Aspiration-Job Match: Age Trends in a Large, Nationally Representative Sample of Young White Men

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Age trends in the match between vocational aspirations and actual jobs were studied in a nationally representative sample of 3,730 white men 16–28 years old who were interviewed yearly over a 5-year period. As the men aged, higher agreement between jobs and aspirations (classified according to Holland's typology) occurred. In addition, the distributions of both aspirations and actual jobs differed with age. Larger proportions of the older men were engaged in enterprising work, and the distribution of aspirations, which at age 16 diverged markedly from the distribution of jobs, resembled that distribution more closely by age 28. Implications for changing strategies of vocational counseling and research are discussed.

Since Parsons (1909) counselors have attempted to assist young people in integrating occupational information and information about themselves in planning their careers. Until recently the tools available to counselors for providing occupational information have been unwieldy. To cope with the voluminous information about occupations, a number of occupational classification schemes have been developed to assist in organizing information. One such scheme is Holland's (1973) typology of persons and occupations. This scheme makes the parallel assessment of people and jobs easier and provides a set of tools for studying and displaying information about the job content of the economy; differences in the jobs people of different ages, races, or gender typically do; the ways these patterns of employment change across time; the development of career stability; the match between people's aspirations and their employment; and the importance of education for income attainment in different types of work (G. Gottfredson, 1977; G. Gottfredson & Daiger, 1977; G. Gottfredson, Holland, & L. Gottfredson, 1975; L. Gottfredson, 1978a, 1978b, in press; L. Gottfredson, Note 1). The present article reports additional information from a program of research designed to systematically examine careers using the Holland typology.

Recent research has examined the occupational constraints within which people attempt to fulfill their aspirations. Based on an examination of the occupational aspirations of youth and the distribution of occupations in the economy when both were classified according to the same typology, G. Gottfredson et al. (1975) suggested that the distribution of jobs in society limits the possible amount of congruence or match between people and jobs. Although they found the distribution of aspirations of teenagers similar to the distribution of jobs in the economy, teenagers aspired to some types of work in greater proportion than such work actually existed. For example, boys aspired to investigative and artistic jobs in greater proportion than adult men were employed in such work, and they aspired to enterprising work in smaller proportion than

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such work was held by men. Dissimilarity between distributions of aspirations and jobs has often been taken as evidence of the lack of realism of vocational choices among youngsters (e.g., Trow, 1941). This dissimilarity implies that many young people must either change their aspirations or else work at undesired jobs.

This study extends earlier work by examining trends in aspiration—job congruence for white men 16–28 years old to learn how accommodation may take place. The following questions are explored: (a) How much does aspiration—job congruence increase with age? (b) How do the distributions of jobs and of aspirations of young men vary by age? (c) What percentage of men change type of work or change category of aspiration from one year to the next, and how does categorical stability of aspiration develop with age?

Method

Data on a nationally representative sample of 3,730 young white men 14–24 years old in 1966 were obtained from the National Longitudinal Study of the Educational and Labor Market Experience of Young Men (Parnes et al., 1970). The men were interviewed every year from 1966 to 1971, and the surveys provide data on both the aspirations and employment experiences for each of these years. Young men were not surveyed during the years they were in military service.

The analyses reported here are based on comparisons among different age groups. Because of the small number of men in each cohort in 1966, the employment experiences of men of different ages were examined without regard to cohort, that is, without regard to which year it was that they were a particular age. For example, the jobs of men age 18 in any year were compared with the jobs of men age 20 in any year regardless of the survey year during which this information was obtained. This means that each man could be classified into as many as, but not more than, six age groups.

Data on aspirations and employment in 2 consecutive years were examined for different age groups. Occupational aspirations were obtained by asking the men each year what job they would like to have at age 30. Both aspirations and actual jobs held in the current year and in the previous year were coded according to Holland's (1973) six-category typology of people and jobs: realistic (R), investigative (I), artistic (A), social (S), enterprising (E), and conventional (C). Holland codes for the detailed 1960 census occupational titles used are shown in L. Gottfredson and Brown (1978).

The analyses involve three different groups of men. The broadest group of men examined is labeled *all men* and includes all men for whom both current employment status and current occupational aspirations are

known. In order to assess job-aspiration congruence, a smaller second set of men (labeled *employed men* in several tables) was created from the first by excluding those men who were not currently employed. The third set of men (shown in Tables 2, 4, and 6) is yet smaller and includes only those men employed and expressing an aspiration in *both* the current and the previous year. This last set of men was used to examine and compare the categorical stability of aspirations and of jobs over a 1-year period.

Job-aspiration congruence and the categorical stability of jobs and aspirations were assessed in parallel fashion. If jobs or aspirations fell in the same Holland category, they were classified as congruent or stable; if they fell in different categories, they were considered incongruent or not stable. The degree of congruence or stability within each of the seven age groups examined was summarized in two ways: by the percentage of men who were classified as congruent (percentage agreement) and by Cohen's (1960) kappa. Kappa is the ratio of observed proportionate agreement beyond chance to possible agreement beyond chance given the two marginal distributions across the six categories.

No significance levels are shown. The stratified sampling design used in the National Longitudinal Survey makes the usual formulas for the standard errors of kappa inappropriate. The issues investigated all involve trends in the magnitude of kappa across ages. The regularity in progressions is believed to be more important than mere statistical significance with these very large samples.

Results

Age trends in the degree of congruence between category of job aspiration and category of actual job are examined first. Succeeding tables examine trends in the categorical stability of aspirations and of jobs over 1-year periods. These tables also provide a profile of the types of jobs young men want and of the jobs they actually hold at different ages.

Changes in Aspiration-Job Congruence

Table 1 shows the degree of congruence of aspirations and actual jobs for different ages. It shows that the degree of congruence increases regularly and substantially from age 16 to age 28. The percentage of employed men who are employed in congruent jobs rises from 43% to 84%. When only agreement above that expected by chance is considered—that is, when kappas are examined—the change is even more dramatic.

Table 1 does not show changes in congruence for the *same* set of men over early career because the seven age groups are

Table 1 Congruence of Aspirations and Actual Jobs

	Aspiration-job c		
Age	% agreement	Kappa	n
16	42.5	.11	348
18	49.2	.20	744
20	53.4	.32	862
22	60.3	.44	865
24	67.8	.55	904
26	75.4	.65	805
28	84.0	.77	432

Note. Table includes all men employed and expressing an aspiration in the current year.

composed of somewhat different sets of men. Table 2, however, shows increases in congruence over a 1-year period for the same men. The table shows that aspiration—job congruence increases over the 1-year interval for men of each age. In short, Tables 1 and 2 both suggest that job—aspiration congruence increases steadily among employed men and is quite high by the late twenties.

Stability of Type of Work Held

This increase in congruence can occur both because men are changing their jobs and because they are changing their aspirations. Tables 3 and 4 show changes in types of work held, and Tables 5 and 6 show changes in aspirations.

The top panel of Table 3 shows the percentage of men who were employed and what type of work they held if they were employed; the lower panel excludes men not employed and shows the percentage of employed men who held each type of work. This table shows a steady change from age 16 to age 28 in the types of jobs held by young men. With increasing age a greater proportion of men are found in investigative, social, and especially enterprising jobs. The distribution of work for men in their late twenties is similar to the distribution of jobs for all men reported by G. Gottfredson et al. (1975), suggesting that by the late twenties the overall distribution of men across types of work has stabilized.

The distribution of men across the different types of work can change both because men who become employed at older ages

tend to enter different types of work than do men becoming employed at an early age and also because men change jobs once employed. Table 4 shows the stability of the type of work held by the same men over a 1-year interval, and it indicates that some of the changes in the distribution of jobs among young men are a result of some men changing types of work. The major net shifts occurring at all ages are shifts out of realistic work and shifts into enterprising work. Percentage agreement does not vary much with age; about 20% of men in all the age groups examined here change their category of work from one year to the next. kappas, however, increase from .44 to .74 and indicate that categorical stability of work is higher among the older men.

Stability of Aspirations

Table 5 shows the percentages of men in different age groups who aspire to each of the six categories of work. Percentages are shown separately for all men and for employed men, but the pattern is much the same for both groups. There is a large de-

Table 2 Congruence of Aspirations and Actual Jobs in Two Consecutive Years for Men Employed Both Years

		Aspirat congru	•		
Age	Year	% agree- Year ment		n	
16	Previous Current	$36.9 \\ 46.2$.06 .14	160	
18	Previous Current	47.4 52.0	.16 .22	454	
20	Previous Current	53.9 55.7	.28 .33	601	
22	Previous Current	$57.4 \\ 63.6$.40 .48	646	
24	Previous Current	68.6 69.1	.56 .56	741	
26	Previous Current	$71.6 \\ 76.8$.60 .67	676	
28	Previous Current	81.8 83.8	.7 4 .77	395	

Note. Table includes only men employed and expressing an aspiration in both the previous and current years.

 $\begin{array}{l} \textbf{Table 3} \\ \textbf{Category of Work Held by All Men and by Employed Men Only (Percent)} \end{array}$

	-		•					
Age	Ř	I .	A	A S E		С	Not employed	n
				All	men			
16	41.5	.1	1.3	.6	5.6	1.2	49.6	691
18	47.7	1.1	1.6	1.6	6.6	3.7	37.7	1,195
20	48.2	3.0	2.1	2.7	10.8	5.6	27.4	1,188
22	49.6	5.4	2.3	8.3	13.7	6.5	14.3	1,009
$\frac{24}{24}$	46.5	8.3	1.5	8.4	21.2	7.0	7.0	972
26	48.8	8.2	1.6	9.1	21.9	6.7	3.7	836
28	45.7	8.8	2.0	10.0	25.8	5.4	2.3	442
				Employed	l men only			
16	82.5	.3	2.6	1.1	11.2	2.3		348
18	76.6	1.7	2.6	2.6	10.6	5.9		744
20	66.5	4.2	2.9	3.7	15.0	7.8		862
$\frac{20}{22}$	57.8	6.2	2.6	9.7	16.0	7.6		865
24	50.0	9.0	1.6	9.1	22.8	7.5		904
26	50.7	8.6	1.6	9.4	22.7	7.0		805
28	46.8	9.0	2.1	10.2	26.4	5.6		432

Note. Table includes only men expressing an aspiration in the current year.

crease in investigative aspirations—from a high of about 25% at age 16 to a low of about 10% at age 28. There are somewhat smaller absolute decreases in aspirations for artistic and social work. In contrast, there is over a twofold increase in the proportion of men aspiring to enterprising work—from 12% to over 30%.

Table 4
Category and Stability of Work Held in Two Consecutive Years by Men Employed
Both Years (Percent)

				Categor	Categorical stability of job					
Age	Year	R	I	A	S	Е	С	% agreement	Kappa	n
16	Previous Current	76.9 78.1	.0 .0	3.8 3.8	.6 1.3	$12.5 \\ 12.5$	6.3 4.4	78.8	.44	160
18	Previous Current	77.8 77.3	1.1 1.5	$\frac{2.9}{2.2}$	$\frac{1.8}{2.6}$	$10.6 \\ 11.0$	5.9 5.3	78.2	.43	454
20	Previous Current	74.0 68.6	$\frac{2.2}{3.8}$	$\frac{2.5}{2.3}$	2.2 3.7	$12.3 \\ 14.0$	6.8 7.7	75.4	.47	601
22	Previous Current	$63.0 \\ 59.1$	6.0 5.9	2.8 2.9	6.8 8.5	$13.2 \\ 15.9$	8.2 7.6	76.6	.60	646
24	Previous Current	$52.4 \\ 51.3$	8.2 8.4	$\frac{3.2}{1.5}$	$10.3 \\ 9.3$	$18.8 \\ 22.5$	$7.2 \\ 7.0$	82.3	.74	741
26	Previous Current	49.4 49.1	8.1 7.8	.9 1.3	10.2 9.6	$22.2 \\ 24.4$	$9.2 \\ 7.7$	81.4	.73	676
28	Previous Current	49.1 46.8	8.4 8.9	$\frac{1.5}{2.3}$	10.4 10.6	$24.8 \\ 25.8$	5.8 5.6	82.0	.74	395

Note. Table includes only men employed and expressing an aspiration in both the previous and current years. $^{a}R = realistic; I = investigative; A = artistic; S = social; E = enterprising; C = conventional.$

 $^{{}^{}a}R = realistic; I = investigative; A = artistic; S = social; E = enterprising; C = conventional.$

Table 5
Category of Aspirations for All Men and Employed Men (Percent)

		Aspirations for category of worka								
Age	R	I	A	S	Е	С	n			
			Al	l men						
16	36.0	26.6	7.4	14.2	12.4	3.3	691			
18	34.4	17.4	9.0	16.9	17.2	5.1	1,195			
20	32.7	16.1	6.8	15.0	25.3	4.0	1,188			
22	35.2	12.2	5.8	15.6	26.6	4.6	1,009			
24	34.2	11.9	2.6	11.9	33.8	5.4	972			
26	40.0	8.2	2.0	11.5	33.0	5.3	836			
28	42.8	10.4	2.0	10.6	29.9	4.3	442			
			Employe	ed men only						
16	41.1	24.7	5.7	12.9	11.5	4.0	348			
18	43.5	13.2	8.5	14.4	16.3	4.2	744			
20	39.9	12.3	6.8	12.6	24.6	3.7	862			
22	37.4	10.2	5.5	14.6	27.4	4.8	865			
24	35.8	10.6	2.4	11.4	34.6	5.1	904			
26	40.4	7.7	2.0	11.3	33.2	5.5	805			
28	42.6	10.6	1.8	10.9	29.6	4.4	432			

Note. Table includes only men expressing an aspiration in the current year.

Comparing the distributions of aspirations (Table 5) to the distributions of actual jobs (Table 3) is particularly interesting. Both the aspirations and the jobs of teenage men differ substantially from the jobs held by older men—and thus from the jobs the teenagers are likely to hold later in their careers. But by age 28 the distributions of both aspirations and jobs change, and they converge toward the distribution of jobs among older men. Although some men may be able to realize their aspirations, it appears that a fair number have adjusted their goals for age 30 to be more in line with what they realistically expect they will be doing at that age.

Table 6 provides some more clues about the kinds of changes in aspirations that occur and at what ages they occur. This table examines the 1-year categorical stability of aspirations of men employed in both the current and previous years. Both the percentages of agreement and the kappas suggest that the stability of aspirations from year to year is much the same for employed men of all ages—though there may be a dip in stability in the early years after high school. This relatively high and constant level of stability in aspirations across dif-

ferent age groups of employed men contrasts with the pattern of initially low but increasing stability of actual jobs shown earlier (Table 4).

An examination of net changes in the aggregate distributions of aspirations in Table 6 shows that aggregate shifts are most pronounced among the younger men. The most striking change is between ages 16 and 20 and involves a halving of the proportion of men who want to have investigative (e.g., scientific or medical) jobs and a doubling of the percentage who want enterprising (e.g., sales and management) work. shows the same pattern of changes when the broader groups of men are considered, but it suggests that the shifts occur somewhat later for men who are not yet employed. The large shift out of investigative and into enterprising work occurs during the college-age years and is consistent with the science to nonscience shift among college majors found by Astin and Panos (1969). A decrease in aspirations for artistic work occurs among somewhat older men and is accompanied by the continued increase in interest in enterprising work. To summarize these results. 20%-30% of men in all the age groups ex-

^aR = realistic; I = investigative; A = artistic; S = social; E = enterprising; C = conventional.

Table 6
Category and Stability of Aspirations in Two Consecutive Years

	,		Cate	egory of a	Categorical s of aspirat					
Age	Year	R	I	A	S	E	С	% agreement	Kappa	n
16	Previous Current	40.0 45.6	27.5 23.1	7.5 7.5	11.3 11.3	11.3 9.4	2.5 3.1	72.5	.62	160
18	Previous Current	$45.6 \\ 46.5$	$17.0 \\ 13.2$	6.4 7.3	$15.0 \\ 14.3$	12.6 15.9	$3.5 \\ 2.9$	67.8	.55	454
20	Previous Current	$44.4 \\ 43.1$	10.6 11.6	7.5 7.5	11.6 10.8	$20.6 \\ 23.3$	$\frac{5.2}{3.7}$	69.9	.59	601
22	Previous Current	$38.2 \\ 40.4$	$12.2 \\ 10.1$	$6.0 \\ 5.3$	13.9 13.3	$26.2 \\ 27.1$	$\frac{3.4}{3.9}$	71.5	.62	646
24	Previous Current	$39.0 \\ 36.7$	10.7 10.4	$\frac{2.7}{2.3}$	$12.0 \\ 11.5$	$30.5 \\ 34.7$	$5.1 \\ 4.5$	73.4	.63	741
26	Previous Current	$37.6 \\ 39.5$	$9.5 \\ 7.2$	2.2 1.9	$11.4 \\ 11.5$	$33.0 \\ 33.7$	$6.4 \\ 6.1$	75.6	.66	676
28	Previous Current	$40.8 \\ 42.0$	7.6 9.9	$\frac{1.5}{2.0}$	11.1 11.1	33.9 30.4	5.1 4.6	81.0	.73	395

Note. Table includes only men employed and expressing an aspiration in both the current and previous years.

^aR = realistic; I = investigative; A = artistic; S = social; E = enterprising; C = conventional.

amined here change their type of aspiration over a 1-year period, but their adjustment as a group to the constraints of the labor market—that is, to the realities of what jobs are most and least available—seems to occur by age 20 or 22.

Discussion

This report is based on longitudinal data for a large nationally representative sample and provides the best evidence to date on age trends in aspiration-job match and on the 1-year stability of aspirations and type of work held. The major limitation of the study is that it examines only one segment of the work force. Further work should examine the employment experiences of nonwhites and of women, especially because it is plausible that these groups face more obstacles to fulfilling their aspirations. The experiences of older workers should also be examined, although this appears to be a less serious limitation because (a) congruence is already high by age 28 and (b) 1- and 5-year job stability has been shown to be relatively high beyond age 30 (Byrne, 1975; G. Gottfredson, 1977; Sommers & Eck, 1977). A second limitation has already been mentioned—cohort and age differences are confounded. It has been assumed here that cohort differences are minimal and that the differences discovered between the age groups reflect primarily developmental differences occurring with age. Nevertheless, different cohorts have probably been affected differently by the economic ups and downs of the last decade, so cohort differences must be explicitly examined in further research.

Aspiration-Job Congruence

Assuming that cohorts are similar, it appears that there are large shifts in both the types of jobs men hold and the jobs they want at different ages. Aspiration-job match increases dramatically with age, even above that predicted as potentially possible when the aspirations of youngsters are compared with the jobs actually likely to be available to them. If the aspirations of 16-year-olds (Table 5) are compared with the jobs held by 28-year-olds (Table 3), at most only 73% of men could find jobs congruent with these aspirations. Table 1 does show that only half of the men 20 or younger are in the type of work they would like to be in by age 30, but 84% of 28-year-olds say they are in congruent jobs. Although some men

undoubtedly have been able to move into their preferred type of work, these results suggest that a minimum of 11% of the men have accommodated to labor market realities by adjusting their aspirations by age 30.

Whether or not men have changed their ambitions for later years of their careers is unknown, but they are likely to have done so because they have altered their earlier goals. Furthermore, they have altered their aspirations so that they conform much more closely to the jobs that have apparently been available to men in our society.

This adjustment is not surprising, of course. And from a societal perspective, it is desirable that workers be happy with the jobs they must fill—that they want the jobs they have or can get. But the massive shifts in aspirations raise some interesting questions. How difficult is it to change aspirations? Vocational theory implies that shifting aspirations involves a shift in one's basic conception of oneself. The analyses show that the major net changes in aspirations are from investigative to enterprising work—which is a particularly difficult shift in terms of Holland's theory—and they continue among men late into their twenties. Furthermore, who is best able to realize their aspirations? Early deciders or the vocationally mature? The most talented? The well-educated or the well-to-do? And when does this adjustment of aspirations most often occur? When making decisions about college before even taking a job? When taking one's first job? Or is it gradually coming to terms with or coming to like a job one once thought only a way station to another destination?

Implications for Research and Practice

The results from this study are also a vivid reminder that the occupational world severely constrains the options of workers and that workers must in some way adjust to this reality. Although little research has examined the barriers or thwarting conditions with which workers must cope, theorists are beginning to stress the need for such research (e.g., Crites, 1976; Krumboltz, Mitchell, & Jones, 1978). But the results also remind us of another aspect of this re-

ality that counselors and researchers are apt to forget if they deal primarily with the more advantaged sectors of society—that people must compete for the same limited supply and selection of jobs. A recent volume on career counseling (Whiteley & Resnikoff, 1978) illustrates this oversight. In that volume Crites (1978a) illustrates his comprehensive new model of career counseling with a case study of a high-ability collegebound high school student who is disturbed because she is undecided between social work and teaching. Nowhere in the entire volume are we faced with the considerably more poignant career problems which result from the restricted pool of jobs available in our society. For example, in 1970 about 2.5 million people were employed as janitors and maids, more people than were employed as either lawyers, doctors, accountants, or engineers (U.S. Bureau of the Census, 1973). And in that year 1.8 million people lost their jobs, with another 2.3 million unemployed for other reasons (U.S. Department of Labor, 1976). Many other illustrations of the restricted nature of the job market could be provided, but the point is that to some degree getting good jobs is a zero-sum game (i.e., when some people win, others lose), and many people must work in low-paying, lowprestige, low-security jobs if they are able to get jobs at all.

To more fully appreciate the constraining and competitive nature of the occupational world, vocational counseling and research must shift its emphasis from primarily analyzing *individual* clients and individual occupations to examining the broader social and economic environments that constrain career development and to analyzing the distributions of *populations* of individuals across environments. Three suggestions for analyzing social and occupational environments are provided below.

1. Parallel classifications of people and jobs developed in the trait-factor tradition of counseling (e.g., Holland, 1973) are valuable tools for studying career development. Predictions about development (Holland & Gottfredson, 1976) originating from the modern differentialist theory of person-job match (i.e., from the modernized version of trait-factor theory) are supported

in this study: Congruence does increase with age as workers change the type of work they do or the type of work to which they aspire. But more important, the parallel classification of people and of occupations provides new insights into career development. Not only do individual men change jobs and aspirations, but these changes are highly patterned at the aggregate level. The distributions of jobs and of aspirations of entire age groups shift with age and converge toward the distributions of jobs typical of working older men. The direction of these shifts suggests that young men are responding to conditions of the labor market which have not always been examined in studies of career development.

When Holland's typology is used to describe and classify job environments, it should generally be elaborated to include distinctions in job level or prestige because other research has shown the types to differ considerably in prestige and general educational development level (L. Gottfredson, in press). Many of the men in this study who changed category of aspiration or job undoubtedly also changed level of aspiration or job. Incorporating level distinctions would also make research with Holland's scheme more comparable with status attainment and other sociological research (Blau & Duncan, 1967) that conceptualizes career development primarily as a competition among different socioeconomic groups for jobs high in the occupational prestige hierarchy.

Vocational psychologists and coun-2. selors have devoted much effort to understanding what makes a wise career choice and how people come (or should come) to make choices before entering the labor market. In contrast, we know little about how people implement career strategies in a world which severely constrains their options, so we now need to look more closely at what actually happens to people after they become employed. Over two decades ago Super (as quoted by Crites, 1978b) stressed the utility of knowledge about career patterns for career counseling and proposed research questions such as the following: What are the typical entry, intermediate, and regular adult occupations of persons

from different socioeconomic levels? What factors are related to the direction and rate of movement from one job or occupation to another? But research attacking such questions in the last two decades has been conducted primarily outside the discipline by sociologists interested in questions of the perpetuation of inequality across generations (e.g., Blau & Duncan, 1967; Lipset & Bendix, 1959; Sewell & Hauser, 1975), and this large literature has only occasionally made its way into the vocational literature (cf. Vetter, 1978). Industrial and organizational psychology, with its focus on designing work systems that promote performance and satisfaction, also appears to be a good source of information about career development. This literature is better integrated into the vocational literature, largely through the writings of Hall (1976; see also Super and Hall, 1978). In the past, vocational counselors and researchers have turned toward other disciplines—particularly to psychotherapy—for insight into the structure of personality and personal adjustment. We now need to take similar advantage of disciplines such as sociology and economics for insight into the structure of the socioeconomic world with which individuals must cope.

The types of opportunities and barriers in the environment that people face during career development should be catalogued and their distribution across different age and social groups systematically examined. Such information is needed for determining a fair or rational allocation of counseling resources—who needs counseling services the most, at what ages or stages in the life cycle, and of what type? We have a lot of information about the demands and reinforcers of individual occupations from trait-factor research in vocational psychology (e.g., Campbell, 1971), from job analyses (e.g., McCormick, Jeanneret, & Mecham, 1972), and from periodic surveys and censuses of the population (e.g., U.S. Bureau of the Census, 1973), although these data are often not organized in the terms most useful to counselors. We have little data by comparison on the availability and location of these different environments. For example, Holcomb and Anderson (1977) discovered

that out of 522 guidance studies between 1971 and 1975, 41 dealt with career information and only 2 of those with job availability. Other constraints which are acknowledged only implicitly in current discussions of counseling should also be catalogued. For example, societal norms about what is appropriate career behavior for different ages or sexes are probably quite strong. Such pressures are implicitly acknowledged in discussions of indecision and of counselors' strategies for reducing the anxiety or guilt of being undecided (e.g., Crites, 1978a)—why would clients feel discomfort or guilt if they were not violating some expectation for their career behavior? Parent-child conflicts in occupational aspirations for the child are also cited as frequent problems. Relevant learning environments—an important focus of Krumboltz's social learning theory of career selection (Krumboltz et al., 1978)—can be expected to differ systematically for the sexes and different ethnic groups. Such differences in learning environments are important partly because they may reinforce race and sex differences in employment. For example, L. Gottfredson (Note 2) has suggested that exposure to a different pattern of occupational environments is partly responsible for black youngsters' adjusting their occupational aspirations toward different families of work than do whites when the youngsters abandon initial unrealistic preferences for professional work. distribution of needs for counseling services should then be compared with the actual distribution of services. It is possible that counseling resources are most available to the most advantaged populations in our society (e.g., more available to college students than to non-college-bound youngsters) and thus to those who may need it least in the competition for jobs.

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