Changes in Social and Academic Integration in Freshmen of High and Average Ability: Implications for Retention

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The authors examine the relationship between retention and changes in freshmen's perspectives on social and academic issues. Using data collected from a student questionnaire administered at the beginning and end of the freshman year, the authors found that contact with faculty may play a significant role in how freshmen view their college experience but may not be related to retention. Student retention may be only indirectly related to changes in social and academic integration at an institution and may depend more on variables associated with student characteristics and predispositions.

Academic advisors are in a unique position to discern the personal and educational changes in students during the first year in college. These changes have been linked to the need to design programs and services for the freshman year experience in order to facilitate certain desirable freshman outcomes. Although first-year students bring certain individual characteristics to college (e.g., family background, high school experiences, race, and academic aptitude) that certainly affect their first-year experience, some models of student change emphasize the role of the institution and the impact of student interaction with the college environment. These models emphasize how students act and think while involved in that environment (Pascarella & Terenzini, 1991). This person-environment fit has a direct and indirect effect on whether the student persists or drops out.

Tinto's theory of student departure (1987) seeks to explain why students voluntarily withdraw from college. Tinto emphasizes that the way freshmen react to their new environment not only depends on their precollege schooling and background but also on their initial intentions about graduating from college and other personal goals. Student integration into the academic and social systems of the institution is viewed as critical to continuing matriculation. Academic integration can be measured by student academic performance and by their level of intellectual development; social integration can be determined by the extent and quality of student interactions with their peer group and the faculty. According to Tinto, the greater the level of social and academic integration, the greater a student's subsequent commitments, both to the institution and to the goal of college graduation.

Many research studies have substantiated Tinto's model of student departure (Allen, 1986; Boyle, 1989; Brown & Robinson, 1988; Cabrera, Stampen, & Hansen, 1990; Ethington, 1990; Halpin, 1990; Pascarella & Terenzini, 1983; Stage, 1989; Terenzini & Pascarella, 1980; Wilder & Kellams, 1987). Recently, however, Cabrera, Nora, & Castañeda (1993) combined Bean's model of student attrition (1985) with Tinto's and showed that the relationship between environmental factors and retention may be more complex than outlined in Tinto's model. Thus, factors external to the institution may affect student socialization and academic integration.

Some studies have found that background characteristics and initial commitments explain little variance in persistence but have indirect effects on academic and social integration (Pascarella & Chapman, 1983; Stoecker, Pascarella, & Wolfle, 1988). For example, Pascarella and Terenzini (1983) found that social integration had a stronger effect on the persistence of female freshmen. In contrast, academic integration had a stronger direct effect on the persistence of male freshmen. The core constructs of social and academic integration and their predictive validity, for both sexes, have been supported by the majority of studies.

When Pascarella & Terenzini (1980) studied student expectations of a variety of college experiences, they developed a questionnaire to measure the dimensions identified by Tinto as important in student persistence. Precollege characteristics such as sex, race, academic aptitude, high school achievement, parents' educational background, socioeconomic level, and other background variables were controlled because they were identified through previous research as potentially important correlates of persistence or dropout behavior. We employed Pascarella and Terenzini's questionnaire in our study.

The purpose of our study was to determine how the freshman year changes students' initial commitment to an institution. Specifically, how do students' actual first-year college experiences change their perceptions of academic and social integration, taking into account the influences of gender and honors status? We concentrated on gender because of Pascarella and Terenzini's results (1983). In addition, because little academic and social integration research has focused on high-ability students, we felt this was an important area to investigate.

Method

Sample

Participating in this study were 711 freshmen from a population of 4,613 entering University College at Ohio State University in the fall of 1991. We surveyed students who initially declared arts and sciences, business, premedicine, and undecided as their curricular programs. The description and comparison of the overall population to the sample in terms of gender, honors status, and curriculum is found in Table 1.

To concentrate on gender and honors status, we included in the sample a sufficient number of females and males as well as students participating and not participating in the Honors Program. Table 1 shows that although the sample's ratio of females to males does not differ much from the population's, the sample is highly skewed with respect to honors status. This apparently had an effect on the distribution over race and curricular program as well. Thus, the comparisons in the current study regarding student retention will be limited to gender and honors status.

Data Collection

Our research used the questionnaire developed by Pascarella and Terenzini (1980) that designed to assess student opinions regarding their college experience. Specifically, the questionnaire was developed as an institutional integration scale and has been used as a means of understanding student withdrawal, particularly as it relates to Tinto's (1975) conceptual model.

TABLE 1
Sample and Population Percentages of First Quarter Freshmen by Curricular Program, Gender, Race, and Honors Status

	PRE Sample (n = 711)	*POST Sample (n = 219)*	*Freshman Class (N = 4613)*
Curricular Program			
Arts & Sciences	23.5	19.3	31.5
Business	29.1	15.5	25.9
Premedicine	12.5	24.3	13.3
Undecided	34.9	40.9	29.3
Gender			
Female	50.4	56.9	52.3
Male	49.5	43.1	47.7
Race			
African American	4.2	1.2	9.2
Asian American	3.8	7.2	4.3
Hispanic	0.8	0.0	2.0
Native American	0.6	0.0	0.4
White/Caucasian	87.6	89.5	82.4
Other	3.0	1.1	0.5
Honors Status			
Honors	27.8	44.2	11.1
Nonhonors	72.2	55.8	88.9

The questionnaire was administered to 711 entering freshmen in their Freshman University Survey classes during the first half of their first quarter (henceforth indicated as PRE). These students were selected on the basis of their initial declaration of major. A preliminary interest in differences among curricular programs was responsible for the initial selection but produced nothing significant and allows for the data to be collapsed across this variable. The questionnaire was then mailed to all participants at the end of the freshman year and was returned by 219 students (henceforth indicated as POST). Unfortunately, because POST surveys were intended to measure opinions at the end of the academic year, telephone follow-ups were precluded during the summer term when most students were no longer on campus.

We used the responses of these 219 in the subsequent analyses because data on both PRE and POST surveys were available for these students only. Although the response rate was low, we deemed the number of students returning the survey was sufficient to perform valid analyses. Also, the large proportion of honors students in this sample, in conjunction with the interest in gender, will focus the results on these comparisons.

Analyses

The study employed a repeated-measures design (n = 219) and focused on the 34 items of the questionnaire regarding social and academic integration. Responses were coded on a 5-point Likert scale as Agree Strongly, Agree Somewhat, Not Sure, Disagree Somewhat, and Disagree Strongly. Agree Strongly and Agree Somewhat were then collapsed into AGREE, and Disagree Somewhat and Disagree Strongly were collapsed into DISAGREE. Distributions of the three resultant responses are described below. Items analyzed are found in Table 2.

The analyses were performed in three stages. First, in order to determine common patterns that remain over the academic year and reduce the number of variables for subsequent analyses, two separate factor analyses were performed for the 219 initial and returned responses. We first performed a principle components factor analysis for each group of responses to assess a sufficient number of factors by means of a scree plot (Cattell, 1966). Once the number of factors was determined, the analysis was performed again with a varimax rotation. Factors remaining after rotation were then used in subsequent analyses.

The second analysis was a test of the changing opinions regarding social and academic integration as measured by the remaining factors. We looked at the proportion of students who agreed, disagreed, or were not sure when asked at the beginning of the year and compared their responses to the same questions at the end of the year (Grizzle, Starmer, & Koch, 1969; Guthrie, 1981). Patterns of initial responses (PRE) different from those of returned responses (POST) on the factors will be manifest as a significant chi-square with, in this case, two degrees of freedom.

The third and final stage involved an assessment of the relationship between retention, gender, and honors status with factors showing significant response pattern changes. This was accomplished by analyzing the interactions between the factor response patterns and retention status, gender, and honors status. This allowed for a test of dependency of the response pattern changes on these variables. That is, if a change of opinion over the course of the freshman year exists, the questions asked in this third stage of analysis looked at whether the pattern change (a) related to whether students reenrolled the following fall, (b) depended on gender, and (c) depended on honors status. (Students with ACT composite scores of 28 or above or SAT combined scores of 1250 or above were designated HONORS.) This is a repeated-measures analysis with three response levels (i.e., Agree, Disagree, and Not Sure) and, in all analyses, two populations (i.e., Retained vs. Not Retained, Female vs. Male, and Honors vs. Nonhonors).

Results

Factor Analyses

The results of the factor analyses performed on the questionnaire are shown in Table 2. For comparison, we have also included Pascarella and Terenzini's (1980) results. For both analyses, scree plots indicated 10 factors should be retained for rotation. Eigenvalues for the initial responses ranged from 1.147 to 5.531, accounting for 63.85% of the variance. Eigenvalues for the returned response ranged from 1.064 to 6.181, accounting for 67.45% of the variance. As shown in Table 2, the factor patterns after varimax rotation demonstrated agreement for 7 of the 10 factors. These seven factors were used in subsequent analyses. The responses of the items making up

TABLE 2
Scale Pattern Loadings

	Present Study (Internal Reliability[a]) PRE	POST	Pascarella & Terenzini[b]
Scale 1 *Peer-Group Interactions*	(.78)	(.87)	*Scale 1* *Peer-Group Interactions*
My interpersonal relationships with other students have had a positive influence on my intellectual growth and interest in ideas.	.682	.705	.72
I have developed close personal relationships with other students.	.862	.898	.82
The student friendships I have developed have been personally satisfying.	.845	.853	.82
My interpersonal relationships with other students have had a positive influence on my personal growth, values, and attitudes.	.807	.844	.76
It has been difficult for me to meet and make friends with other students.	−.669	−.656	−.71
Scale 2 *Interactions w/Faculty*	(.75)	(.83)	*Scale 2* *Interactions w/ Faculty*
I have developed a close, personal relationship with at least one faculty member.	.620	.706	.72
My nonclassroom interactions with faculty members have had a positive influence on my intellectual growth and interest in ideas.	.846	.889	.83
My nonclassroom interactions with faculty have had a positive influence on my personal growth, values and attitudes.	.891	.890	.86
My nonclassroom interactions with faculty have had a positive influence on my career goals and aspirations.	.852	.825	.73
Scale 3 *Academic/Intellectual Development*	(.71)	(.79)	*Scale 3* *Academic/Intellect. Dev.*
I am satisfied with my academic experience so far.	.810	.765	.64
I am satisfied with the extent of my intellectual development this year.	.748	.716	.68
My academic experience so far has had a positive influence on my intellectual growth and interest in ideas.	.627	.570	.67
I have performed academically as well as I anticipated would.	.703	.717	.41

(Continued)

TABLE 2 (Continued)
Scale Pattern Loadings

	Present Study (Internal Reliability[a]) PRE	POST	Pascarella & Terenzini[b]
Scale 4			*Scale 5*
Institutional & Goal Commitments	(.63)	(.77)	*Inst. & Goal Commitments*
It is important for me to graduate from college.	.795	.887	.69
It is not important for me to graduate.	–.738	–.864	–.59
I am confident that I made the right decision in choosing to attend college.	.719	.807	.63
It is likely that I will register at this institution next fall.	.554	.523	.62
Scale 5			*Scale 3*
Faculty Concern for Student Development & Teaching	(.50)	(.74)	*Faculty Concern for Stu. Development & Teaching*
Few of the faculty members I have had contact with this year are willing to spend time outside of class to discuss issues of interest and importance to students.	.645	.665	–.58
Few of the faculty members I had contact with are genuinely outstanding or superior teachers.	.733	.708	–.72
Few of the faculty members I have had contact with are genuinely interested in students.	.787	.810	–.77
Scale 6			*Scale 3*
Faculty Interest in Tchng./Service	(.29)	(.37)	*Fac. Int. in Tchng/Serv.*
Most faculty members I have had contact with are genuinely interested in teaching.	.764	.796	.54
Most of the faculty members I have had contact with are interested in helping students grow in more than just academic areas.	.456	.536	.56
Item 7			*Scale 5 Inst. & Goal Commitments*
I have no idea at all what I want to major in.	.730	.685	–.45

[a] The numbers in parentheses are alpha reliability coefficients representing the internal consistency of the scales.

[b] The numbers in the Pascarella & Terenzini column represent the loadings of the respective items with their scales. These may or may not be the same as the those of the present study.

the seven factors for both the initial and returned responses were then averaged for each student. The resulting averaged scores were used as data for all subsequent analyses.

The first five factors (scales) resemble those of Pascarella and Terenzini (1980). Scale 6 of the present study contains only two items; these came from Pascarella and Terenzini's Scale 3 (Faculty Concern for Student Development and Teaching). However, these items had relatively low weights (less than .450) in the present study's corresponding Scale 5 and were included in a separate scale. The same is true for the last factor, which includes only one item (Item #7). This was the 10th factor for both the initial and returned responses and was included in subsequent analyses. The alpha reliabilities (in parentheses in Table 2) indicate acceptable internal consistencies for Scales 1 through 5, although POST responses show consistently more reliability. Scale 6, with only two items, is not reliable but will remain a separate scale in this study because student responses indicate that it may be measuring something different from Pascarella and Terenzini's Scale 3.

Table 3 shows the intercorrelations of Scales 1 through 6 and Item 7 for both PRE and POST measures. Some relationships among these scales are more stable over the year than others. For example, students seem to discriminate between peer-group interactions and nonclass faculty interactions at the end of the year but not at the beginning. Likewise, students seem to discriminate between academic and intellectual development and nonclassroom interaction at the end of year but not the beginning. On the other hand, an association of academic and intellectual development with institutional and goal commitments appears to exist at the end of the year but not the beginning.

The impact of student-faculty interaction is shown in the change over the year between Scales 2 and 5. The pattern in Table 3 suggests that the more students agree that interactions with faculty have a positive influence, the more students are likely to disagree that faculty are not interested in student development and teaching. In other words, students are more likely to perceive faculty as better teachers and more interested in students at the end of the year, presumably related to the interactions students had with faculty over the year.

Finally, student satisfaction with academic and intellectual development at the end of the year does not seem to be related to whether they have chosen a major. However, at the beginning of the year they do seem to relate. Alternatively, at the end of the year, students who claim not to have found a major seem to have a lower level of com-

TABLE 3
Intercorrelations for PRE and POST Measures

	Scale 1	*Scale 2*	*Scale 3*	*Scale 4*	*Scale 5*	*Scale 6*
Scale 2	.283* (.086)					
Scale 3	.420* (.432*)	.325* (.140)				
Scale 4	.199* (.384*)	–.045 (.078)	.055 (.298*)			
Scale 5	–.195* (–.204*)	–.023 (–.251*)	–.199* (–.281*)	–.148* (–.134)		
Scale 6	.169* (.267*)	.374* (.255*)	.264* (.212*)	–.208* (.190*)	–.268* (–.327*)	
Item 7	–.048 (–.162*)	–.120 (–.004)	–.173* (–.093)	.093 (–.221*)	.042 (.148)	–.122 (–.139)

The numbers in each cell are correlations for PRE (top number) and POST (bottom number in parentheses).

* Correlations are significantly different from zero ($p \leq 0.05$).

TABLE 4
Percentage of Student Responses on the Scales (PRE vs. POST)

	% Agree		*% Disagree*		*% Not Sure*	
Scale	*PRE*	*POST*	*PRE*	*POST*	*PRE*	*POST*
Peer-Group Interactions	79.7	86.8	16.5	12.7	3.8	0.5
Interactions with Faculty	29.1	29.1	60.4	58.8	10.5	12.1
Academic & Intellectual Development	69.2	68.1	20.9	22.5	9.9	9.4
Inst./Goal Commitments	83.0	96.1	15.9	2.7	1.1	1.1
Faculty Concern for Student Dev./Teaching	20.8	21.9	64.9	68.3	14.3	9.9
Faculty Interest in Teaching & Service	71.4	68.7	5.4	14.8	23.0	16.5
No Idea re Major	25.8	17.6	69.8	74.2	4.4	8.2

mitment to the institution relative to students who claim to have found a major. Institutional commitment does not seem to be related to major undecidedness at the beginning of the year.

Analysis of Changes in Response Patterns

Table 4 shows, for the seven factors, the changes that resulted over the course of the first year for the 219 freshmen surveyed. The results of the analysis of these data are shown in Table 5. Clearly, the changes in response patterns were most salient for Peer-Group Interactions, Institutional and Goal Commitments, Faculty Interest in Teaching and Service, and Undecided Major. The results shown in Tables 4 and 5 suggest that (a) freshmen were significantly more likely to believe that they developed satisfying and productive relationships with peers at the end of the year than at the beginning, (b) institutional commitment increased over the course of the year, (c) students viewed faculty as less interested in teaching and less helpful at the end of the year than at the beginning, and (d) significantly fewer students were undecided at the end of the year.

Analysis of Response Pattern Dependencies

Table 6 shows the results of the analyses of response pattern dependencies for Scales 1, 4, and 6 and for Item 7. As can be seen from the analysis of interaction terms, only Scale 6 (Faculty Interest in Teaching and Service) seems to depend on honors status. No factor was dependent on gender or retention status.

Because student opinions regarding Faculty Interest in Teaching and Service seem to depend on honors status, a further analysis was done to assess the structure of the dependency (i.e., an analysis of nested effects). We asked whether honors or nonhonors students' response patterns with respect to Faculty Interest in Teaching and

TABLE 5
Chi-Square and Probability Values for the Analysis of Pattern Change

	χ^2	*df*	*p*
Scale 1	8.79	2	0.0123
Scale 2	0.27	2	0.8759
Scale 3	0.22	2	0.8978
Scale 4	20.69	2	< 0.0001
Scale 5	1.61	2	0.4462
Scale 6	10.49	2	0.0053
Item 7	7.11	2	0.0286

TABLE 6
Chi-Square Values for the Analysis of Response Pattern Changes With Respect to Gender, Retention Status, and Honors Status for Scales 1, 4, 6, and Item 7

	Gender	*Retention Status*	*Honors Status*
Scale 1	0.07 (0.9656)	0.71 (0.6996)	2.29 (0.3179)
Scale 4	4.32 (0.1151)	1.90 (0.3866)	0.52 (0.7728)
Scale 6	2.38 (0.3048)	4.94 (0.0847)	7.68 (0.0215)
Item #7	1.59 (0.4525)	0.53 (0.7670)	1.78 (0.4112)

Note: Numbers in parentheses are probabilities of finding χ^2 values greater than the corresponding tabled values.

Service changed more and in which direction. Table 7 shows these results. The pattern of change nested within honors students shows a significant effect ($\chi^2(2) = 14.65$, $p = 0.0007$) whereas the pattern is not significantly different nested within nonhonors students ($\chi^2(2) = 3.36$, $p = 0.1861$). In addition, the residual $\chi^2(2) = 3.36$ for the analysis of Scale 6 nested within honors is nonsignificant ($p = 0.1861$). These data, then, support the hypothesis that the pattern of response changes is greater for honors students (i.e., a nonsignificant residual indicates no significant difference between the empirical and hypothesized models). Table 8 shows that this may be due to the relatively large increase in the number of honors students who, at the end of the year, did not believe that faculty are interested in teaching and service. Thus, honors students were more likely than nonhonors students to change their opinion regarding Faculty Interest in Teaching and Service. Specifically, at the end of the year honors students had a greater likelihood of believing that faculty were not interested in teaching and service.

Discussion

Our discussion will focus on three areas: (a) confirmation of Pascarella & Terenzini's (1980) scales, (b) explanation of response pattern changes on Pascarella & Terenzini's scales over the course of subjects' freshman year, and (c) explanation of relationships between student retention, gender, honors status, and changes in response patterns.

As noted, these results matched well with Pascarella & Terenzini's original five scales. However, we found slight variations in the factor structure of these data. For example, two items representing the sixth scale (Faculty Interest in Teaching and Service) had relatively low weights corresponding with Pascarella & Terenzini's third scale (Faculty Concern for Student Development and Teaching). These two items included "Most faculty members I have had contact with are gen-

TABLE 7
Analyses of Nested Effects for Scale 6 (Faculty Interest in Teaching and Service)

	χ^2	*df*	*p*
Honors Effects			
Honors	3.64	2	0.1617
Scale 6	17.95	2	0.0001
Honors × Scale 6	7.73	2	0.0209
Honors Nested Effects			
Honors	34.24	2	0.0000
Response (Nonhonors)	3.36	2	0.1861
Residual	14.65	2	0.0007
Honors	4.13	2	0.1269
Response (Honors)	14.65	2	0.0007
Residual	3.36	2	0.1861

TABLE 8
Percentage of Student Responses on Scale 6 (PRE vs. POST)

	Honors		*Nonhonors*	
	PRE	*POST*	*PRE*	*POST*
% Agree	73.3	61.7	71.1	71.9
% Disagree	1.7	20.0	7.4	12.4
% Not Sure	25.0	18.3	21.5	15.7

uinely interested in teaching" and "Most of the faculty members I have had contact with are interested in helping students grow in more than just academic areas."

This factor structure suggests that students have three general perceptions of faculty. These perceptions might include student evaluations of faculty impact through nonclassroom interactions on career goals and intellectual and personal growth. Another general perception may be student evaluation of faculty teaching skills inside the classroom and skills at discussing issues outside. Lastly, students may have a general perception of a faculty member's attitude toward a specific aspect of his or her craft (i.e., teaching and helping students).

Unlike previous studies that specifically tested Tinto's model as a predictor of retention, this study also incorporated a repeated-measures design of Pascarella & Terenzini's scales. As noted, we found some positive and negative response changes on the seven scales. Three positive changes were observed. Subjects believed that they developed more satisfying and productive relationships with peers at the end of their freshman year. This might be expected if one considers normal college student development. As Chickering & Reisser (1993) note, students develop more mature interpersonal relationships as they progress through college. Students also increased their institutional commitments at the end of their freshman year as well as decisiveness about their college majors. Furthermore, the relationships between these factors change over the year.

Nevertheless, these changes were not good predictors of retention; even though changes occurred during the first year for some students, the decision to remain at the institution appears to be independent of these changes. That is, because the attitudes per se seem to be good predictors of retention (Pascarella & Terenzini, 1980; Stoecker et al., 1988), and if we assume they accurately reflect what is occurring in a student's institutional environment, then it seems possible that the changes in this social and academic context play only a minor role in a student's decision to remain at the institution. Therefore, some other factor or factors may be responsible for the decision to stay (cf. Cabrera, Nora, & Castañeda, 1993). Thus, this study raises the questions of how—and to what extent—other, more stable (possibly psychological) factors affect student retention? And further, are these factors also responsible for the attitudes measured in this study? If this is the case, these attitudes may be related to retention secondarily by virtue of their relationship with factors not measured in the present study. This is speculative; further research is needed.

Second, some studies have shown that gender interacts differently with the Pascarella & Terenzini scales (Pascarella & Terenzini, 1983). That is, path analyses have shown that social integration scales had a stronger effect on freshman year persistence of females. In contrast, academic integration scales had a stronger direct effect on freshman year persistence of males. Because gender did not seem to play a role in changes that occurred over the year, it is possible that men and women at this age come to college with different sets of issues that are not susceptible to change during the first year. Again, this speculative issue needs to be tested.

Finally, one significant response pattern interaction unexpectedly occurred. This involved the scale measuring student perception of faculty's interest in teaching and service. Findings indicated that honors students perceived faculty as having a greater interest in teaching at the beginning of the school year as opposed to the end. Freshman honors students apparently had greater expectations of faculty teaching than the nonhonors students. This is a rather surprising finding because honors students typically receive more individual attention and participate in smaller classes taught by full faculty.

In an effort to account for this unexpected finding, the combined values of the items for Scale 6 were regressed on the total number of times students reported meeting with faculty (on questionnaires completed at the end of the school year). This analysis showed that of the 184 students responding to this series of questions, students who actually met with faculty were more likely to agree that faculty are interested in teaching and service. Students who reported that they had not met with faculty were more likely to disagree ($F(1,182) = 24.745$, $p < 0.0001$).

These results suggest that honors students enter college with higher expectations of faculty than nonhonors students. This seems reasonable given that the institution in this study actively recruits high-ability students and makes it clear at the beginning of the freshman year that special services are available to them. Thus, it is possible that if students have relatively high expectations of faculty, failure to meet and talk with them may result in unfavorable (and possibly unrealistic) beliefs about faculty interest in their job. This result may be an artifact of student inability or unwillingness to talk with faculty.

Although generalizations of the data in this study to more heterogeneous populations must be approached with caution, these findings have important implications for university programs that attempt to increase involvement of faculty with students to ensure student retention. These results suggest that retention may not be dependent on changes in student perception of faculty interest in teaching and service. Rather, they may demonstrate that a student characteristic, such as willingness or unwillingness of honors students to meet with faculty, may be associated with students' perceptions of faculty interest in teaching and helping them. It is possible that freshman honors students have greater expectations of faculty than do nonhonors students.

For academic advisors working closely with honors students, these data suggest that helping honors students to restructure their expectations of faculty may also be of some importance. Advisors may need to consider the background of an honors student. That is, some highly skilled students may be more likely to expect a close relationship with faculty in a setting where professors initiate the contact. These high ability students may need to adjust their expectations by making contact with faculty in and out of the classroom. Advisors may want to be particularly sensitive to shy or nonassertive students who might not be likely to initiate contact with faculty.

Conclusion

This study reaffirms the complexity between student characteristics and institutional factors in terms of retention. These data provide additional insights into the application of Tinto's model. First, changes in social and academic integration as reflected in student self-assessments do not necessarily predict retention. In addition, we found no relationship between gender and change in attitudes toward social and academic issues. We suggest further studies using the same factor structure in addition to other, and possibly more fundamental, psychological factors to predict retention and assess the putative relationship between gender and social and academic integration.

Second, an additional factor focusing on student expectations for faculty interaction requires closer scrutiny, especially with honors students. Identifying and dealing with student expectations of faculty may be as critical as encouraging faculty involvement.

Third, and not surprisingly, student perceptions of institutional commitment, peer relationships, and decisions associated with selecting a major do change through during the freshman year. Although changes in the Pascarella and Terenzini scales over the year were not strong predictors of retention in this study, they are useful as measures of student perception of social and academic integration. However, student perception of social and academic integration may differ from the actual integration taking place; thus changes in these perceptions may not be the best measures to use in the prediction of retention. We suggest that other—currently speculative—psychological factors may play a role in retention as well as in student attitudes about the college experience.

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A Myth of Higher Education?—You Be the Judge

The lecture hall is filled with 950 students. The instructor hands out the final exam and blue books. "This is a two-hour exam. I will accept no blue books after the two-hour bell rings. I will give you 30-minute, 15-minute, and 5-minute warnings." The exam progresses; the warnings are given; the final bell rings.

As the professor is stacking blue books on the front desk, a student dashes up and hands her a blue book. "I will not accept this exam," the instructor says. "I was very clear that I will not accept late submissions."

The student is furious. "Do you know who I am? Do you have any idea just who I am?"

"I have no idea who you are . . . nor does it matter," responds the instructor, trying to contain her fury.

"Good!" retorts the student. He throws the stack of blue books onto the floor, slips his into the pile, and dashes from the room.