

So Close, Yet So Far: Predictors of Attrition in College Seniors

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The purpose of this study was to identify issues relevant to nontransfer college seniors who disenroll from their academic programs before graduating. Forty-two of these nonreturning seniors were interviewed by telephone, as were 48 returning seniors who served as a comparison group. The randomly selected sample was ethnically and racially diverse (52% White), gender balanced (51% female), and of traditional age for seniors (mean age = 22.5). Interview data indicated that college seniors offer a variety of reasons for disenrolling before graduating, including financial strain, transferring to another school, moving, starting or supporting a family, enhancing career development, personal problems, and needing a break from college. Quantitative analyses suggested that nonretention of seniors was best predicted by dissatisfaction with academic guidance, dissatisfaction with access to school-related information, and dissatisfaction with quality of education, as well as by feelings of institutional alienation. Implications of the results for retention of seniors and for future research are discussed.

Few topics in higher education have received as much attention as those of student persistence and departure. Research in this area has spanned the large part of this century, and our understanding of student persistence has evolved from a simple listing of attributes associated with persistence to models that account for complex interactions between person and environment over time (Tinto, 1993). Studies have begun to incorporate important distinctions related to persistence, such as the difference between “dropouts” and “stopouts,” and the difference between departures due to academic dismissal and

those due to voluntary departure. Although the picture that emerges from this body of research is necessarily intricate, one finding has emerged as robust across a variety of studies: To understand student persistence, researchers must understand student involvement in the academic and social realms of the college experience (Astin, 1984; Tinto, 1993). The concepts of student involvement and integration are important not only for their predictive utility, but also for their role as the basis for conceptual models of student attrition (e.g., Tinto, 1975).

Although this line of research has led to a greater understanding of student attrition and retention, one group of students not often considered in studies is college seniors. Most retention studies have focused either on students in their first and second years of college or on the entire student body; thus, the extent to which existing research applies to college seniors is uncertain. It is not clear what has led to this focus on first- and second-year students, but it may be related to the widespread use of theories of student adjustment in studying attrition. Because college seniors are often presumed to have adjusted to the many developmental transitions involved in going to college, researchers and practitioners alike may have assumed that retention is not a significant issue for these students. Furthermore, researchers may believe that seniors are too far along in their studies for retention efforts to have a serious impact on senior attrition. Regardless of the reason for the lack of research on college seniors, attrition is clearly a significant issue for this group. For example, Neumann and Finaly-Neumann (1989) found that 13% of a group of 166 junior and senior students did not persist in their course of studies after a 6-month period.

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A vast array of student and institutional variables have been studied in relationship to retention, many of which are presumed to predict retention for students at all levels of undergraduate study. Psychological variables associated with departure include feelings of alienation and loneliness (Bennett & Okinaka, 1990; Rotenberg & Morrison, 1993), difficulties in emotional adjustment (Gerdes & Mallinckrodt, 1994), and approach/avoidance behaviors (Eaton & Bean, 1995). Sedlacek (1996) has demonstrated the consistent relationship between retention and non-cognitive variables (e.g., self-confidence, community involvement) for a variety of students, including students of color and student athletes. A number of social factors related to student persistence have been identified. For example, Mallinckrodt (1988) found that social and familial support predicted student retention. Heath, Skok, and McLaughlin (1991) identified a number social factors that have been found to predict student retention, such as contact with faculty, availability of mentors, encouragement of goal commitment, orientation programs for transition from high school to college, and general social integration into the campus community. Environmental factors such as employment, financial support, living arrangements, and social encouragement to attend college have been shown to be associated with persistence in college freshmen (Cabrera, Nora, & Castañeda, 1993) and in a sample of college students who were at risk for leaving school before completing their program of studies (Ryland, Riordan, & Brack, 1994).

One of the few retention studies explicitly focused on college seniors was conducted by Neumann and Finaly-Neumann (1989), who developed and tested a model of academic involvement designed to explain junior and senior persistence. Their model is based on past research that has shown that external-environmental factors (e.g., finances, friends outside of the college campus) and socialization-selection factors (e.g., grades, institutional fit) are better predictors of retention for students in their earlier years of college than those in their later years. These researchers argue that the leading models of student persistence (e.g., Tinto, 1975) are fairly well suited to predict retention for first- and

second-year students because they focus on the most basic tasks of social and academic integration, but that they are not appropriate for more advanced students who have already faced and coped with these tasks. Neumann and Finaly-Neumann concluded that advanced undergraduates are most likely to withdraw from school due to disappointment with the quality of the learning experience. Their research supported this hypothesis with the finding that the persistence of a sample of college juniors and seniors was most strongly predicted by student-faculty contact, students' involvement in their academic programs, and the quality of course content and instructional activities.

Educational researchers have called for diverse data collection approaches (Tinto, 1993), but most retention studies continue to use written self-report data. The current study was designed to replicate and extend the limited base of research on senior persistence using a semi-structured interview. Both quantitative and qualitative data were gathered in the interview, with particular attention to qualitative data in order to better understand the many ways that seniors make sense of their college experience. The research was designed to be exploratory, asking students a number of open-ended questions about their college experience, as well as specific questions related to areas that have been found to relate to persistence.

In the current study we focused on three areas of inquiry. First, we aimed to identify and categorize the reasons given for disenrollment by nonreturning seniors. A second goal of this study was to identify thematic dimensions based on material shared by returning and nonreturning students when asked about negative aspects of their college experience. Finally, we planned to test the degree to which returners and nonreturners differed on self-report and judge-rated measures related to involvement in the academic and social realms of college life and to the perceived quality of academic experience. In line with the findings of Neumann and Finaly-Neumann (1989) cited earlier, we expected to find significant differences on variables related to students' sense of academic involvement and satisfaction.

METHOD

Participants

The participants were 90 undergraduate students who were enrolled at a large Eastern public university in the spring semester of 1996. All of these students had earned at least 86 credits by the end of that semester, which accorded them senior status. Approximately 53% of the students in this randomly selected sample (23 females and 25 males) were enrolled at the university 1 semester later. The remaining 47% of the students in the total sample (22 females and 20 males) were not enrolled at the university 1 semester later and had not completed their degree programs. None of these nonreturning students had been dismissed for academic problems. Of the returning seniors, 17% identified themselves as African American, 25% as Asian American, 2% as Hispanic/Latino, and 56% as White. Of the nonreturning seniors, 14% identified as African American, 33% as Asian American, 5% as Hispanic/Latino, and 48% as White. The mean age of returning seniors was 21.8, and the mean age of nonreturning seniors was 23.2. The returning and nonreturning seniors had mean GPAs of 3.06 and 2.60, respectively, with standard deviations of .49 and .51. All the participants were "native" to the university (i.e., they had begun their undergraduate education at this university).

Measures

Participants took part in a 10-to-15-minute semistructured telephone interview using one of two protocols, depending upon the participant's enrollment status. Both interviews were designed to assess current employment and educational status and goals, perceptions of the university's strengths and weaknesses, and current barriers to achieving goals. The first part of the interview consisted of items for which responses were rated on a 5-point Likert-type scale ranging from 1 (*strongly disagree*) to 5 (*strongly agree*). Items were created to tap a variety of variables presumed to relate to student retention, based on a review of the retention literature. For this study, we only considered those seven items that measured aspects of academic and social integration (see Appendix A). The three items related

to academic integration assessed the quality of contact with faculty and academic advisors. These items were combined to form a Personal Contact scale, which had an internal consistency reliability of .71. The four items related to social integration measured the degree of involvement on campus and were combined to form a Campus Involvement scale with internal consistency reliability of .81. The second part of the interview consisted of open-ended questions in which participants were encouraged to discuss challenges to remaining enrolled in college, advice for future students, desired changes at their college and aspects of college that the participants most and least liked (see Appendix B). Nonreturning students were also asked about their reasons for disenrolling, the likelihood of returning to the university, and about their current life activities (e.g., work, school, family).

Procedure

At the beginning of the spring semester of 1997, over 750 individuals met the definition of nonreturning senior adopted for this study (i.e., over 86 credit hours earned, in academic good standing, not enrolled as of fall 1996), and just under one third of these students were natives. The names and phone numbers of native nonreturning seniors were chosen by a random process, printed in a random order and distributed to six research team members to contact by telephone and interview. A similar list was generated of the names and phone numbers of native returning seniors. Research assistants were doctoral students in education or psychology who were trained to do the interviews. Of those potential participants that team members reached by telephone, only two nonreturning seniors declined participation and no returning seniors declined participation. Team members attempted to call all of the nonreturning seniors who met our inclusion criteria. The final sample size is a reflection of our attempt to maintain roughly equal numbers of returning and nonreturning seniors.

Several participants had been incorrectly classified as nonreturning seniors in the university database. These participants were placed into the correct group by the interviewers. Also, two of the nonreturning seniors had entered

TABLE 1.
Percentage of Nonreturning Senior Responses in Interview Categories

<i>What are the main reasons you are no longer enrolled at this university?</i>	
Economic Reasons	26.8
Other School	22.0
Academic Problems	17.1
Family Responsibilities	9.8
Personal Problems	7.3
Poor Advising or Teaching	7.3
Co-op Experience	4.9
Needed a Break	4.9
Schedule Conflicts	2.4
Wanted to Move	2.4
<i>What are you doing now?</i>	
Full-Time Job	65.9
Part-Time Job	7.3
Full-Time School	17.1
Part-Time School	9.8
Other	9.8
<i>Are you planning to return to this university?</i>	
Yes	48.8
No	26.8
Uncertain	26.8

Note. N = 42 nonreturning seniors. Only categories for the third question are mutually exclusive.

graduate school directly from undergraduate school without earning their bachelor’s degrees. Because they conformed to the definition of nonreturning student used for this study, their classification was not changed. Their circumstances, however, were not typical of the majority of the sample of nonreturners.

When potential participants were first contacted by telephone, they were invited to participate in a research project that involved

completing a short interview designed to assess their current educational and vocational status as well as their perceptions of the strengths and weaknesses of the university. Participants were informed that their responses were confidential, and that giving the interview indicated their informed consent. They also were informed about the nature of the task, their right not to answer specific questions, to withdraw totally and to decline participation. Finally, potential participants were told that all individuals taking part in the study would be entered into a lottery for gift certificates at a national chain bookstore.

Identifying thematic dimensions. After all of the interviews had been conducted, research team members examined the qualitative data to identify dimensions related to dissatisfaction with the college experience. To render data from returning and nonreturning seniors comparable, team members only examined responses to those interview questions that were asked of both groups (i.e., the last four questions on the returning senior protocol, Appendix B). Team members generated an initial list of seven dimensions and rated five interviews for the presence or absence of material related to each dimension. On the basis of discussion regarding the conceptual clarity of the dimensions and relevance to the aims of the study, we defined a final set of four dimensions (discussed in the Results section). This process of identifying thematic dimensions through careful reading of the data and consensual decisionmaking is considered to be a hallmark of most forms of qualitative data analysis (Highlen & Finley, 1996; Hill, Thompson, & Nutt Williams, 1997).

Rating data on thematic dimensions. The first two authors separately rated interview data on these four dimensions using a 5-point scale from 1 (*no evidence of this construct*) to 5 (*evidence of a great deal of this construct*). We chose to use this rating system to reflect our observation that the constructs related to the four dimensions were present in varying degrees of salience. This method of analyzing open-ended responses is consistent with positivist approaches to qualitative data analysis (Highlen & Finley, 1996), and it has been profitably used to study diverse psychological phenomena such as

attributions in romantic relationships (Collins, 1996) and parental attachment (Main, Kaplan, & Cassidy, 1985). As discussed in detail below, interrater reliabilities for the scales were all above .70 and thus sufficiently high for research purposes (Nunnally, 1978).

A similar process was used to analyze interview data from nonreturning seniors pertaining to their reasons for disenrollment, their current activities, and their plans for returning to school. Content area categories were generated by consensus. Instead of using rating scales as above, the first two authors independently categorized the interview data. We chose to use discrete categories rather than rating scales because we were analyzing data for constructs that were either present or absent, rather than present in relative degrees as above. For example, participants were either currently working full-time or they were not working full-time, thus the 5-point rating scale used above would not have been useful in scoring interview data regarding full-time work status. The interjudge agreement rate was 100%, which reflected the relatively straightforward nature of the categories used in this analysis.

RESULTS

Nonreturning Student Characteristics

Analyses of the qualitative data (Table 1) revealed that the top six reasons given for disenrollment were economic factors (e.g., finding a high-paying job, needing to pay back loans), enrollment in another school (e.g., community college, graduate program), academic difficulties (e.g., receiving incompletes in the one or two last courses required for graduation, low grades), family responsibilities (e.g., starting a family, supporting a family), personal problems (e.g., emotional difficulties, health problems), and poor advising or teaching (e.g., receiving misinformation about graduation requirements, sexist professors).

A majority of the nonreturning seniors were working at full-time jobs (66%), and some were working at part-time jobs (7%). Slightly over one quarter of these participants were enrolled in other schools; approximately two thirds of these

students were enrolled in full-time academic programs, and the remaining one third were enrolled in part-time programs. Finally, analyses revealed that nearly one half of the nonreturning seniors were planning to return to complete their degree programs at the university, while one quarter were not planning to return and one quarter were uncertain.

Thematic Dimensions of School Dissatisfaction

Based on our analyses of the qualitative data from both nonreturning and returning seniors, we identified four dimensions of school dissatisfaction: (a) Institutional Alienation (Alienation; e.g., feeling uncared about by teachers, feeling like a "number"), (b) Dissatisfaction with Guidance and Access to Information (Guidance; e.g., poor advice from advisor, no knowledge about where to learn about special academic programs), (c) Dissatisfaction with Quality of Education (Education; e.g., poor classroom instruction, unhelpful teaching assistants), and (d) Dissatisfaction with School Policies and Facilities (Policies; e.g., too many major requirements, limited library hours). Interrater reliabilities for the four dimensions were calculated using the Pearson product-moment correlation coefficient and were .90, .85, .87, and .76 for Alienation, Guidance, Education, and Policies, respectively.

Examples from interview data help to clarify distinctions between the scales. One student spoke about the repeated difficulties she experienced in scheduling appointments with her academic advisor. She felt as though regular advising sessions would have helped her to make better choices regarding course selection. Because of her focus on the academic guidance aspect of advising, a high score was given on Guidance. Another student said that her advisor "talked down to me, couldn't remember who I was, lectured at me, didn't seem to care, and just went through the motions." This interview was given a high score on Guidance, as well as a moderate score on Alienation. A high score was not given on the latter scale because the interview did not reflect pervasive or marked feelings of alienation. Two participants spoke in depth about their dissatisfaction with instructors, but one student

TABLE 2.
Scale Means and Standard Deviations for Returning and Nonreturning Seniors

Measure	Returning		Nonreturning		<i>d</i>	<i>t</i>
	<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>		
<i>Self-rated scales</i>						
Personal Contact	3.22	0.93	2.41	1.03	.84	-3.94**
Campus Involvement	3.21	1.01	3.31	1.03	.09	0.42
<i>Judge-rated dimensions</i>						
Alienation	1.46	0.68	2.35	1.18	.94	4.44***
Guidance	1.69	0.97	2.96	1.57	.99	4.70***
Education	1.42	0.68	1.85	1.08	.48	2.28*
Policies	2.21	1.06	2.05	1.10	.15	-0.22

Note. *N* = 48 returning seniors. *N* = 42 nonreturning seniors. Effect size (*d*) was calculated using a pooled variance estimate. Alienation = Institutional Alienation; Guidance = Dissatisfaction with Guidance and Access to Information; Education = Dissatisfaction with Quality of Education; Policies = Dissatisfaction with School Policies and Facilities.

p* < .05. *p* < .005. ****p* < .0001.

emphasized the poor quality of teaching whereas the other focused on his perception that professors did not take a personal interest in their students. Consequently, the first student received a high score on Education and a low score on Alienation, and the other student received a moderate score on Education (due in part to other parts of the interview) and a high score on Alienation. One student's only source of dissatisfaction was in regard to the computer facilities: He wished that the school had newer equipment and that it did not charge for printing. His interview received low scores on all scales except for Policies, for which he received a moderately high score.

Comparison of Returning and Nonreturning Seniors

Means and standard deviations for the self-report scales and judge-rated dimensions are listed in Table 2. The intercorrelations among these variables offer a source of discriminant and convergent validity for the measures used in this

study (see Table 3). For example, Personal Contact was positively correlated with Campus Involvement, and negatively correlated with Guidance, Education, and Alienation. These correlations are in the expected directions, and they make theoretical sense in that all of these variables are strongly related to college integration. Policies was not significantly correlated with any of the other variables, which is in line with the fact that this variable is conceptually the least related to the psychosocial and educational focus shared by the other variables. Alienation was significantly correlated only with Personal Contact and Guidance, which reflects the lack of personal attention from advisors and teachers that is associated with this dimension. Finally, the lack of significant correlations between Campus Involvement and the judge-rated dimensions points to the distinction between satisfaction with one's nonacademic and academic lives. Overall, the significant but modest intercorrelations are evidence that the variables represent distinct, conceptually related constructs.

Two MANOVA analyses were conducted to compare ratings of returning and nonreturning seniors; the first analysis used the two self-report scales, and the second used the four judge-rated dimensions. For the first analysis, the a priori power estimate for a moderate effect size was .85 and thus reasonably high (Stevens, 1980). The multivariate effect was significant, $F(2, 87) = 10.25, p < .0001$. The Mahalanobis distance (D^2) was .93, which indicates a moderate to large effect size (Stevens, 1980). Post hoc univariate t tests (conducted at an overall type I error rate of .10) revealed that the significant multivariate effect was due to group differences on Personal Contact but not Campus Involvement (see Table 2). The mean on Personal Contact for returning seniors was over three quarters of a standard deviation greater than that of the nonreturning seniors.

Similar analyses were conducted using the four judge-rated dimensions. The a priori power estimate for a moderate effect size using MANOVA was greater than .80 and thus adequate (Stevens, 1980). The multivariate effect was significant, $F(4, 85) = 11.93, p < .0001$, with an effect size in the large-to-very-large range, $D^2 = 2.21$ (Stevens). Post hoc univariate t tests

(conducted at an overall type I error rate of .10) revealed significant group differences on three of the four dimensions. Compared to returning seniors, interview data for nonreturning seniors was rated as demonstrating significantly higher scores on Alienation, Guidance, and Education (see Table 2). Group means differed by nearly one standard deviation for the first two of these three dimensions. The two groups were not found to differ on Policies.

DISCUSSION

The results support the finding in past research on senior attrition that the quality of the academic experience is predictive of retention for seniors. The nonreturning and returning seniors in this study differed most on scales relating to institutional alienation and productive, meaningful contact with faculty and advisors. This result held true for both self-report data and judges' ratings of participants' responses to open-ended questions. One nonreturning senior said that he had felt as if "no one on campus cared about what happened to me academically." Another student spoke about "teachers who do not care about

TABLE 3.
Intercorrelations Among Self-Rated Scales and Judge-Rated Dimensions

Measure	1	2	3	4	5	6
<i>Self-rated scales</i>						
1. Personal Contact	—					
2. Campus Involvement	.37**	—				
<i>Judge-rated scales</i>						
3. Alienation	-.24*	-.10	—			
4. Guidance	-.29**	-.16	.27**	—		
5. Education	-.27*	-.14	-.01	-.01	—	
6. Policies	-.07	-.12	-.17	-.05	-.02	—

Note. Alienation = Institutional Alienation; Guidance = Dissatisfaction with Guidance and Access to Information; Education = Dissatisfaction with Quality of Education; Policies = Dissatisfaction with School Policies and Facilities.

* $p < .05$. ** $p < .01$.

teaching, only about their research,” and wanting “more interaction with the advisor, more attentiveness [from the advisor] and [wanting advisors to have more of] a vested interest in student plans.” Nonreturning seniors were also significantly less satisfied with the quality of education at the university.

The two groups did not significantly differ with regard to dissatisfaction with school policies and facilities or self-reported levels of campus involvement. The latter result is particularly interesting in the face of prevailing theories regarding the importance of social integration for retention (Tinto, 1993). As noted earlier, many seniors have achieved the basic tasks of social integration, thus retention of seniors may have little to do with involvement in the campus community. Interestingly, several nonreturning seniors cited the large size of the university as an asset with regard to finding social niches, despite the fact that they also felt that the size promoted feelings of institutional alienation. Another result that was notably different from the findings of studies on freshman retention concerns the role of academic advising. For example, Metzner (1989) found that freshmen’s ratings of the quality of academic advising and of courses were not directly predictive of attrition. In a study of freshmen retention, Cabrera et al. (1993) remarked that academic advising and counseling were not likely to improve retention efforts. The current results suggest that this may not be true in the case of college seniors.

Analysis of interview data pertaining to participant dissatisfaction with the college experience revealed several distinct but inter-related dimensions: feelings of institutional alienation; dissatisfaction with guidance and access to school-related information; dissatisfaction with education; and dissatisfaction with school policies and facilities. Although all of these areas have already been identified in the body of research on student retention (Tinto, 1993), these results are noteworthy in several ways. First, the absence of dimensions related to student life supports the findings discussed above regarding aspects of social integration. As noted above, the seniors in this study appear to have successfully negotiated the task of finding

a social niche on campus, at least to a level that they find satisfying. Their focus was clearly on aspects of their formal academic experience rather than on campus life. Second, the four dimensions of student dissatisfaction have implications for measurement and research. Inspection of measurement strategies used in student retention studies reveals that little consistency exists with regard to choice of measures and constructs. Constructs such as “academic integration” have been interpreted by researchers in very different ways (Cabrera et al., 1993), and some researchers have attempted to create unidimensional measures of such constructs by combining items with remarkably diverse content (e.g., Stage, 1989). The current research identified dimensions of student frustration that might all fall under the rubric of “academic integration” or “quality of education,” but inspection of intercorrelations suggested that these dimensions are not indicators of a single underlying dimension. Also, results indicated that dissatisfaction with teacher and advisor relationships may be related to one or more of several distinct causes. For example, dissatisfaction with one’s advisor may be linked to perceptions of advisor incompetence, but it may be the result of feelings that one’s advisor is uncaring. The use of self-report items that do not assess the sources of dissatisfaction (e.g., items that ask students to rate the “perceived quality of academic advising,” as in Metzner, 1989) obscure potentially important distinctions. Thus, retention research may be facilitated by further discussion regarding measurement strategies and by the development of reliable, valid measures that assess distinct constructs such as those identified in this study.

One of the notable findings of this study was that the specific reasons given by nonreturning seniors for disenrolling were not directly reflected in the analyses comparing nonreturners and returners. Nonreturners were most likely to attribute their disenrollment to economic factors, to attending another school, or to academic problems. Although nonreturning students did not often cite school-related psychosocial factors as reasons for disenrolling, these factors proved to be the strongest discriminators between nonreturning and returning seniors. What might

explain this apparent discrepancy? One possibility is that the students in this study may have had more difficulty articulating dissatisfaction in the psychosocial realm than in more external realms such as that of economic need. Another possibility is that diminished satisfaction with school-related elements of college life may yield less incentive to actively cope with the economic and academic stressors faced by most students. This explanation is supported by Tinto (1993) who noted that "the citing of financial problems as reasons for departure is often merely an end product of decisions regarding departure. It reflects the weighing of benefits as well as of costs and as such mirrors the nature of the student's academic and social experiences on campus" (p. 67). Although this study does not lend itself to making causal inferences, the results strongly suggest both that dissatisfaction with the academic experience is, at the very least, an important precursor to disenrollment for many seniors and that the ultimate reasons given by seniors for disenrolling are varied and depend upon unique circumstances.

Results also demonstrated that nearly one half of all of the nonreturning seniors were planning to return to the university to complete their degrees. This finding points to the complexity of students' developmental paths and the resulting complexity of doing research on student retention. The distinction between dropouts and stopouts is often difficult to make because students can potentially take 10 or more years to complete their degrees. Indeed, long-term studies of undergraduate student attrition have shown that the true rates of institutional departure may be substantially lower than the departure rates obtained only 4 or 5 years after matriculation (e.g., Campbell, 1980). On the more practical side, the current research has also suggested that student departure rates may also be artificially inflated by inaccurate and incomplete information in the institutional database. Several students in the study who were classified as nonreturners by the university database were either enrolled as full-time students or were engaged in full-time cooperative work experiences for university credit. This news of inflated departure rates may be comforting to administrators who are con-

cerned with student persistence. However, nonreturning students gave lower ratings to the quality of education than did returning students, even though nearly half of them were still planning to return to the university. Thus, the perceived quality of education may well play a role in stopping out as well as dropping out.

We believe that this study exhibited several methodological strengths. Tinto (1993) pointed to a number of methodological areas that are especially important in conducting retention research, including random sampling, achieving a high return rate, and the use of diverse approaches to data collection and data analysis. This study incorporated all of these recommendations. In addition, the sample was ethnically/racially diverse and gender balanced.

Several caveats regarding the results of this study must also be made. First, the data from nonreturning seniors were retrospective; we asked these participants about their experiences prior to disenrolling from the university. Their views and attributions regarding the university may have changed since they had last been enrolled. However, also they may have downplayed positive feelings about their university experience to reduce cognitive dissonance associated with disenrolling (Festinger, 1957). Similarly, returning seniors may have tended to speak more positively about their educational experience to maintain a sense of consistency between their attitudes and their enrollment status. This argument is weakened, however, by the fact that nearly half of the nonreturning seniors were planning to return to school. Second, both the interview protocol and interview rating system were created for the purpose of this study. Thus, neither the interview nor the rating system have received validity and reliability evidence apart from the preliminary evidence offered here. Third, random assignment into groups was clearly not possible, thus no causal inferences can be drawn from this study. Finally, the variability of our sample was intentionally limited by restricting the sample to native seniors. Retention factors for transfers may be substantially different than those for natives. For example, issues of social integration may be much more salient for transfer seniors than for native seniors due to their relative newness to campus.

This study highlighted the importance of student perceptions of the academic experience in understanding retention of seniors. Results suggested that seniors may be more likely to stop out or drop out when they do not have regular, meaningful contact with faculty and advisors and when they are not pointed toward information about services relevant to their educational goals. These findings affirm the importance of affording student academic involvement a central role in student development theory (Astin, 1993; Neumann & Finaly-Neumann, 1989; Tinto, 1993), and that institutions of higher education may profit by focusing on ways of enhancing student involvement not only for first and second year undergraduates but for all undergraduates.

For example, Tinto (1993) has discussed the great need for high-quality academic advising for all undergraduates, where academic advisors would serve to provide students with high quality information, link students to resources that are likely to enhance their development, and offer students a caring, stable, continuing relationship on which they can depend during difficult times. When seniors lack this type of meaningful contact as well as meaningful educational experiences, they may not feel sufficiently motivated to continue to cope with the ever present challenges associated with being a student. Astin (1984) noted that finding ways of increasing the academic involvement of “the passive, reticent, or unprepared student” (p. 305) may be especially important because these students may be at risk for having negative

educational experiences. The current research, as well as that of others’ (Neumann & Finaly-Neumann, 1989) suggests that schools can best achieve this goal by investing in and rewarding high-quality teaching and advising.

Given the relative paucity of studies on senior retention, many opportunities exist to contribute to this body of literature. Future studies may profitably focus on nonreturning transfer students, the relationship between student employment and academic involvement, longitudinal observation of nonreturning seniors, longitudinal study of the development of academic involvement, and the development and evaluation of programs designed to increase academic involvement in college juniors and seniors. Also, the ample evidence that academic experience is mediated by such variables as race, sex, and academic motivation (Bennett & Okinaka, 1990; Sedlacek, 1996; Stage, 1989) suggests that these demographic and personality variables may be important to consider in future research on senior retention. Finally, given the growing interest in incorporating environmental factors in models of attrition (Cabrera et al., 1993), the role of such variables as financial status and encouragement from family members in processes related to senior retention is worth considering.

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APPENDIX A.
Self-Report Items

PERSONAL CONTACT

You knew one or more faculty quite well.

You were satisfied with the guidance you received from your academic advisor.

You had a mentor.

CAMPUS INVOLVEMENT

You were very involved in campus activities.

You felt a part of the campus community.

You were satisfied with your social life at school.

You were a member of several campus clubs or groups.

Note. Items were phrased in the present tense for returning seniors.

APPENDIX B.
Interview Protocols

INTERVIEW PROTOCOL FOR NONRETURNING SENIORS

Given that you have earned over 86 credits, what are the main reasons that you are no longer enrolled at this university?

What are you currently doing?

What would you change at this university to help future students?

What did you most like about being a student at this university?

What did you least like about being a student at this university?

Are you planning to return to this university to complete your degree? If uncertain, describe the factors that will help you make your decision.

What advice would you give to students just beginning their college education at this university?

INTERVIEW PROTOCOL FOR RETURNING SENIORS

What have been your biggest challenges to remaining enrolled at this university?

What has most helped you to continue your studies at this university?

What would you change at this university to help future students?

What do you most like about being a student at this university?

What do you least like about being a student at this university?

What advice would you give to students just beginning their college education at this university?

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