable experience to be a student on this campus.	5.67	1.33
I am able to experience intellectual growth here.	5.80	1.16
My academic advisor is approachable.	5.79	1.47
The campus is safe and secure for all students.	5.66	1.30
Major requirements are clear and reasonable.	5.65	1.26
There is a good variety of courses provided on this campus.	5.50	1.38
Adequate financial aid is available for most students.	4.90	1.61
Faculty are fair and unbiased in their treatment of individual students.	5.41	1.35
There is a commitment to academic excellence on this campus.	5.68	1.24
This institution shows concern for students as individuals.	5.49	1.39
Security staff respond quickly in emergencies.	5.23	1.49
Students are made to feel welcome on this campus.	5.72	1.25
Faculty are usually available after class and during office hours.	5.81	1.18

Participating Institutions

Arcadia University, PA
Arkansas Tech University, AR
Baylor University, TX
Berea College, KY
Bethel University, MN
Biola University, CA
Bluffton University, OH
Bryan College, TN
California Lutheran University, CA
Carroll University, WI
Cedarville University, OH
Clafin University, SC
Coe College, IA
Columbia College Chicago, IL
Covenant College, GA
Dakota State University, SD
Dominican University of California, CA
Edgewood College, WI
Elizabethtown College, PA
Emmanuel College, MA
Everglades University, FL
Franciscan University of Steubenville, OH
Franklin College, IN
Franklin College, Switzerland
Fresno Pacific University, CA
Graceland University, IA
Hastings College, NE
Houston Baptist University, TX
Huntington University, IN
Laboratory Institute of Merchandising, NY
Loyola University, New Orleans, LA
Manchester College, IN
Marian University, WI
Martin Luther College, MN
Master's College and Seminary, The, CA
Mayville State University, ND
Minnesota State University, Mankato, MN
Mississippi College, MS
Montana Tech of the University of Montana, MT
New Mexico State University Main Campus, NM
Northeastern University, MA
Northwest Missouri State University, MO
Philadelphia University, PA
Quincy University, IL
Rocky Mountain College, MT
Salisbury University, MD
Shepherd University, WV
Southwestern Baptist Theological Seminary, TX
Southwestern College, KS
St. Ambrose University, IA
Stonehill College, MA
Texas Woman's University, TX
Trinity Christian College, IL
University of Alaska, Fairbanks, AK
University of Cincinnati, Main Campus, OH
University of Evansville, IN
University of Maryland, Eastern Shore, MD
University of North Dakota Main Campus, ND
Valley City State University, ND
Virginia Wesleyan College, VA
Waynesburg University, PA
Wheaton College, MA
Widener University, PA
Wilson College, PA
Wright State University, OH

Citation:

Astin, A.W. (1977). *What matters most in college: Four critical years*.
San Francisco: Jossey-Bass.

Schreiner, L. A., & Juillerat, S. L. (1994). *The Student Satisfaction Inventory*.
Iowa City, IA: Noel-Levitz.

Special thanks to Noel-Levitz for its support on this study, especially Jeff Easterling, senior statistician, and Julie Bryant, associate vice president for retention solutions.



About the author

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Noel-Levitz has served the higher education community for more than 35 years. Campus leaders turn to the firm for consultation and resources for student retention, student recruitment, marketing, and strategic enrollment planning. Noel-Levitz has partnered with more than 2,000 colleges and universities throughout North America. For more information, visit www.noellevitz.com.

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