

ON THE EDUCABILITY OF WOMEN*

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On the opening day of this work conference, I traced historical changes in national attitudes on the question of who should go to college. Putting together the research fact that most high school graduates who rank in the upper half of their class academically are already in college with the egalitarian ideal that all young people should have a chance to go to college, I arrived at the conclusion that New Students to higher education will consist primarily of young people who have not been successful at school tasks as we have defined them. Their arrival should make a significant impact on our conception and organization of postsecondary education.

There is, however, another group of new students to higher education who will enter college in increasingly larger numbers in the decade ahead--women. Women have been underrepresented in the college-going populations of the past, and they are now beginning to make up for lost time. Only twenty years

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ago, 70 percent of all of the students enrolled in institutions of higher education were men. But with each passing decade, the percentage of women pursuing degrees increased by five percent, going from 30 percent in 1948, to 35 percent in 1958, to 40 percent in 1968. The National Center for Educational Statistics predicts that by 1978 women will constitute 45 percent of the national college student population.

Despite the fact that it will probably take another decade before equality of opportunity for college entrance becomes a reality for women, most colleges can expect the proportion of women in their student bodies to increase rapidly during the decade of the 1970's for several reasons: 1) Education is becoming increasingly important to women as more and more women enter the labor market. The Women's Bureau has reported that in 1970 almost half of the women in the population between the ages of 18 and 65 were in the labor force, and more than half of these workers were married women. 2) The reservoir of academically qualified women not now going to college is large. In a recent study of urban youth Knoell (1970) concluded that able women were the most neglected group of all potential college students in terms of college recruitment efforts. In one Texas city included in her study of black and white youth, she found that the lowest rate of college attendance for young people with IQ's above 105 occurred among white women; white men and black men and women in this ability range all entered college more readily. 3) The new attention directed to obtaining equality of opportunity for women is part of the broader egalitarian

movement. If women were to enter institutions of higher education in the same proportion as men, about 1-1/2 million new students would enter our colleges.

The move toward equality of educational opportunity will gradually result in more even distributions of men and women within institutions. It is probably safe to predict that within the next five years, public and private universities will move away from their traditional ratios of six or seven men to every three or four women. The former teachers colleges will attract more men as they continue their move toward multipurpose institutions. And the community colleges will move away from their heavily male enrollments as women from the lower socioeconomic and ability levels begin to enter institutions of higher education.

Women As Students

One of the cultural beliefs that delayed the entry of women into colleges and universities some 200 years beyond that of men was the conviction that women were not suited to work requiring sustained intellectual effort. And the folk wisdom still conveys a nagging feeling that women are not quite as good as men at academic pursuits. Present day discussions are full of documentation of the extremely low proportion of women faculty in prestige colleges and of the reluctance of graduate and professional schools to admit "too many" women. And yet the facts concerning the scholarship of women make any fears about academic dilution groundless. On the criteria by which

we judge academic performance--test scores, grades, and intellectual values--women are able, interested, and high-achieving students.

Test Scores

Data are not lacking on the abilities of men and women as measured by tests. Long before women's rights movements began receiving national attention, test norms were being published separately for males and females simply because they were easily identifiable groups that showed consistent differences in performance.

The results may be broadly summarized by stating that women score higher on tests of verbal skills and men score higher in quantitative abilities. Whether men or women earn higher aggregate scores on tests depends on what weights are applied in combining test scores to arrive at a single index of academic ability. In most testing programs, men would receive a slightly higher total score than women if scaled scores were simply added together. The generalization that men tend to do slightly better than women on tests is somewhat oversimplified, but essentially accurate.

Grades

The single best indicant of college performance is the high school record. And there can be no equivocation about the superior academic achievement of women when measured by the traditional grading system. Studies going back as far as 1929 show better grades for females than for males from elementary

school through college (Anastasi, 1958). The high school grades of women are quite significantly above those of men. Typical are the figures from the SCOPE project (Tillery et. al, 1966) showing 60 percent of the high school senior women with grades of "mostly B's" or above, compared with 44 percent of the men. At the college level the story is the same. In the spring of 1970, for example, 46 percent of the freshmen women at the University of California at Berkeley made averages of B or better, compared with 39 percent of the men. For seniors, the figures were almost identical; 45 percent of the women and 38 percent of the men had semester averages of B or better.

The synthesis of research about test scores and grades as measures of academic ability leads to the conclusion, baldly put, that women are slightly behind men on test scores but are significantly ahead on grades.

Academic Motivation

What accounts for the apparent success of women in academic activities? I say "apparent success" because grades are only one measure of academic accomplishment. Nevertheless, they are the coin of the realm, and teachers, parents, students, and employers all agree that grades signify the level of academic accomplishment. Most students want good grades and try to attain them, yet girls are better at getting grades than boys are, and this is true at elementary, high school, and college levels.

The explanations offered are many, but perhaps the most

frequent observation is that girls simply "try harder." Girls admit to being more conscientious about school work than boys do. Among Project TALENT high school seniors, 47 percent of the girls but only 27 percent of the boys maintained that they "almost never" got behind on school assignments (Flanagan, et. al., 1964). Among four-year college freshmen responding to the College Student Questionnaires (CSQ, 1966), women were more likely than men to say that they had studied harder than their high school classmates (62 percent of the women and 52 percent of the men), that their fellow students perceived them as hard workers (76 percent to 63 percent), and that their teachers thought of them as hard workers (63 percent to 44 percent).

Cultural norms dictate that it is somewhat less acceptable for young males to appear conscientious about studies than for females, but it is also true that women spend more actual hours on homework than men do. Seventy-four percent of the women and 59 percent of the men in a nationally diverse sample of college freshmen said that as high school seniors, they had studied more than two hours a day (CSQ, 1966). If girls spend more time studying than boys, it seems reasonable that their grades should reflect it.

While a conscientious approach to learning is not to be discounted, hard work by itself doesn't necessarily make an exciting student or a good scholar. In an intensive study of the intellectual values and appreciations of college students, Heist and Yonge (1968) have noted that there are statistically

significant differences between the sexes on the scales of the Omnibus Personality Inventory (OPI). Of the four OPI scales that contribute most heavily to "the potential for behaving intellectually," women tend to score higher on fondness for working with ideas and abstractions (Thinking Introversion) and on esthetic appreciations (Estheticism); men score higher on theoretical and scientific interests (Theoretical Orientation); and there is no difference between the sexes on flexibility and tolerance for ambiguities and uncertainties (Complexity).

A review of the major measures of academic ability indicates no important differences between men and women in their potentials for academic accomplishment.

Discrimination

Nevertheless, despite the considerable evidence that women make good students and that their new role in American society is educationally-demanding, the cases of out-and-out discrimination against the admission of women to undergraduate education are surprisingly easy to document. Attention to discrimination at the undergraduate level has almost been eclipsed by the blatancy of the discrimination at graduate and professional levels, but high school and college deans need to give careful attention to any discrimination against women on this first important rung of the educational ladder.

The data shown in Table 1 were openly presented in The College Handbook which is used for the guidance of high school

TABLE 1

Rates of Acceptance of Applicants
to a Prestige Four-Year Liberal Arts College
by Sex

Criteria	Percentage of Applicants Accepted*	
	<u>Male</u>	<u>Female</u>
High school class rank		
Top fifth	87	66
Second fifth	44	14
Third fifth and below	22	20
SAT scores--verbal		
700-800	90	90
600-699	85	70
500-599	60	30
Below 500	22	16
SAT scores--mathematical		
700-800	89	87
600-699	79	71
500-599	44	39
Below 500	11	17

* Applications for admission were received from 711 males and 601 females. Overall rates of acceptance were 72 percent for males and 60 percent for females.

Source: Computed from data given in The College Handbook, 1969.

seniors and their counselors. (Original data were given in numbers not percentages, thus obscuring the operation of discriminatory practices for the average reader.)

The better grade-getting ability of girls seems more than adequately compensated for by the acceptance of 87 percent of the male applicants from the top fifth of their high school class, compared to only 66 percent of the women. If women score very high on the verbal portion of the SAT (over 700, which is the top one percent of the high school graduates), chances of obtaining admission to the college illustrated in Table 1 are as good for women as for men. But the closer a woman gets to being average, the harder the discrimination gets. The only admissions criterion at this college that does not show marked sex discrimination is mathematics test scores, but men are twice as likely as women to make very high SAT-M scores (11 percent of the high school senior males and 5 percent of the females score above 600). Women applicants to this college must be as good as males in mathematics and better than men in high school record and verbal aptitude in order to gain admission.

Generally speaking, very able women are not as likely to experience discrimination as are their average or below-average sisters--at least not until they reach a level of selectivity where they too have substantial competition as in Ph.D. candidacy, for example. A group of investigators at the University of Wisconsin (Transaction, 1971) verified the existence of discrimin-

ation against lower ability women by sending bogus applications to 240 colleges. They found that their invented applicant with high grades was as likely to be accepted as a male applicant with equally good grades. But male applicants with low ability were decidedly more likely to be accepted than females with the same low credentials.

Although it is hard to excuse discrimination on the part of educational institutions on the basis of race or sex or any other personal characteristic, public institutions have had to be considerably more circumspect about discriminatory practices than private institutions. But overt discrimination against women exists in public, as well as in private institutions.

Most discriminatory practices in public institutions, however, are seemingly related more to historical tradition than to rational decisions; they fall in three major categories: (a) Housing regulations frequently limit women's enrollments to the number of dormitory spaces available. (b) Compared with the broad choices of majors offered men, the academic majors that have been attractive to women have been limited. Thus, there have been more "male spaces" in the classrooms. Precollege and college counseling to encourage women to follow their own interests rather than those dictated by cultural stereotypes seems a better long-range solution than attempting to increase the numbers in traditional women's fields. But arbitrary sex quotas--as in colleges of liberal arts for example--frequently operate in a discriminatory manner by placing a ceiling on the number of qualified women admitted while permitting the acceptance of men with lower qualifications. (c) Society has tended

to look upon universities as male institutions, and females have been slower to apply. The predominance of men on faculties not only perpetuates this view but deprives young adults--both male and female--of the opportunity to interact with talented female scholars.

The fact is that at the beginning of the 1970's, there is not equality of educational opportunity at the college level for women. Women are not as likely as men to seek to extend their education, and even when they do, there are instances of discrimination against their admission. Some discrimination can only be considered deliberate; some is the non-deliberate result of other decisions that determine the number of admissions spaces available. In either case, the result is discrimination on the grounds of sex. I must confess that during my years as a dean of students, I failed to raise the questions that would have forced us to make a conscious decision about whether the double-standard in housing regulations, for example, should create a double-standard in college admissions. Women today are making a contribution by raising many more questions about the necessity for double-standards. I, for one, have no interest in unisex or in trying to eradicate differences between men and women. I do have an interest in eliminating any and all conditions that handicap any individual in the pursuit of the best possible development of his or her talents. Since it is highly unlikely that talents are sex-linked or race-linked, practices that relate to a class of people instead of to individual behaviors are quite likely to penalize persons who do not fit the stereotype of their "class membership".

Women As Women

Women face certain problems in education because they are women. We know, from many studies, that encouragement from parents bears a high relationship to college attendance. In our society, parents feel that it is more important for a son to go to college than for a daughter. Forty-nine percent of the SCOPE senior boys stated that their mothers "definitely desired" college for them, whereas only 37 percent of the girls reported as much parental enthusiasm for continued education. Parental attitude and those of society affect not only educational aspirations, but they seem to have a pervasive effect on the self-concepts of women. Girls receive less encouragement from their parents and from society at large to achieve at high levels. A characteristic that women have in common with other groups of people who have not been a part of the dominant culture is the problem of diminished self-concept. Much as members of ethnic minorities have been encouraged to set their aspirations "realistically" for jobs that would be "open" to them, women have been encouraged to think about elementary school teaching rather than college teaching, about typing instead of business management, and about becoming nurses rather than doctors. These constant reminders of a secondary role in society take a toll and the results are clearly evident in the research.

Women are significantly less likely than men to believe, as high school seniors, that they "definitely have the ability" to do college work. Despite their better high school grades, which

should represent an independent measure of success to them, only 26 percent of the women compared with 35 percent of the men express a high level of confidence in their academic ability (Tillery, et al., 1966). Furthermore, there appears to be some personal cost involved in the surface adjustment of girls to the classroom. Over one-third of the high school girls say that they often feel nervous, tense, or shy in class, while less than one-fourth of the boys admit to these feelings of insecurity. The problem can be said to have reached serious proportions for women in the lowest third of the class academically, 44 percent of whom state that they are frequently uncomfortable in class (SCOPE data, 1966).

It is hard to say why classroom anxiety is so prevalent among young women. Actually, male high school seniors are more likely than females to feel that the teachers go too fast (21 percent for boys and 15 percent for girls) and that there is too much stress on grades (36 percent for boys and 28 percent for girls, Tillery et al., 1966). One would think that both of these situations might be anxiety provoking. Apparently, it is not the academic tasks themselves that account for feelings of tension or shyness among young women.

Elsewhere (Cross, 1971) I have set forth the thesis that a major characteristic of our classrooms from first grade through graduate school is their hotly competitive nature. It is apparent in much of the data from young people that women do not enjoy competition as much as men do; 26 percent of the women entering

college but only 13 percent of the men confessed to disliking competitive situations (CSQ, 1966). In particular, women have been taught not to enjoy competing with men. But school is a competitive situation, and in this competition girls seem threatened by winning. To be encouraged to know the answers in school and to be discouraged from proving it may well be the cause of some approach-avoidance conflicts for adolescent girls.

No one needs to tell this audience that the relationship between the sexes is changing, but it is a part of the broader change of women's role in society. The rate of growth of women ^{the} in labor market is increasing five times as rapidly for women as for men. Ninety percent of all women work at some time during their lives, and the typical girl graduating from high school today may expect to work outside the home for 25 years of her life. College women are well aware of the changing sex roles, and some recent data show the changes in attitudes to be extremely rapid. Not many colleges collect information about student attitudes year after year, but were they to do so, they would find some very interesting trends. One women's college has administered the College Student Questionnaires (CSQ) to the entering freshmen class each year since 1964 (College Research Center, 1971). The most dramatic changes to take place over the six year period occurred in student perceptions about women's roles. One question asked what the respondent would like to be doing 15 years hence. Sixty-five percent of the 1964 class said they would like to be a housewife with one or more children. Over the years, there was a steady decline in the percentage choosing this lifestyle until in 1970,

only 31 percent preferred the traditional female role. Two other alternatives increased in popularity: the percentage wanting to be a married career woman with children doubled, going from 20 percent in 1964 to 40 percent in 1970. And the percentage that were uncertain increased from 13 to 22 percent, probably reflecting the strain that extremely rapid social change places on individuals. When asked to express their opinions about the role of adult women in American society, 19 percent of the 1964 class and only 7 percent of the 1970 class felt that her activities should be confined to home and family. Most dramatic of all, perhaps, were the responses to a question concerning career choice. In 1964, 57 percent elected a career that would center around home and family; by 1970 the figure had dropped to less than half, 22 percent. The slack was taken up by increases in almost any career area, but especially "academic life" and "professional life." The career aspirations of college women are rising; the evidence suggests that sex roles are changing very rapidly for young women today. Colleges ignore these trends to the peril of educating young people for adult roles in society.

The present social revolution affects women's roles more than men's, and it is not surprising that the research shows that college women experience more difficulty than men in knowing who they are and what they wish to become. When college students were asked to indicate their greatest problem in college, the only problem to show a significant difference between men and women was that of achieving a sense of identity. The search

for identity was the number one problem for college women, with one-third of them engaged in the quest. Achieving identity was the major problem for one-fourth of the men (CSQ II, 1968). The majority (51 percent) of college women feel that today's woman should divide her time between a home, a job, and children. To juggle the often conflicting roles of wife, mother, and career woman is no small challenge.

Women As Workers

When college women state that they look forward to a future that includes husband, children, and career, they are in a sense simply being realistic. What kinds of careers would they prefer, given unrestricted choice?

The SCOPE project underway at the Center for Research and Development in Higher Education at the University of California asked high school seniors from four states to indicate what jobs they would really enjoy doing regardless of whether they had the necessary qualifications. When I compared the choices of women scoring in the lowest third of the class on a test of academic ability with those scoring in the upper third, I found that the choices could be grouped into three clusters (Cross, 1971): a group of jobs liked by the majority of low-ability but not by high-ability women, a group of jobs popular with high-ability but not low-ability women, and a group of jobs liked by women without respect to ability. Most popular among the low-ability women, the majority of whom did not plan to attend college, were the traditional women's jobs--typist, secretary, and office clerk. Jobs liked by high-ability women, most of whom were headed for college, included author of a novel, high school teacher, and college professor (college president and doctor were next in

order). The top three choices that showed no difference by ability groupings were the frequently romanticized feminine jobs of housewife, airline hostess, and social worker.

Although much has been written about the low aspirations of women, high ability women show abundant aspiration when not faced with the instruction to "be realistic." The only job with a high appeal for academically talented women that is likely to be realized by a sizeable percentage of these young women is that of high school teacher. It appears that talented college women will be ready for more challenging jobs when society is ready to consider women capable of handling demanding responsibilities.

Liberated Woman

Meanwhile, the revolution in the attitudes of young women continues, seemingly escalating in very recent years. An eastern women's college found that in 1968--only four short years ago--only 19 percent of their entering freshmen were endorsing a statement that read that "women should be allowed to choose to be entirely free of domestic responsibilities in order to work on an equal footing with men at all occupational levels". This spring, when these young women were seniors, over half of them endorsed this "liberated" viewpoint.

Women's liberation has a number of ramifications, not the least of which is the concern of young people over the population explosion. Some recent research (College Research Center, 1971) has shown dramatic changes of attitudes about family size just in the past year. During each of the five years between 1964

and 1969, the largest number of freshmen on each of eight women's college campuses said that they would eventually like to have four or more children. All of a sudden, in 1970, the perceived desirability of large families took a tumble. In 1970, the most popular family size dropped to two children and the percentages of young women wanting no children or only one child showed a small increase on each of the eight campuses.

I'm afraid that it is sad but true that many educators seem blissfully unaware of the speed with which attitudes are changing. Most men and many women still consider college a necessity for men and a luxury for women since while it is nice to have "culture" in the home, men are presumably the breadwinners for the family. This is, of course, not true even now. The Department of Labor (1968) states flatly that "most women work because they or their families need the money they can earn... Relatively few women have the option of working solely for personal fulfillment." The fact that it is now necessary for hundreds of thousands of women to work outside the home calls for a revolution in our way of thinking about the lives of women. The lives of young women entering college today will be so different from those of my classmates that it is difficult even for me, let alone a 60-year old male college administrator, to grasp the realities of the change.

Not very long ago, leading female educators were pleading for recognition of the uniqueness of the discontinuities in

women's lives. That concept that was so forward looking five years ago now seems to me out-of-date. In the first place, the time span of discontinuity for many women has already decreased from 7 years to 7 weeks, and if child care centers become the reality that many people predict they will, more and more women will be spending less and less time at traditional family activities. In the second place, discontinuities in schooling are becoming increasingly popular for men as well as for women. Clark Kerr's prestigious Carnegie Commission on Higher Education (1971) has called for the introduction of "stop-outs" between high school and college as well as during college. Young people, they say, should be encouraged to break the present continuities of education. In a similar vein, the just-released highly-publicized Newman Report on Higher Education (1971) has also urged a break in the lockstep of life which dictates that schooling should be completed before age 25. All of the trends of the future indicate that discontinuities will be increasingly common for both men and women and that education and participation in the labor force will be consciously designed for stop-outs. In the future, it should be as acceptable for a young woman to work for a few years before entering college as it is for an older woman to return to college. The rigid patterning of lives into three distinct phases of education, child-rearing, and career should give way to flexibilities that are based upon personal preference instead of class membership such as age or sex.

We, as academic women, hold key positions in helping to create the climate that will make these new flexibilities possible. For education is indeed the gateway to opportunity.

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