ADULT LEARNERS AND TRADITIONAL AGE FRESHMEN: Comparing the "New" Pool with the "Old" Pool of Students

George D. Kuh and Frank P. Ardaiolo, *Indiana University, Bloomington*

First year adult learners (23 years of age and older) from a residential campus and an urban commuter campus and traditional age (17-20 years of age) freshmen were compared on a variety of demographic variables. Many of the commonly held assumptions about older students vis-à-vis younger students were substantiated. In general, adult learners at the residential campus comprised a distinct group unlike commuter campus adult learners and traditional age freshmen. Implications and suggestions for additional research are discussed.

Key words: adult learners; student characteristics

Beginning in 1980, postsecondary education will have to contend with a sharp decrease in the number of 18-year-olds (Henderson, 1977). The implications are twofold. Not only will there be a decrease in the "traditional" student base, but a shift in the nature of the base. If steady enrollments are necessary for higher education to survive, there are only two possible pools from which new learners might come. One is to attract a greater proportion of the 18–22-year-old pool than currently attends college; the second is to attract more adult learners (23 years of age and older) (Hodgkinson, 1976). Therefore, it is not surprising that programs designed to appeal to adults, such as lifelong learning, continuing education and non-credit courses have become increasingly important for maintaining enrollments in many postsecondary institutions (Harrington, 1977).

There are a number of commonly held assumptions about adult learners when compared with students of traditional college-going age

Dr. Ardaiolo is currently at the University of South Carolina, Columbia, SC.

Address reprint requests to Dr. George D. Kuh, Department of College Student Personnel Administration, Education 226, Indiana University, Bloomington, IN 47405.

Research in Higher Education Vol. 10, No. 3, 1979

0361-0365/79/030207-13$01.25

which have received varying degrees of support in the literature. For example, the age difference itself suggests that adult learners must often deal with the expectations of a spouse and children and concomitant financial constraints in addition to classroom demands (Hepker & Cloyd, 1974). When compared with adolescents, adult learners are thought to be more highly motivated (Roelfs, 1975) although their high-school grades probably do not reflect a comparable degree of achievement (Ryan, 1969). They spend relatively little time on campus and therefore are not likely to attend or participate in extracurricular activities such as plays or lectures.

Although a good deal has been published about the demography of older students, many studies have been national in scope (Broschart, 1976; Carp, Peterson, & Roelfs, 1974; Guilford, 1974; Kimmel, 1976; National Advisory Council on Adult Education, 1974; National Center for Education Statistics, 1976) and have often combined full-time with part-time and degree-seeking with noncredit students, thereby obfuscating the actual number of potential learners in various pools. As a result, their findings have been of little assistance to faculty and administrators concerned with meeting the needs of adult learners on the local level (Arbeiter, 1976-77). In the majority of the instances in which the needs and concerns of older students have been addressed, female samples have been used exclusively (e.g., Brandenburg, 1974; Doty, 1966; Durcholz & O'Connor, 1973; Roach, 1976). Whether combined sex samples of adult learners enrolled full time differ by the type of institutional setting (residential compared with an urban, commuter campus) has not been empirically determined.

The purpose of this study was to compare demographic characteristics of first-year adult learners from two types of campuses (residential and commuter) with characteristics of traditional-age freshmen from a residential campus to determine whether assumptions about adult learners *vis-à-vis* younger students were accurate. More specifically, how did adult learners from the respective campuses and traditional-age students compare with regard to: the reasons given for attending college, the type and degree of participation in extracurricular activities, and educational aspirations (major field, degree)?

METHOD

Two companion instruments were designed for use in the study, the Adult Learner Questionnaire (ALQ) and the Traditional-age Freshmen Survey (TAFS). Both instruments requested a variety of demographic information (e.g., sex; age; ethnicity; religious preference; parents' occupations; high-school grades; degree objective; academic major;

academic degree aspirations; participation in social, academic, cultural and athletic extracurricular campus activities; and primary reason for attending the university).

The adult learner sample included all students 23 years of age or older classified as freshmen and enrolled for a minimum of seven credit hours at either one of two campuses (a predominantly residential campus located in a community of about 50,000 and a predominantly commuter campus located in an urban setting of over 1,000,000 people) of a major Midwestern university. These criteria were met by 283 students (25% residential campus; 75% commuter campus) to whom the ALQ was subsequently mailed. Ten students were either improperly classified or had withdrawn from the university, resulting in an adult learner target sample of 273 (24% residential campus—ALR, 51% male; 76% commuter campus—ALC, 39% male). Usable ALQs were received from 143 adult learners for a response rate of 52% (55% ALR, 54% male; 51% ALC, 30% male).

The traditional-aged sample (TAF) was randomly chosen by selecting every 38th freshman (n = 226) 20 years of age or younger enrolled for a minimum of seven credit hours at the residential campus. Academic withdrawals reduced the target TAF sample to 217 (39% male). Usable instruments were returned by 43% of the total target group (37% male).

Chi square was used to compare groups on nonordinal variables such as sex and major field. Analysis of variance was employed to discern relationships between ordinal variables such as age and number of hours worked by respective respondent groups. If a significant F-ratio was found, pairwise multiple comparisons were made using the Least Significant Differences (LSD) range function.

RESULTS

The age of respondents ranged from: adult learners residential campus (ALR) 23-32, adult learners commuter campus (ALC) 23-52, traditional age freshmen (TAF) 17-20. ALC males were older than both ALR and TAF males (Table 1). A disproportionate number of male adult learners were attending the residential campus (54%, 30% and 37% ALR, ALC and TAF respectively; $x^2 = 6.7$, 2 df, $p < .05$). More fathers of traditional age freshmen tended to hold professional/white collar positions (51%) when compared with fathers of ALR (35%) and ALC (13%) respondents ($x^2 = 31.9$, 4 df, $p < .01$). A similar relationship was found for respondents' mothers as more mothers of older students (65% and 69% ALR and ALC respectively) were either housewives or unskilled workers than were TAF mothers (44%) ($x^2 = 35.3$, 4 df, $p < .01$). A disproportionate number of residential adult learners

TABLE 1. Comparison of Adult Learners and Traditional-Age Freshman by Age, Hours Worked per Week and HSGPA

		Adult Learner									
		Residential Campus			Commuter Campus			Traditional-age Freshmen			
	Sex	*n*	$\bar{x}$	SD	*n*	$\bar{x}$	SD	*n*	$\bar{x}$	SD	*F* ratios
Age	M	20	25.0†	2.6	32	28.9§	7.7	35	18.1‡	.8	41.6*
	F	17	29.2†	5.6	74	30.6†	7.7	59	18.0‡	.6	82.9*
HSGPA[a]	M	20	5.4†	2.4	32	5.8†	1.7	35	3.5‡	1.7	14.8*
	F	17	4.4†	2.1	74	4.4†	2.2	59	3.2‡	1.7	6.8**
No. Hours worked	M	3	22.0	12.1	19	31.2†	13.3	5	8.8‡	5.3	6.9*
per week[b]	F	7	22.1	12.7	27	26.3†	10.4	6	13.3‡	4.5	4.0**

Note: [a]High school grade-point averages based on a 12-point scale where 1 = A, 2 = A−, 3 = B+, etc.
[b]Includes only those who were working while enrolled for classes.
**$p < .05$
*$p < .01$
†Different from § group.
‡Groups(s) different from † and § group.

TABLE 2. Comparison of Adult Learners and Traditional Age Freshmen by Present and Highest Degree Aspirations

	Adult Learner			
	Residential Campus (%)	Commuter Campus (%)	Traditional-age Freshmen (%)	x^2
Present Degree				
A.A.	6	25	2	26.7*
B.S., B.A.	76	62	90	
Other[a]	18	13	8	
n[b] =	33	101	88	
Highest Degree				
A.A., B.A., B.S.	52	55	35	10.9**
M.A., M.A.	32	30	34	
Ph.D., Ed.D.	16	15	31	
Professional degree[c]				
n = [b]	31	100	89	

Note: [a]Includes some certification programs requiring less than an A.A. degree
[b]Some respondents did not complete this item
[c]Includes medicine, law, dentistry
**$p < .05$
*$p < .01$

reported having no religious preference (43%) when compared with commuter campus adult learners (15%) or traditional-age freshmen (12%) ($x^2 = 19.5$, 6 *df*, $p < .01$).

Fewer ALR respondents were classified as residents for feepaying purposes (78%) than were ALC (93%) or TAF (82%) respondents ($x^2 = 8.1$, 2 *df*, $p < .05$). TAF reported higher high school grade-point averages than either group of adult learners (Table 1), and had higher aspirations for both present and future academic degree plans (Table 2). More than twice as many ALC respondents reported majors in the physical sciences (including data processing) as did TAF, and in the biological sciences when compared with their ALR counterparts. Also, a disproportionate number of adult learners at the residential campus (27%) were undecided as to major field (Table 3).

Older students at the commuter campus were more likely to be employed while going to school (43%) than their peers at the residential campus (27%) or traditional-age freshmen (12%) ($x^2 = 24.7$, 2 *df*, $p < .01$). Of those who were working, ALC respondents worked more hours per week than did TAF (and appreciably more than ALR re-

TABLE 3. Comparison of Adult Learners and Traditional-age Freshmen by Intended Major Field

Major	Adult Learner: Residential Campus (%)	Adult Learner: Commuter Campus (%)	Traditional-age Freshmen (%)	x^2
Physical Sciences[a]	9	15	6	25.0*
Biological Sciences[b]	15	30	20	
Business	18	20	29	
Education	9	9	14	
Social Sciences[c]	9	7	13	
Humanities	12	13	12	
Undecided	27	7	6	
n	33	105	94	

Note: [a]Includes physics, chemistry, computer science, data processing, and engineering
[b]Includes all health professions (pre-medicine, practical nursing, etc.)
[c]Includes psychology
*$p < .01$

spondents although the difference was not statistically significant—see Table 1), and were more likely to be working off campus (87% ALC, 64% ALR, 18% TAF; $x^2 = 20.8$, 2 *df*, $p < .01$). Younger students were far more likely to participate in any type of extracurricular activity during the first weeks of the semester; ALC were least likely to be involved in out-of-class university sponsored programs (Table 5).

The groups differed as to the primary reason they were attending the university. Three-quarters of the adult learners at the commuter campus hoped to become prepared for a better job compared with 40% of the older residential and 51% of the traditional age groups. Over a third (35%) of the ALR were in school to pursue a particular field of study while only 18% of the ALC and 27% of the TAF reported a similar reason for enrolling ($x^2 = 25.9$, 6 *df*, $p < .01$).

DISCUSSION

In general, the assumptions about adult learners vis-à-vis traditional-age college freshmen reported earlier were corroborated by the findings. For example, older students did not achieve as well in high school as their younger counterparts. This fact coupled with adult learners'

TABLE 4. Summary of Findings: Comparison of Residential Campus Adult Learners, Commuter Campus Adult Learners and Traditional-age Freshmen

Variable	Adult Learner		Traditional-age Freshmen
	Residential Campus	Commuter Campus	
Age ($\bar{x}$)	27	30	18
Sex	54% male; 46% female	30% male; 70% female	37% male; 63% female
Father's occupation	Some blue collar, unskilled; some skilled, professional	Blue collar, unskilled	Professional, white collar
Mother's occupation	Housewife, unskilled	Housewife, unskilled	Professional, teacher, social worker
Religious preference	No preference	Protestant, Catholic	Protestant, Catholic, Jew
HSGPA	B− males, B females	C+ males; B females	B+ males and females
Major field	Undecided, Business	Data processing, Nursing, Business	Business, Biology, Social Sciences
Aspirations: present degree	B.A./B.S., some A.A. or less	A.A. degree or less, some B.A./B.S.	B.A./B.S.

TABLE 4 *(Continued)*

Variable	Adult Learner		Traditional-age Freshmen
	Residential Campus	Commuter Campus	
Highest degree	B.A., M.A.	B.A., M.A.	B.A., M.A., Professional degree
Employment[a]: No. of hours per week	22	28	11
Location	Off-campus	Off-campus	On-campus
Extracurricular activities	Some participate	Most do not participate	Most participate
Reason for attending the university	Better job, pursue particular field of study	Better job	Particular field of study, learn more about self

Note: [a]Includes only those respondents who were working while going to school

TABLE 5. Comparison of Adult Learners and Traditional-age Freshmen by Participation in Extracurricular Activities

Activity	Frequency	Adult Learner Residential Campus (%)	Adult Learner Commuter Campus (%)	Traditional-age Freshmen (%)	x^2
Social[a]	Never	60	92	5	173.8*
	Once	19	6	7	
	Two or more	21	2	88	
Academic[b]	Never	65	76	38	38.8*
	Once	13	15	19	
	Two or more	22	9	43	
Cultural[c]	Never	51	90	48	48.6*
	Once	19	7	17	
	Two or more	30	3	35	
Athletic[d]	Never	70	92	25	116.0*
	Once	19	5	9	
	Two or more	11	3	66	
n		37	105	94	

Note: [a]Includes parties, dances, etc.
[b]Includes special lectures, study groups, organizational meetings such as English Club
[c]Includes plays, theatre, recitals, etc.
[d]Includes attendance at intercollegiate events (football, etc.) and participation in intramurals
*$p < .01$

relatively low socioeconomic family background may account for a good portion of the variance in explaining why this group of respondents did not pursue postsecondary education at an earlier age. Similarly, the observed differences in present and highest degree aspirations, hours worked per week, and participation levels in extracurricular activities between older and younger students were not unexpected. More noteworthy were the data that suggested the three groups differed *systemically* across a number of dependent variables.

For the most part, *adult learners enrolled at the residential campus were neither directly comparable to traditional-age freshmen nor to their counterparts at the commuter campus.* For instance, ALR were more like TAF in their reasons for attending college and more like the commuter campus group with regard to intended major. Also, older students on the residential campus tended to participate in extracurricular activities more than commuter campus adult learners but not as often as younger students. Closer examination of the groups' char-

acteristics suggest some reasons for the differences in levels of participation.

Adult learner respondents from the residential campus were somewhat closer in age to traditional-age undergraduates and they tended to live close to or in residence halls where a variety of extracurricular activities are often offered. Also, a relatively large number of graduate students of comparable age attended the residential campus and their activities are perhaps more appealing to residential adult learners. On the other hand, the converse is true for adult learners at the commuter campus. ALC tended to work more than either ALR or TAF; they are somewhat older than many other undergraduates; and they live some distance away from a campus which has relatively few graduate programs and thus a smaller number of graduate student activities.

Apparently, employment commitments coupled with family and community responsibilities leave relatively little time for most older students to participate in extracurricular activities. It is possible that some of those who do have time find their wants best satisfied by nonuniversity sponsored functions. However, participation in extracurricular activities has been found to be related to personality development (Astin, 1977; Chickering, 1969) and retention (Astin, 1976) of traditional-age students. If this phenomenon is also true to some extent for adult learners, then special efforts should be directed at involving other students in these activities. On the other hand, if participation in out-of-class activities serves only to keep students busy, adult learners—particularly at the commuter campus—apparently have enough to do. Clearly, research is needed to determine the relative impact of various types of college experiences on the development and retention of residential and commuter campus adult learners. Also, given the potentially debilitating correlation between off-campus jobs and attrition for traditional-age students (Astin, 1976), institutions should monitor the relationship between employment and adult learner persistence.

It is not known at present whether the highly motivated, low-ability adult learners will evidence satisfactory academic progress at rates comparable to traditional-age freshmen. The relatively low high-school grade-point averages coupled with long absences from academic endeavors (some adult learners had been out of high school for more than 30 years) indicates a probable need for activities (counseling, advising, study skills, etc.) to increase the likelihood that older students will be successful academically. How these services can be provided to persons who spend more time off than on the campus presents a major logistical problem—particularly for commuter campus administrators—and is ripe for evaluative research.

Insofar as residential adult learners are concerned, this study raises as many questions as it answers. For example, why are so many ALR nonresidents for fee-paying purposes? It is possible that some have come to the state with family members who have been recently transferred to a new place of employment. This explanation might be more plausible, however, if the commuter campus adult learners comprised the largest group of nonresidents given that this campus is located in a somewhat more transient major metropolitan area dominated by business and industry.

Other questions are even more perplexing. Why are so many ALR undecided as to major when compared with the other groups? Why is the proportion of ALR who report no religious preference so high? Clearly, additional information about residential campus adult learners—particularly with regard to personality characteristics—is necessary to more-fully understand this new group of nontraditional students.

Perhaps one of the more interesting findings of the study concerns the relative number of first-year adult learners. Using the selection criteria outlined earlier, less than 300 adult learners were eligible for inclusion in the target sample. In the state in which this study was conducted it was estimated that approximately 35% of the state's aggregate total enrollment in higher education were students 25 years of age and over. Yet only about 1 percent of the freshmen at the residential campus and less than 10% of the first-year students at the commuter campus were adult learners. Apparently the greatest proportion of older students in this state were part-time registrants or had previous college experience, or were enrolled in noncredit granting programs. The implication is clear. Adult learners, most of whom evidently attend part-time, are not likely to provide the same level of financial support for institutions as have traditional-age freshmen enrolled full-time. This is likely to be a serious concern of residential campuses in smaller towns and cities similar to those included in this study.

If higher education is to survive with a structure similar to what presently exists, far more part-time adult learners than currently seek out postsecondary education must be attracted to offset the projected decline in the number of traditional-age freshmen. An alternative scenario has higher education somehow becoming more attractive to and making matriculation possible for far more full-time adult learners than are enrolled at present. It would seem, however, that institutions expecting to attract increasing numbers of older students must first attempt to describe the characteristics of those adult learners presently enrolled, analyze the potential market, and then modify recruitment and retention practices where necessary to embrace the various types

of "new" students including residential and commuter campus adult learners. Local field-based research such as that reported here is necessary if higher education is to adequately respond to the needs of adult learners.

ACKNOWLEDGMENT

This research was sponsored by the Spencer Foundation, Chicago, Illinois and the Office of Graduate Research and Development, Indiana University, Bloomington.

REFERENCES

Astin, A. W. *Preventing students from dropping out.* San Francisco: Jossey-Bass, 1976.

Astin, A. W. *Four critical years.* San Francisco: Jossey-Bass, 1977.

Arbeiter, S. Profile of the adult learner. *College Board Review,* 1976–1977, *102,* 20–27.

Brandenburg, J. B. The needs of women returning to school. *Personnel and Guidance Journal,* 1974, *53,* 11–18.

Broschart, J. *A synthesis of selected manuscripts about the education of adults in the United States.* Washington, D.C.; U.S. Offices of Education, 1976.

Carp, A., Peterson, R., & Roelfs, P. Adult learning, interests and experiences. In K. P. Cross, J. R. Valley and Associates (Eds.), *Planning Non-traditional Programs.* San Francisco: Jossey-Bass, 1974.

Chickering, A. W. *Education and identity.* San Francisco: Jossey-Bass, 1969.

Doty, B. A. Why do mature women return to college? *Journal of the National Association of Women Deans and Counselors,* 1966, *29,* 171–174.

Durcholz, P., & O'Connor, J. Why women go back to college. *Change,* 1973, *5,* 52, 62.

Guilford, D. M. *The non-collegiate sector: Statistical snapshots of adult continuing education.* Paper presented at the meeting of the American Association of Higher Education, March, 1974.

Harrington, F. H. *The future of adult education.* San Francisco: Jossey-Bass, 1977.

Hepker, W., & Cloyd, J. S. Role relationships and role performance: The male married student. *Journal of Marriage and the Family,* 1974, *36,* 688–696.

Henderson, C. *Changes in enrollment by 1985. Policy analysis service report.* Washington, D.C.: ACE, 1977. (ERIC Document Reproduction Service No. ED 140 766)

Hodgkinson, H. Guess who's coming to college: New learners, new tasks. *NASPA Journal,* 1976, *14,* 2–14.

Kimmel, E. *The characteristics of adult learners.* Princeton, N.J.: CEEB, 1976.

National Advisory Council on Adult Education. *A target population in education.* Washington, D.C.: U.S. Government Printing Office, 1974.

National Center for Education Statistics. *The condition of education.* Washington, D.C.; U.S. Government Printing Office, 1976.

Roach, R. M. "Honey, won't you please stay home." *Personnel and Guidance Journal,* 1976, *55,* 86–89.

Roelfs, P. Teaching and counseling older college students. *Findings,* 1975, *2* (1), 5–8.

Ryan, J. D., Jr. *A comparison of the academic achievement of adults and college-age junior college full-time day students.* Unpublished doctoral dissertation, Wayne State University, 1969.