Gender Differences in the Academic Progress of Adult Undergraduates: Patterns and Policy Implications

Douglas L. Robertson  School of Education, Portland State University

This article presents empirical evidence that female, adult undergraduates are more likely than male, adult undergraduates to manifest interruption and slowing of their academic progress. Possible policy biases are discussed.

Moving from higher education's periphery to its center by force of sheer numbers, adult students currently command considerable attention among the field's researchers and practitioners. Regarding adult learners and higher education at least four things are now known.

First, adult learners have rapidly become a major presence on college campuses. From 1970 to 1985, students 25 years or older increased from 28% to 42% of the total enrollment in institutions of higher education (Center for Education Statistics, 1987).

Second, adult learners will remain a major presence for the foreseeable future. For a variety of demographic, social, and technological reasons (Cross, 1981), adult learners are the fastest growing segment in higher education (Center for Education Statistics, 1987). Although the demographic forces behind this phenomenon may diminish as the Baby Boomers pass the peak enrollment ages (Brazziel, 1989), social and technological developments within the American "learning society" will continue to encourage high levels of adult participation in higher education (Cross, 1981).

Third, adult learners are a diverse group. Scholars and practitioners alike frequently remark in general regarding the heterogeneity within the category of the adult learner (e.g., Apps, 1988; Brookfield, 1986, 1987; Chickering & Associates, 1981; Cross, 1981; Daloz, 1986; Evans, 1985a; Greenberg, O'Donnell, & Bergquist, 1980; Mezirow & Associates, 1990; Robertson, 1988; Schlossberg, Lynch, & Chickering, 1989; Shriberg, 1980; Wlodkowski, 1985).

Fourth, because of this significant and apparently enduring presence of adult students, and because of their diversity, higher education researchers need to discriminate and describe meaningful subcategories of adult learners so that higher education practitioners can properly serve this new student population. As the adult phenomenon emerged, the initial problem was to differentiate adult students from traditional-age students and integrate the new category into the general concept of the college student. The next challenge is to differentiate and integrate significant subcategories among adult students. In this way—by continuing to elaborate the typology of American college students in response to their increasing diversity—the ongoing development of effective practice and policy is assisted.

A good place to begin determining adult-learner subcategories is gender. A growing body of research has delineated fundamental differences in the life course and psychology of men and women (e.g., Baruch, Barnett, & Rivers, 1983; Belenky, Clinchy, Goldberger, & Tarule, 1986; Chodorow, 1978; Cox, 1981; Fiske & Chiriboga, 1990; Gilligan, 1982; Gilligan, Lyons, & Hanmer, 1990; Gilligan, Ward, Taylor, & Bardige, 1988; Josselson, 1987; Lowenthal, Thurnher, Chiriboga, & Associates, 1975; McGuiigean, 1980; Miller, 1986; Neugarten, 1968; Rubin, 1979). The research has also pointed out that the male perspective frequently

Douglas L. Robertson is an assistant professor of postsecondary education and can be contacted at the School of Education, Portland State University, P. O. Box 751, Portland, OR 97207-0751. A Northwest Regional Research Grant from the Council for Adult and Experiential Learning provided partial financial support for the study reported in this article.
serves as the generalized human perspective thereby eclipsing female experience. De-emphasizing or ignoring the experience of a major category of participants will cause problems in any group of learners. In particular, making this error with adult learners on college campuses will cause difficulties because women have quickly become the majority among American college students 25 years or older, increasing from 37% in 1970 to 57% in 1985 (Center for Education Statistics, 1987).

This article explores gender differences among adult learners in a category of behavior that is central to the mission of any college or university—the student’s academic progress. It reports the results from a study that investigated whether male and female undergraduates at an urban, small college manifest different patterns regarding interruption and speed in their academic progress. Included in the discussion are important policy implications.

METHODS

The study took place at Omega College, a small, nontraditional, liberal arts college (Carnegie classification: Liberal Arts II; Carnegie Foundation for the Advancement of Teaching, 1987). Omega receives its fictitious name because of the ecological niche that it fills in its metropolitan region of approximately 1.4 million inhabitants and 21 regionally accredited colleges and universities. In 1974, the college transformed itself from an insolvent, 4-year, Catholic college for young women to what had become by the mid-1980s a successful, upper-division college for working adults. On the average, graduates of Omega enter the college in their late 30s, having accumulated several years of college credit from two or three other schools. Omega College is where these adult learners come to finish their baccalaureate degree 20 years down the road from some distant Alpha College.

Study Population

The study population comprised Omega College graduates during the years 1987 and 1988 who were greater than 25 years old at admission to Omega (N=235). The lower age boundary of 25 years old is the demarcation that is usually employed in national statistical reports to define adult (e.g., Center for Education Statistics, 1987). The study focused on graduates because one of its general interests was to identify different paths to success that are taken by adult learners; operationally, success is defined as graduating.

Also, graduates received focus in order to avoid certain methodological problems. As this study shows, adult learners may stop frequently and for long periods and still graduate. Having frequent or long interruptions may be a style of progression, rather than stoppage altogether. Taking a group of admitted students and discussing the characteristics of those who progress at some standardized rate, versus those who do not, introduces a progression style bias and is problematical with regard to adult learners, who often manifest a diversity of such styles. For example, a year’s break in enrollment cannot be used to indicate whether a student has dropped out in his or her own mind or is simply pausing because life’s circumstances demand it and is still mentally and emotionally engaged with his or her progress and institution. Focusing on graduates avoids the methodological problem of defining nonsuccessers as well as helping to point out the diversity of paths to success that adult learners take as a group.

During the study period 247 students graduated, but 12 were eliminated from the study because they were younger than 25 years old at admission to Omega. Women constituted 75% of the study population (n=177); men, 25% (n=58). The average age at admission was 38 (M=37.52; SD=6.93); the average graduation age was 41 (M=40.60; SD=7.29). The population was overwhelmingly White and predominantly middle class. On the average, the students had attended two or three schools prior to admission to Omega (M=2.52; SD=1.18), and at admission to Omega they transferred over 100 quarter credits of the 180 required to graduate (M=102.70; SD=49.60). Most of these graduates were directing their careers toward some form of management or direct delivery of human services.

Data

The data were limited to information that could be obtained from the Omega College transcript. Omega College employs the quarter system, and all credits are converted to quarter credits. The study focused on the student’s academic
progress from Omega-admission to Omega-graduation. Any academic activity that appeared on the student’s transcript during this period, whether or not it occurred at Omega, was included in the analysis. Twelve variables received primary attention: 6 variables involving interruption in academic activity and 6 variables dealing with speed of academic progress.

Regarding the six interruption variables, two expressed simply the number of breaks in academic activity from Omega-admission to Omega-graduation and the total number of quarters that transpired during those breaks (break-quarters). Adult learners often go to school during the summers; so summer quarter was treated like any other quarter by these variables.

The break measures were standardized in order to account for differences in each student’s program length. Students who were far from graduation at Omega-admission would be expected to have more breaks than students who were near graduation simply because more opportunity existed for interruption. Program length can be measured in at least two ways: time (quarters) and accomplishment (credits). In order to protect against unwitting bias, both measures of length were used to standardize the interruption measures. Breaks and break-quarters were each divided by the student’s total quarters (program length expressed in time units) and the student’s total credits (program length expressed in accomplishment units) from Omega-admission to Omega-graduation. This procedure produced four ratios that provided standardized interruption rates for each student.

The six speed variables were also expressed as standardized rates: credits per quarter. At Omega College, full-time enrollment is defined as 12 credits per quarter; half-time, as 6 credits per quarter. The overall rate of progress variable expressed the average number of credits earned per quarter from Omega-admission to Omega-graduation. The active rate of progress variable eliminated inactive (break) quarters and expressed the average number of credits earned for active quarters from Omega-admission to Omega-graduation.

The remaining speed variables measured rates of progress during different parts of the student’s Omega program: beginning, middle, and end. The beginning rate of progress represented the average number of credits earned per quarter during consecutive quarters following Omega-admission. The ending rate of progress expressed the average number of credits earned per quarter during consecutive quarters prior to Omega-graduation. The middle rate of progress represented the average number of credits earned per quarter during the period between the beginning and the end. Because the middle period may have inactive quarters in it, a middle rate of progress was also calculated for active quarters only. Students who took no breaks or who took only one break had no middle.

**Analysis**

The general hypothesis that men and women manifest different patterns of interruption and speed in their academic progress was investigated by conducting t tests on male and female averages for the 12 previously explained variables. All results are reported as two-tailed. In addition, chi-square was employed to examine differences in break patterns (male and female differences in the proportion who take no breaks, one break, and two-or-more breaks, from Omega-admission to Omega-graduation).

**RESULTS**

Regarding speed from Omega-admission to Omega-graduation, men progressed significantly more rapidly than women, both in terms of the overall rate (men $M=10.73$; women $M=8.91$; $t(233)=2.749; p<.01$) and the active rate (men $M=11.50$; women $M=10.18$; $t(233)=2.184; p<.05$).

Concerning interruptions, women experienced significantly more breaks (number of interruptions) than men did in their academic programs according to all three break measures: (a) for total breaks, men $M=.638$, women $M=1.243$, $t(233)=2.735$, $p<.01$; (b) for break-quarters, men $M=.047$, women $M=.073$, $t(233)=2.263$, $p<.05$; and (c) for break-quarters, men $M=.007$, women $M=.015$, $t(233)=2.532$, $p<.05$.

Concerning break-quarters (number of quarters of interruptions), one man who had 33 inactive quarters single-handedly raised the male average by over 50% (from 1.00 to 1.552). When the highest case for men and the highest case for women were eliminated, women manifested significantly more inactive quarters than men did for all three break-quarter measures: (a) for
Strikingly, half of the population (50.2%) took no breaks whatsoever from Omega-admission to Omega-graduation. These students were not just finishing their final residency requirements. They were enrolled full-time for almost 2 years (number of quarters from Omega-admission to Omega-graduation, \(M=7.15\); number of credits from Omega-admission to Omega-graduation, \(M=83.27\); and overall rate of progress, credits per quarter from Omega-admission to Omega-graduation, \(M=12.10\)). The remaining half of the students were almost evenly divided between those who took one break (21.3%) and those who took two-or-more breaks (28.5%).

Male and female students began at Omega with virtually the same number of credits left to complete (male transfer credits at Omega-admission, \(M=107.71\); female transfer credits at Omega-admission, \(M=101.06\)), and therefore a gender difference in break pattern due to program length was not expected. Yet, among these three break patterns—no breaks, one break, and two-or-more breaks—from Omega-admission to Omega-graduation—significant gender differences do exist (\(\chi^2 [2, N=235]=7.38, p<.05\)). The high chi-square value was produced largely by the overrepresentation of men in the no-breaks category and their underrepresentation in the two-or-more breaks category. Among men, the break pattern was steeply skewed toward no breaks (no breaks = 63.8% of men; one break = 20.7%; and two-or-more breaks = 15.5%). Among women, the break pattern is bipolar between no breaks and two-or-more breaks (no breaks = 45.8% of women; one break = 21.5%; and two-or-more breaks = 32.8%). Worth noting is that at Omega College roughly one-third of all the graduates (34.5%) were women who took no breaks and approximately one-quarter of all the graduates (24.7%) were women who took two-or-more breaks. In other words, the two largest categories of Omega graduates consisted of women with polar-opposite interruption patterns.

Within the various break-pattern groups, no significant variation between men and women was found in terms of rate of progress. Women who took no breaks progressed at essentially the same high rate as did men who took no breaks (men \(M=12.35\); women \(M=11.98\)). Both men and women in the no-breaks group averaged a full-time rate of progress, or about 12 credits per quarter. These 37 men who took no breaks represented 63.8% of the men, whereas the 81 women who took no breaks constituted 45.8% of the women.

Men who took one break did not go significantly faster than women who took one break on any measure except the overall rate of progress (men \(M=9.40\), women \(M=7.68\), \(t[48]=2.226, p<.05\)). Of the three break-pattern groups—no breaks, one break, and two-or-more breaks—this one-break group was the only one in which the overall rate of progress was significantly different between men and women. When standardized for active quarters, the rate of progress difference was not significant. Interestingly, for both men and women in this group, the ending rate was higher than the beginning rate. These 12 men who took one break made up 20.7% of the men, and the 38 women who took one break represented 21.5% of the women.

For men and women who took two-or-more breaks, the overall and active rates of progress were virtually the same (overall men \(M=5.82\), overall women \(M=5.42\); overall-active men \(M=8.42\), overall-active women \(M=8.15\)). In fact, none of the six rate differences (beginning, middle, middle-active, ending, overall, and overall-active) was statistically significant, except the beginning rate of progress (men \(M=9.92\), women \(M=5.97\), \(t[65]=2.037, p<.05\)). This significant difference in the beginning rate of progress points to an intriguing distinction between men's and women's patterns of rate variation from beginning to middle to end in the two-or-more breaks group. Men began at a high rate (beginning \(M=9.92\), dropped dramatically in the middle (middle-active \(M=6.32\), and edged back up at the end (ending \(M=7.09\). In contrast, women began slowly (beginning \(M=5.97\) and increased their rate steadily (middle-active \(M=7.15\), finishing at a higher rate than men (ending \(M=8.86\)). The 9 men in this two-or-more breaks group represented only 15.5% of the men, whereas these 58 women constituted 32.8% of the women.

In general, regarding rates of progress within the various break patterns, gender differences between men and women were negligible. Between the different break patterns, however, rates of progress varied strikingly. Therefore,
the significant result is the proportion of each gender that manifested each break pattern. Again, nearly two-thirds of the men (63.8%) took no breaks, whereas women showed a bipolar distribution between taking no breaks (45.8%) and taking two-or-more breaks (32.8%).

**DISCUSSION**

These results support the general hypothesis that men and women have different patterns regarding academic progress. According to these data, women manifest more interruptions and slowing in their academic progress than do men. Existing theory and research suggest that this pattern results from the greater relationship responsiveness of women compared with men and the more diverse role demands experienced by women relative to men (Bardwick, 1980; Baruch et al., 1983; Belenky et al., 1986; Chodorow, 1978; Erikson, 1963; Evans, 1985b; Fiske & Chiriboga, 1990; Gilligan, 1982; Holliday, 1985; Levinson, Darrow, Klein, Levinson, & McKee, 1978; McGuigan, 1980; Mohney & Anderson, 1988; Vaillant, 1977). This study, however, does not systematically examine this explanation, and further research regarding these causal linkages is indicated here.

This general finding—that men progress more continuously and rapidly than women—needs to be qualified by calling attention to the fact that in this study when women showed the same interruption pattern as men, they progressed at roughly the same rate. For both men and women, interruption pattern and rate of progress seem to be linked. As interruptions increase, the active rate of progress appears to decrease (n.b., the active rate is the average number of credits per quarter after eliminating inactive quarters). For example, in this study, when no interruptions occurred, the mean active rate of progress was 12.35 for men and 11.98 for women; with one interruption, men = 11.19, women = 9.44; and with two-or-more interruptions, men = 8.42, women = 8.15. None of these gender differences is statistically significant.

Women go just as fast as men in their particular break pattern. Men are much more likely than women, however, to manifest no breaks, and women are much more likely than men to manifest two-or-more breaks.

Care must be taken to avoid seeing interruptions and relatively slow rates of progress as problems necessarily. The adult learner’s challenge is to integrate school with his or her existing world. Clearly, many ways to do this exist—some of which may involve frequent stops and light loads. Hypothesis-generating, phenomenological case studies regarding adult students’ various integration challenges and strategies are needed.

To summarize these various patterns of progress, this study suggests that if a higher education practitioner meets an adult learner on campus, he or she can have some idea of the pattern of academic progress to expect. If the adult learner is male, chances are high that he will go through his program at a high rate of speed with no interruptions. If the adult learner is female, chances are almost even that she will either go very quickly with no interruptions or go very slowly with many interruptions.

These findings have some important policy implications. Policies that support a model of full-time, fall-to-spring enrollment, with summers off, tend to discriminate against some large categories of adult learners—either those who progress rapidly or those who progress slowly.

Regarding those who go slowly, policies that disfavor interruptions and relatively low rates of progress discriminate against what may be a large category of female students (in this study, about one-third of the population) and are sexist by their effect, although not necessarily by their intention. Financial aid policy provides a good example. Continuing to receive any kind of financial aid is usually dependent on satisfactory academic progress. Definitions of satisfactory progress do not allow for a pattern of frequent interruptions and a slow rate of progress. From this perspective, an interruption may be construed as dropping out rather than as part of an overall style of progression. Other examples of policies that discriminate against this slow style of academic progress often include the following: admission status, residency, course sequences, prerequisites, time limits, and important service eligibilities such as for housing, health care, child care, library usage, computer-center access, tutoring, and so forth.

Regarding those adult learners who progress rapidly, policies that hinder year-round, full-time enrollment discriminate against what may be a large category of adult learners that includes both men and women (in this study, about half of the population). Again, financial aid policy
provides a good example. Grants, scholarships, and fellowships are usually not awarded in a way that supports year-round, full-time enrollment. Students who go to school fall through spring are usually left without this kind of aid for the summer. Other examples of policies that discriminate against this rapid style of progress include the following: lack of a year-round schedule for completing required courses, lack of year-round staffing for appropriate advising during the summer, and treating the summer session as a separate administrative unit. In general, the mind set that construes a college primarily as a fall-to-spring enterprise with a summer session tacked on produces policies that discriminate against the year-round, full-time learner.

The results of this study encourage institutions and agencies to examine their programs in order to identify policies that impede learners who deviate from the traditional full-time, fall-to-spring, enrollment pattern. These policies tend to discriminate against adult students—a new student population that will remain numerically significant in higher education well into the 21st century.

REFERENCES


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