

**The Role of Friendship in Community College Students'
Decisions to Persist, Transfer, or Withdraw**

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Abstract

In an effort to learn more about the factors that affect persistence in the community college environment, this study was designed to explore the effect of friendship on the educational goals and decisions of community college students. Four measures of student's friendships were tested in a series of logistic regression analyses. Findings suggest that the opinions of friends matter more to community college students' academic choices than do friends' proximity and shared experiences. Moreover, social integration might be more important to the persistence of married students than unmarried students. Implications for theory and practice are discussed.

Introduction

As part of a larger project to “isolate and analyze” factors that explain patterns of enrollment among the community college student population (Hagedorn, Maxwell, Pickett, Moon, Brocato, & Sax, 2002), this study draws from a sample of 5,001 students at nine community colleges to examine one piece of the retention puzzle: the effect of friendship on the likelihood of re-enrollment, transfer, or withdrawal. The premise is simple. As a fairly salient relationship over the lifespan with many developmental implications, the relevance of friendship to students’ goals and choices (academic or otherwise) seems obvious. But is it relevant? Especially to community college students, for whom friendship and college-going might be less closely tied to one another by virtue of the non-residential campus setting, or the nontraditional characteristics of many community college students themselves? How does friendship affect the process by which these students map their academic lives?

In this exploratory study, logistic regressions were conducted to assess whether and how students’ experiences with their friends increase or decrease the odds of re-enrollment, transfer, or withdrawal in a two-year college environment. Because several measures of friendship were tested in these analyses, the relative importance of various experiences with friends was investigated as well. By calling attention to students’ friendships, findings from this study shed new light on the dynamics of enrollment in a fast-growing segment of postsecondary education, and carry direct consequences for policymaking, advising, and curricular programming at institution- and system-wide levels.

Background of the Study

Three areas of research set the stage for the present study: 1) the role of friendship over the life course; 2) social integration and persistence in college; and 3) the characteristics,

experiences, and goals of community college students. Following is a brief discussion of previous work in each of these areas.

Friendship

Research on friendship tends to highlight the positive aspects of this uniquely pliant relationship (O'Connor, 1992). As Rubin (1985) writes enthusiastically, friends “are those who seem to us to call up the best parts of ourselves, even while they also accept our darker side” (p. 41). In early childhood, friends function as “agents of comfort,” enhancing emotional health and “scholastic competence” (Doll, 1996, pp. 165-166). During adolescence, close friendships are associated with “(1) feeling good about oneself, feeling socially connected, and being positive (nondepressed) in outlook, and (2) being successful in subsequent relationships” (Hartup, 1993, p. 16). Among adults, having close and supportive friends mitigates emotional strain following a stressful life event, particularly when these friendships are simultaneously low in conflict (Major, Zubek, Cooper, Cozzarelli, & Richards, 1997). And frequency of contact with friends in later life is more strongly related to subjective well-being than is frequency of contact with adult children (Pinquart & Sorenson, 2000). In an extensive review of friendship over the life course, Hartup and Stevens (1997) conclude that substantive relationships with friends make more likely a host of “good outcomes” at all points in time.

A handful of studies in higher education examine the link between friendship and the process by which students adjust to college (Gilmartin, 2003; Hays & Oxley, 1986; Paul & Kelleher, 1995; Takahashi & Majima, 1994). Characteristics of students' friendship networks and the demands of close friends may be related to student persistence as well (e.g., Christie & Dinham, 1991; Thomas, 2000), but most work in this area speaks to the experiences of undergraduates at four-year institutions. Fewer researchers examine the impact of friendship on

the academic performance, psychological well-being, and educational plans of students at community colleges, despite strong evidence that friendship carries tremendous developmental and practical significance over the lifecycle.

Social Integration and Persistence

Though “friendship” is neither equivalent to nor interchangeable with “social integration,” the two are interrelated; as such, it makes sense to review the body of work on social integration among students at two-year colleges, particularly as this construct affects re-enrollment, transfer, or withdrawal. Tinto’s (1975, 1987, 1993) theory of student departure suggests that there is a strong link between social integration and persistence; as the theory goes, students who feel more socially integrated into the campus community (or those who feel connected to the social life of the campus) tend to identify more strongly with their institution and are more likely to persist at this institution. However, is this true of community college students, for whom relationships with peers and faculty members on campus may be of a much different ilk than those of peers at more traditional (i.e., residential) four-year schools? For whom close friendships might exist outside of the campus environment, given the good number of community college students who are simultaneously employed full-time (see “Enrollment Patterns and Population Characteristics of Community College Students,” below)? Evidence is not only mixed, but complicated by the fact that researchers define social integration differently.

As one example, Williamson and Creamer (1988) use students’ satisfaction with the social life on campus as an indicator of integration; among the two-year students in their study, this measure was a weak predictor of persistence. By contrast, Bers and Smith (1991) define social integration as a composite measure of students’ experiences with friends and faculty members, and find that this measure was significantly associated with persistence among a

sample of two-year students. In another study, higher levels of social integration made more likely a predisposition to transfer to four-year institutions among a community college student sample, although social integration was defined as the extent of faculty and peer contact on campus as well as behaviors like “reading the college newspaper” (Nora & Rendon, 1990). Finally, in an early comparison of undergraduates at universities, four-year colleges, and two-year colleges, Chapman and Pascarella (1983) note that students at two-year schools reported the lowest levels of social integration, which was assessed by tabulating students’ “average number of dates each month,” “participation in informal social activities,” and “number of best friends on campus,” among other activities. However, the authors urge a careful interpretation of these findings: although the two-year students in their study were less socially integrated into the campus community, they were not necessarily more likely to withdraw, given the unique set of goals and attitudes that characterize the community college student population. Citing findings from this and related research, Chapman and Pascarella speculate, “Maybe community college students, in the main, view their institution as something of a supermarket, where one goes to get whatever one needs and then leaves—without anything more happening in the way of integration or involvement in the culture” (p. 319). Taken together, the results of these suggest that social integration may or may not be important to two-year student retention. Moreover, measures of social integration are inconsistent, which means that the role of friendship in the community college student lifecycle remains unclear.

Enrollment Patterns and Population Characteristics of Community College Students

Generally speaking, what do we know about enrollment, transfer, and withdrawal among community college students? First, consider the following enrollment data and degree attainment statistics: Nationally, 36 percent of college students are enrolled at public two-year institutions,

although states like California find more than half of their college students enrolled at public two-year institutions (Chronicle of Higher Education, 2002). Going forward, enrollment at public two-year institutions is expected to increase from 5.7 million students to 6.3 million students by 2012, a rise comparable to the expected growth in enrollment at public four-institutions (from 6.1 million to 7.2 million over the same time period) (Gerald & Hussar, 2002). Between 1988-89 and 1999-2000, the increase in number of associate's degrees awarded outpaced the increase in number of bachelor's degrees awarded (a 29 percent increase versus a 22 percent increase, respectively) (Wirt, Choy, Gerald, Provasnik, Rooney, Watanabe, & Tobin, 2002).

Next, select characteristics of the student population at two-year institutions: Wirt et al. (2002) notes that 1) "highly nontraditional" students¹ are most likely to attend two-year schools, 2) the majority of nontraditional students consider themselves to be first and foremost an "employee," not a "student," 3) beginning nontraditional students are more likely than are beginning traditional students to leave their education without a degree, whether their degree goal is at the level of associate or bachelor, and 4) beginning nontraditional students are more likely than are beginning traditional students to drop out in their first year of college. Choy (2002) adds that students who aspire to a bachelor's degree but start their postsecondary careers at a two-year institution are much less likely to realize their degree goals than are their peers who begin at four-year institutions.

Finally, transfer in the community college environment: linear transfer from a two- to four-year college (and bachelor's degree completion over a period of four to five years) is no longer a norm among the community college student population. A sizable number of these students make use of multiple campuses over an extended time period, transferring between two- and four-year institutions as appropriate and/or needed. Attesting to this point, Townsend (2001)

identifies six patterns of transfer that are distinct from the traditional model, including the “swirling” pattern (i.e., transferring back and forth between two- and four-year institutions). But research on these inter-campus transfer patterns is sparse—as noted in a recent California Postsecondary Education Commission (CPEC) report, policymakers tend to examine transfer from the community college to the four-year institution only, in keeping with statewide goals to increase the number of students who complete the baccalaureate degree (CPEC, 2002). So many of the reasons behind inter-campus transfer—or departure altogether—are unknown.

Objectives

Given the literature above, we can say the following:

- As one of the most developmentally decisive interpersonal relationships over the lifespan, friendship influences not only psychological outcomes, but educational experiences as well, although the scope or nature of its influence on the persistence of community college students has not been widely studied.
- Having close friends on campus is a reasonable albeit non-exclusive indicator of social integration, which tends to go hand in hand with persistence; however, evidence is mixed with respect to the importance of social integration in the enrollment and transfer decisions of community college students.
- Students at two-year institutions often do not fit the profile of the traditional college student, and these nontraditional students are at much higher risk for dropping out than are their more traditional peers.
- Among community college students, transfer and time-to-degree tend not to follow “typical” models and may be sensitive to a range of personal and

professional variables that research on four-year students has not probed systematically.

In sum, community college students may follow different educational paths than do their many of their peers at four-year institutions, and the degree to which friendship shapes these relatively unique paths is uncertain. Hence, the objective of the present study: to explore a small and specific part of the retention puzzle (i.e., the link between friendship and students' plans and/or decisions to re-enroll, transfer, or withdraw) and begin to build a much more comprehensive body of work on the behaviors, choices, and goals of community college students.

Methodology

Sample

Data for this study draw from two surveys of community college students: 1) the 2001 "Transfer and Retention of Urban Community College Students" (TRUCCS) baseline survey, and 2) the 2002 TRUCCS follow-up survey. TRUCCS is a three-year project designed to examine persistence, transfer, and achievement among students enrolled in the Los Angeles Community College District (LACCD), one of the largest community college districts in the nation. Funded by the U.S. Department of Education, TRUCCS represents a collaboration between the University of Southern California (USC), the University of California, Los Angeles (UCLA), and LACCD.

In Spring 2001, the TRUCCS baseline survey was distributed to 5,001 students at nine LACCD campuses. Members of the TRUCCS project team administered the surveys in 241 classrooms; remedial, standard, vocational, and gateway courses were selected to ensure that the TRUCCS sample was adequately representative of the larger LACCD population. Subsequent

analyses confirmed that students who completed the TRUCCS survey resembled this population in terms of race/ethnicity, age, and primary language.

Approximately one year later, a follow-up survey was distributed to baseline respondents who provided a standard and/or email address at which to contact them (N=4,800). Subjects received the online version of the follow-up survey if they provided a valid email address, and the paper version of the survey if they did not provide a valid email address. Second and third waves of the survey were administered to first-wave nonrespondents; some of these first-wave non-respondents received the survey as both a paper and electronic form to maximize overall response.

As of Winter 2003, the overall rate of response to the follow-up survey was 21 percent. A nonresponse bias analysis indicated that women were more likely to respond to the follow-up survey, as were older students, White students, and students who performed well academically in high school. However, the distribution of the follow-up sample on key demographic variables (including sex, age, race, and high school grade point average) was fairly consistent with the distribution of the mail-out sample on these same variables, such that weights to compensate for nonresponse bias were not applied (the weights, in fact, overcompensated for certain students who were less likely to respond to the follow-up survey). In addition, analyses of nonresponse and response biases by mode of survey administration suggested that the online data were not substantively different from the paper data (Sax, Gilmartin, Lee, & Hagedorn, 2003).

Accordingly, the sample for two multivariate analyses in this study (see below) is comprised of all 5,001 students in the baseline sample, and the sample for the remaining analyses is comprised of students who completed both the baseline and follow-up questionnaires notwithstanding mode of follow-up contact (N=1,008).

Research Methods

The descriptive and multivariate analyses conducted as part of this study allow us to assess if and how friendship matters to persistence, transfer, and/or withdrawal among a sample of community college students, net of those demographic or background characteristics (e.g., sex, race, age) and college experiences (e.g., interaction with faculty members) that also might influence enrollment patterns. Descriptive analyses of the four friendship variables and three dependent variables were performed first (e.g., frequencies and correlations), followed by a series of logistic regression analyses as described below:

- Drawing from the full sample of students who completed the baseline questionnaire (N=5,001), the first logistic analysis regressed the dichotomous dependent variable “*Plans to re-enroll at current institution next semester*” on a block of 25 control variables, followed by a block of three friendship variables (because one friendship variable also measured students’ expectations at the time of the baseline survey, the temporal order of this independent variable and the dependent variable was too ambiguous to justify inclusion in the analysis). Missing values on all independent variables were mean-replaced (in each of these regression analyses, the number of cases with missing values for any given variable did not exceed approximately 20 percent of the sample—in fact, the good majority of cases with missing values did not exceed 5-10 percent of the sample).
- Again drawing from the full sample of students who completed the baseline questionnaire, the second logistic analysis regressed the dichotomous dependent variable “*Plans to enroll at another institution next semester*” on the same variables as above. Missing values on all independent variables were mean-replaced.

- Drawing from the smaller sample of students who completed both the baseline and follow-up questionnaires (N=1,008), the third logistic analysis regressed the dichotomous dependent variable “*Enrolled at any institution at time of follow-up*” on a block of 23 control variables (same as above, save for the exclusion of two race variables due to low counts), followed by a block of all four friendship variables. Missing values on all independent variables were mean-replaced (using means from the smaller sample).
- Again drawing from the smaller sample of follow-up respondents, the fourth logistic analysis added a block of interaction terms to the variables tested in the third. Thirty-two simple interaction terms were calculated by multiplying each friendship variable by eight demographic variables: *Sex*, *Age*, *Marital Status*, *Race/Ethnicity: White/Caucasian*, *Race/Ethnicity: Black/African American*, *Race/Ethnicity: Mexican/Mexican American*, *Race/Ethnicity: Latino/a*, and *Race/Ethnicity: Asian*. These interaction terms were force-entered into the logistic regression equation after the main effects of each variable were force-entered in the block prior. The remaining control variables were tested in the first block using the forward-conditional command (all variables in the preceding logistic analyses also were tested using the forward-conditional command). As with the other analyses, missing values were mean-replaced.
- For those interaction terms that were statistically significant in the fourth analysis ($p < .05$), the effect of one variable at different levels of the variable with which it interacted were examined, net of the control variables tested in this study. This type of analysis clarifies the nature of the observed interaction (i.e., how the effect of one variable depends on the effect of another).

Variables

As discussed, the three dependent variables in this study were: 1) *Plans to re-enroll at current institution next semester* (1 = “no,” 2 = “yes”) (measured on the TRUCCS baseline survey), 2) *Plans to enroll at another institution next semester* (1 = “no,” 2 = “yes”) (measured on the TRUCCS baseline survey), and 3) *Enrolled at any institution at time of follow-up* (1 = “no,” 2 = “yes”) (measured on the TRUCCS follow-up survey). The four measures of friendship include: 1) *Reason for attending current institution: My friends are attending here* (seven-point scale: 1 = “very unimportant” to 7 = “very important”), 2) *Number of close personal friends attending current college* (six-point scale: 1 = “none of my closest friends” to 6 = “all of my closest friends”), 3) *Closest friends’ opinion of current college* (five-point scale: 1 = “does not apply” to 5 = “an excellent college”), and 4) *Plans to develop close new relationships with students* (five-point scale: 1 = “definitely not” to 5 = “definitely”). All of these friendship items were included on the TRUCCS baseline questionnaire.

The control variables in this study were mostly demographic or behavioral in nature: sex, race/ethnicity, native language, and age; income level, receipt of scholarship or grant, parents’ education, and marital status; degree aspirations, length of commute to campus, employment status, and number of other colleges or universities attended in the past; and average grades in high school. A composite measure of perceived obstacles to education was tested, as were two factors that assessed respondents’ academic involvement with faculty members and other students at their current institution. These factors were derived from a principal components factor analysis of 20 independent variables; factors were extracted and rotated using varimax procedures. To maximize reliability, variables with loadings of .40 or less were dropped from each factor. All control variables in this study were measured on the TRUCCS baseline survey.

Appendix A provides a complete dependent and independent variable list; Appendix B lists the items that comprised each of the two factors, along with loadings and Cronbach's alpha values.

Findings

Among the students in the baseline sample, 88.6 percent planned to re-enroll at their current institution next semester, and 8.3 percent planned to enroll elsewhere. Of those students in the longitudinal sample, 82.3 marked "yes" in response to the question "Are you enrolled in any college this term?" Thus, most students in the TRUCCS study expected to persist at the time of initial contact, and most students were enrolled in college at the time of follow-up.

Table 1 summarizes the frequency distributions for the measures of friendship that were tested in this study. More than half of the students in the baseline and longitudinal samples did not feel that their friends' attendance at their current college was an important reason for their enrollment, and nearly half of these students indicated that "none" of their closest friends attended their institution. Over two-thirds of each sample reported that their closest friends would rate their college as "average," "good," or "excellent." Approximately one-fifth of these students felt that they would "definitely" or "probably" not develop close new relationships with other students on campus, and two-fifths responded "maybe" when asked about their expectations to develop close relationships.

Turning to the simple correlation coefficients between three of the four friendship measures and students' re-enrollment plans among the baseline sample (see Table 2), attending a particular institution because friends were attending is positively correlated with plans to re-enroll and negatively correlated with plans to re-enroll elsewhere ($r = .04, p < .01$ and $r = -.05, p < .01$ respectively); likewise, close friends' opinion of a student's college is positively correlated with intentions to re-enroll ($r = .06, p < .01$) and negatively correlated with intentions to enroll

elsewhere ($r = -.06, p < .01$). However, these correlations are not appreciably stronger than are the statistically nonsignificant correlations between *Number of close personal friends attending current college* and students' re-enrollment plans—much stronger are the intercorrelations between the friendship measures themselves. The same is true of the correlations between the friendship measures and college enrollment at time of follow-up: only *Plans to develop close new relationships with students* is a statistically significant and positive correlate of enrollment status among students in the longitudinal sample ($r = .10, p < .01$) (see Table 3).

In light of these descriptive results, the results of the logistic regression analyses are perhaps not too surprising. The first logistic analysis regressed the dependent variable “*Plans to re-enroll at current institution next semester*” on a block of 25 control variables, followed by a block of three friendship variables. Among the control variables that entered this regression equation, being female increased the odds of planning to re-enroll, as did being older and all four measures of employment status (see Appendix A for a complete variable list and Appendix C for the coefficients of all variables to enter each analysis). The odds of re-enrollment plans were lower among Black students, students who were native English speakers, and students who performed well academically in high school; other negative predictors included number of colleges or universities attended in the past. Among the three measures of friendship, only one was a statistically significant predictor of the dependent variable: net of students' educational background and demographic characteristics, closest friends' opinion of current college increased the odds of plans to re-enroll (see Table 4). In other words, intentions to re-enroll were more likely among survey respondents who reported that their closest friends thought highly of their college than among survey respondents who reported that their closest friends did not think highly of their college, or that their friends' opinions “did not apply.”

Similarly, closest friends' opinion of a student's college decreased the odds of plans to enroll at another institution (as was examined in the second logistic analysis), net of the control variables (see Table 4); stated in more mathematical terms, each unit increase in closest friends' opinion yielded a decrease in the predicted odds of plans to enroll elsewhere. The odds of planning to enroll at another institution also were lower among female students, older students, students who were employed full-time, and students who were unemployed but looking for work. The odds were higher among Black students, students who aspired to more advanced degrees, students who had attended a number of colleges or universities in the past, and students who reported that English was their native language.

The third logistic analysis regressed the dependent variable "*Enrolled at any institution at time of follow-up*" on a block of 23 control variables, followed by a block of four friendship variables. Among the control variables that were statistically significant predictors of persistence, survey respondents who frequently studied with other students were more likely to be enrolled in college one year later, as were students who received financial assistance in the form of a scholarship or grant, and students who were employed part-time. Older students and students who reported that English was their native language had lower odds of being enrolled in college at the time of follow-up. Once these control variables were held constant, none of the friendship variables were statistically significant predictors of enrollment in college one year after completing the baseline questionnaire ($p < .05$). Put differently, the four measures of friendship failed to lower or raise the logged odds of persistence over one year among the students in this follow-up sample.

In the fourth logistic analysis, 32 interaction terms were force-entered into the regression equation (after the main effects of those variables to comprise each term were force-entered into

the equation), and three were statistically significant ($p < .05$): *Marital Status * Closest friends' opinion of current college*, *Marital Status * Plans to develop close new relationships with students*, and *Race/Ethnicity: Asian * Closest friends' opinion of current college*. Subsequently, and for each of these terms, the predictive power of one variable was examined at different values of the variable with which it interacted, net of the control variables in the study. These analyses suggested that just one of the three interaction terms constituted a “true” interaction: expecting to develop close new relationships with other students increased the odds of persistence over one year among married respondents, holding all other variables constant (logistic coefficient = .42, odds ratio = 1.526, $p < .01$) but was nonsignificant among unmarried respondents (logistic coefficient = -.01, odds ratio = .986, $p > .05$). Among the remaining interaction terms, closest friends' opinion of college was a nonsignificant predictor of enrollment at the time of follow-up among Asian students and non-Asian students (logistic coefficient = -.43, $p > .05$ and .09, $p > .05$ respectively); likewise, closest friends' opinion of college was a nonsignificant predictor among married and unmarried students (logistic coefficient = -.03, $p > .05$ and .10, $p > .05$ respectively).

Discussion

To summarize the chief findings of these analyses:

- Most students who completed the TRUCCS baseline survey planned to re-enroll at their current community college next semester; most students who completed the TRUCCS follow-up survey one year later were still enrolled in college.
- At the time of the baseline questionnaire, the majority of survey respondents did not attend their current institution because their friends were attending, nor did many have close friends on campus. A good number of students reported that

their closest friends would rate their college as “average,” “good,” or “excellent.” Fewer students planned to develop close relationships with their peers on campus.

- Only close friends’ opinion of students’ current college increased the odds of plans to re-enroll at the time of the baseline survey; similarly, close friends’ opinion of college decreased the odds of plans to enroll elsewhere.
- No friendship measure increased or decreased the logged odds of college enrollment at the time of follow-up, and few significant conditional effects were noted (the exception being that plans to develop close relationships with peers increased the odds of enrollment among married survey respondents, but were unrelated to the odds of enrollment among unmarried survey respondents).

At first glance, the results of this study suggest that friendship was not a particularly salient factor in the educational paths of students who comprised the TRUCCS sample, thus qualifying long-standing models of student persistence (e.g., Tinto, 1975, 1987, 1993). More specifically, on- or off-campus friendships did not seem to pull these community college students in any one direction academically, which indicates that the community college student population might be unique in terms of demographics and the role played by close friends. Among undergraduates at four-year institutions, the quality of students’ peer relationships and the characteristics of their social networks on campus can be critical antecedents of persistence (Thomas, 2000). Conversely, the attitudes and demands of close friends off campus might disrupt the process by which these students connect to the campus community, leaving them at greater risk for dropout (Christie & Dinham, 1991). However, there emerged a different pattern among the community college students in this sample. What friends were doing, if and where friends attended school, what students expected socially from college: these factors were of

marginal and/or conditional importance to respondents' educational goals and decisions. Having a number of close friends on campus weighed little on students' intentions to re-enroll. Attending a particular institution because friends were attending was unrelated to persistence over one year.

Yet students' friendships were not entirely irrelevant to their academic plans and choices, just as many studies of friendship suggest: among the survey respondents in this sample, friends' opinions mattered, even if their proximity to students did not. Net of many demographic variables that influenced students' plans to re-enroll, closest friends' opinions made a difference. Granted, the causal order of friends' opinions and students' plans is not completely clear, but it seems quite possible that students, when deciding whether or not to transfer, take friends' viewpoints into account. Friends provide support, enhance well-being, "call up the best parts of ourselves" (Rubin, 1985, p. 41)—why not share opinions that mean something as well?

Plans to develop close relationships with other students also made a difference: the odds of being enrolled at the time of follow-up were higher among married respondents who expected to establish close relationships with their classmates. Among unmarried respondents, however, no such link was found. Perhaps unmarried respondents enjoyed a wide and supportive social network off campus, such that their social interactions on campus were of relatively little consequence to their educational paths. Married respondents, by contrast, may have had smaller social networks off campus, their time devoted more to family and jobs than to friends (in the TRUCCS sample, married respondents were more likely to be older, to be employed full-time, and to have children), which meant that connecting to other students on campus was fairly important, and would have a substantial effect on the quality of their educational experience. Put differently, these findings suggest that social integration, or involvement in the social life of the campus, does play a role in the academic choices of some community college students—namely,

those who are married. Future research ought to test this more systematically by comparing the effect of relational expectations and actual experiences across samples of married and unmarried students.

So the theoretical implications of these findings begin to take shape, as do the practical implications: Friends' opinions of a student's college (or at least the student's impression of her friends' opinions) can play into her academic choices. Among married students, plans to develop close friendships with classmates seem to increase the odds that they remain enrolled in college one year later. Community college students, in short, do not experience college-going and friendship separately—perhaps differently than do students at residential four-year campuses, but not separately. Academic goals are not set outside of a relational context for these students; they are not untouched by the attitudes of their friends, nor is social integration conceptually moot when thinking about their educational paths. In order to more precisely define the role of friendship in persistence and elaborate on theories of departure among students in community colleges, additional research is needed, but the findings from this research indicate that friendship can be a significant factor—not necessarily in terms of proximity to friends, but in terms of their attitudes, and students' expectations to make friends.

On a more immediate and practical level, these findings are instructive. First, if friends' ratings of an institution matter to students' enrollment plans, community colleges might think about marketing themselves not only to potential community college students, but also to a wider audience (i.e., one that includes friends and partners of potential students). This means that college advertisements, brochures, and literature be distributed in multiple ways to multiple sectors, not simply those that seem most community-college-friendly. If an institutional goal is to retain students and help them accomplish their educational goals, colleges might think about

image on a broader scale. Second, these findings suggest that faculty and staff should not underestimate the expectations or needs of different types of students when designing programs to facilitate social interactions on campus. Married students might be seeking a different kind of social experience than are their unmarried peers; they also might be more receptive to events or activities on campus that allow for social interaction. Most importantly, these events and activities might play an important role in the persistence of married students—something to keep in mind as counselors advise these students about their educational paths. Third, colleges may want to ask how friendship can advance their students' educational goals, given the large body of literature on the many benefits of friendship. Are community colleges maximizing the value of friendship in their students' lives?

References

Bers, T.H., & Smith, K.E. (1991). Persistence of community college students: The influence of student intent and academic and social integration. Research in Higher Education, 32, 539-556.

California Postsecondary Education Commission (CPEC). (2002). Student transfer in California postsecondary education. Retrieved from the Internet at <http://www.cpec.ca.gov>.

Chapman, D.W., & Pascarella, E.T. (1983). Predictors of academic and social integration of college students. Research in Higher Education, 19, 295-322.

Choy, S.P. (2002). Access and persistence: Findings from 10 years of longitudinal research on students. Washington, D.C.: American Council on Education.

Christie, N.G., & Dinham, S.M. (1991). Institutional and external influences on social integration in the freshman year. Journal of Higher Education, 62, 412-436.

Chronicle of Higher Education. (2002). The Chronicle Almanac 2002-3. Retrieved from the Internet at <http://www.chronicle.com>.

Doll, B. (1996). Children without friends: Implications for practice and policy. School Psychology Review, 25, 165-183.

Gerald, D.E., & Hussar, W.J. (2002). Projections of educational statistics to 2012. Washington, D.C.: National Center for Education Statistics. Retrieved from the Internet at: <http://nces.ed.gov/pubs2002/proj2012>.

Gilmartin, S.K. (2003). Intimacy, psychological well-being, and academic success among women in their first year of college. Unpublished doctoral dissertation, University of California Los Angeles.

Hagedorn, L.S., Maxwell, W., Pickett, M.C., Moon, H.S., Brocato, P., & Sax, L.J. (2002). Community college model of student life and retention. Research paper presented at the American Educational Research Association (AERA) annual conference: New Orleans, LA.

Hays, R.B., & Oxley, D. (1986). Social network development and functioning during a life transition. Journal of Personality and Social Psychology, 50, 305-313.

Hartup, W.W. (1993). Adolescents and their friends. In B. Laursen (Ed.), Close friendships in adolescence (pp.3-22). New Directions for Child Development, no. 60. San Francisco: Jossey-Bass.

Hartup, W.W., & Stevens, N. (1997). Friendship and adaptation in the life course. Psychological Bulletin, 121, 355-370.

Major, B., Zubek, J.M., Cooper, M.L., Cozzarelli, C., & Richards, C. (1997). Mixed messages: Implications of social conflict and social support within close relationships for adjustment to a stressful life event. Journal of Personality and Social Psychology, *72*, 1349-1363.

Nora, A., & Rendon, L.I. (1990). Determinants of predisposition to transfer among community college students: A structural model. Research in Higher Education, *31*, 235-255.

O'Connor, P. (1992). Friendships between women: A critical review. London: Harvester Wheatsheaf.

Paul, E.L., & Kelleher, M. (1995). Precollege concerns about losing and making friends in college: Implications for friendship satisfaction and self-esteem during the college transition. Journal of College Student Development, *36*, 513-521.

Pinquart, M., & Sorenson, S. (2000). Influences of socioeconomic status, social network, and competence on subjective well-being in later life: A meta-analysis. Psychology and Aging, *15*, 187-224.

Rubin, L.B. (1985). Just friends: The role of friendship in our lives. New York: Harper & Row.

Sax, L.J., Gilmartin, S.K., Lee, J.J., & Hagedorn, L.S. (2003). Using web surveys to reach community college students: An analysis of response rates and response bias. Research paper presented at the annual conference of the Association of Institutional Research, Tampa, FL.

Takahashi, K., & Majima, N. (1994). Transition from home to college dormitory: The role of pre-established affective relationships in adjustment to a new life. Journal of Research on Adolescence, 4, 367-384.

Thomas, S.L. (2000). Ties that bind: A social network approach to understanding student integration and persistence. Journal of Higher Education, 71, 591-615.

Tinto, V. (1975). Dropout from higher education: A theoretical synthesis of recent research. Review of Educational Research, 45, 89-125.

Tinto, V. (1987). Leaving college: Rethinking the causes and cures of student attrition (1st ed.). Chicago: The University of Chicago Press.

Tinto, V. (1993). Leaving college: Rethinking the causes and cures of student attrition (2nd ed.). Chicago: The University of Chicago Press.

Townsend, B.K. (2001). Redefining the community college transfer mission. Community College Review, 29 (2), 29-42.

Williamson, D.R., & Creamer, D.G. (1988). Student attrition in 2- and 4-year colleges: Application of a theoretical model. Journal of College Student Development, 29, 210-217.

Wirt, J., Choy, S., Gerald, D., Provasnik, S., Rooney, P., Watanabe, S., & Tobin, R. (2002).

The condition of education 2002. Washington, D.C.: National Center for Education Statistics.

¹ According to Wirt et al. (2002), a nontraditional student is one who 1) does not enroll in a postsecondary institution in the same academic year as he/she graduated from high school, 2) is a part-time student for at least part of the academic year, 3) is employed on a full-time basis while a student, 4) is financially independent, 5) has dependents other than a spouse, 6) is a single parent, and/or 7) does not have a high school diploma.