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SOCIAL STATUS AND EDUCATIONAL AND OCCUPATIONAL ASPIRATION *

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UCH of the research on the mechanisms determining the individual's occupational prestige position has been concentrated upon social factors iniluencing achievement motivation.¹ A num-

*This article reports the results of part of a larger project concerning talent loss. The project is under the direction of the senior author and is supported by the Rockefeller Foundation and the Acticultural Experiment Station of the University of Wisconsin. The writers wish to acknowledge the indispensable aid of the Wisconsin Student Counteling Center and the Numerical Analysis Laboraiory of the University of Wisconsin.

¹ See, for example, Russell R. Dynes, et al., Levels of Occupational Aspiration: Some Aspects ¹ Family Experience as a Variable," American ¹ American (1) A School Educational Institutions," in Byron S. Hollingshead, Who Should Go To College, New York: Columbia University Press, 1952, pp. 135-165; Herbert H. Hyman, "The Value Systems of Different Classes: A Social Psychological Contribution to the Analysis of Stratification," in Reinhard Bendix and Scymour Martin Lipset (editors), Class, Status and Power: A Reader in Social Stratification, Glencoe: The Free Press, 1953, pp. 426-442; Harold F. Kaufman, et al., "Problems of Theory and Method in the Study of Social Stratification in Rural Society," Rural Sociology, 18 (March, 1953), pp. 12-24; Seymour Martin Lipset, "Social Mobility and Urbanization," Rural Sociology, 20 (September-December, 1956), pp. 220-228; Sverre Lysgaard, "Social Stratification and the Deferred Gratification Pattern," Transactions of the Second World Congress of Sociology, II, London: The International Sociological Association, 1953, pp. 364-377; Leonard Reissman, "Levels of Aspiration and Social Class," American Sociological Review, 18 (June, 1953), pp. 233-242.

ber of studies show a positive correlation between the youth's levels of educational and occupational prestige status aspirations on the one hand and various measures of the social status of his family.² On the whole, sociologists have attributed this correlation to educational and occupational achievement values that are presumed to be directly influenced by the family's position in the status structure.³ That is, it is supposed that the level of achievement motivation is greatly influenced by the educational and occupational values specific to the status milieu in which he is reared.

Nevertheless, the research evidence in support of this claim is weak in that it has not been based on adequate samples from large populations nor have certain important variables, known to be related to status and aspiration levels, been controlled. In particular, a number of studies have shown that educational and occupational aspiration levels are positively correlated with intelligence,⁴ and others have shown that intelligence is similarly related to social

³ Hyman, op. cit.; Lipset, op. cit.

⁴ Ralph F. Berdie, "Why Don't They Go To College," Personnel and Guidance Journal, 31 (March, 1953), pp. 352-356; Bradley, op. cit.; Carter, op. cit.; Kahl, op. cit.; T. E. Livesay, "Test Intelligence and College Expectation of Ifigh. School Seniors in Hawaii," Journal of Educational Research, 35 (January, 1942), pp. 334-337; T. E. Livesay, "Test Intelligence and Future Vocation of High School Seniors in Hawaii," Journal of Applied Psychology, 25 (December, 1941), pp. 679-686; Porter, op. cit.; Stubbins, op. cit.

status.⁵ On the basis of such studies, it may be reasoned that the apparent effects of parental social status on the youth's levels of aspiration may be due to the common relationship of these variables to intelligence. The democratic ethos notwithstanding, careful studies have shown that in general those of lower intelligence tend to be disproportionately concentrated in the lower social classes; and those of lower intelligence have been shown to have lower levels of educational and occupational aspiration. Thus, the apparent relationship of the youth's educational and occupational prestige aspirations to the values of his social status situation may in reality be a simple reflection of differences in intelligence. Moreover, it is a well known fact that there are gross differences in the occupational and educational aspirations of males and females in our society. Consequently, it would seem necessary to test the relationship between status-

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² William Arthur Bradley, Jr., "Correlates of Vocational Preferences," Genetic Psychology Monographs, 28 (1943), pp. 99-169; Harold D. Carter, "Vocational Interests and Job Orientation," Applied Psychology Monographs, 2 Stanford: Stanford University Press, 1944; Hyman, op. cit.; Joseph A. Kahl, "Educational and Occupational Aspirations of 'Common Man' Boys," Harvard Educational Review, 23 (Summer, 1953), pp. 186-203; Robert Kroger and C. M. Louttit, "The Influence of Father's Occupation on the Vocational Choices of High School Boys," Journal of Applied Psychology, 19 (April, 1935), pp. 203-212; Raymond A. Mulligan, "Socioeconomic Background and College Enrollment," American Sociological Review, 16 (April, 1951), pp. 188-196; J. Richard Porter, "Predicting Vocational Plans of High School Senior Boys," Personnel and Guidance Journal, 33 (December, 1954), pp. 215-218; Joseph Stubbins, "The Relationship Between Level of Vocational Aspiration and Certain Personal Data," Genetic Psychology Monographs, 41 (1950), pp. 327-408.

⁶ Barbara Stoddard Burks, "The Relative Influence of Nature and Nurture on Mental Development," National Society for the Study of Education Ycarbook, 27 (1928), pp. 219-316; J. E. Collins, "Relation of Parental Occupation to Intelligence of Children," Journal of Educational Research, 17 (March, 1928), pp. 157-169; James F. Duff and Godfrey H. Thomson, "Social and Geographic Distribution of Intelligence in Northumberland," British Journal of Psychology, 14 (October, 1923), pp. 192-198; M. E. Haggerty and Harry B. Nash, "Mental Capacity of Children and Parental Occupation," Journal of Educational Psychology, 15 (December, 1924), pp. 559-572; Robert J. Havighurst and Fay H. Breese, "Relations Between Ability and Social Status in a Midwestern Community, III. Primary Mental Abilities," Journal of Educational Psychology, 38 (April, 1947), pp. 241-247; T. M. Livesay, "The Relation of Test Intelligence of High School Seniors in Hawaii to the Occupation of Their Fathers," Journal of Applied Psychology, 25 (August, 1941), pp. 369-377; T. M. Livesay, "Relation of Economic Status to 'Intelligence' and Racial Derivation of High School Seniors in Hawaii," American Journal of Psychology, 57 (January, 1944), pp. 77-82; S. L. Pressey and Ruth Ralston, "The Relation of the General Intelligence of School Children to the Occupation of Their Fathers," Journal of Applied Psychology, 3 (December, 1919), pp. 336-373; Peter Standiford, "Parental Occupation and Intelligence," School and Society, 23 (January 23, 1926), pp. 117--119; William H. Sewell and Bertram L. Ellenbogen, "Social Status and the Measured Intelligence of Small City and Rural Children," American Sociological Review, 17 (October, 1952), pp. 612-616; L. M. Terman and M. A. Merrill, Measuring Intelligence, Bosion: Houghton Mifflin Co., 1937.

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and aspiration separately for the sexes with intelligence controlled.

The purpose of the present article is to present the results of a study testing the general hypothesis that levels of educational and occupational aspiration of youth of both sexes are associated with the social status of their families, when the effects of intelligence are controlled.

PROCEDURE

The general hypothesis was broken down into four specific null hypotheses for testing, as follows:

- 1. Among females, there is no significant association between level of educational aspiration and social status when measured intelligence is controlled.
- 2. Among females, there is no significant association between level of occupational aspiration and social status when measured intelligence is controlled.
- 3. Among males, there is no significant association between level of educational aspiration and social status when measured intelligence is controlled.
- 4. Among males, there is no significant association between level of occupational aspiration and social status when measured intelligence is controlled.

Any tests of the general hypothesis must logically meet a number of conditions. First, they should be restricted to older youth so that the subjects' statements of their aspirations derive from impending decisions, thus omitting the fantasy aspirations of younger persons. Second, they should be limited to youth who have not entered the labor market so as to measure aspirations rather than rationalizations of actual behavior. Finally, they should be performed upon a sample drawn from a large and diverse population, so as to include subjects who vary widely in status and in educational and occupational aspiration.

The data for this study were taken from a one-sixth random sample of all nonfarm seniors in public and private high schools in Wisconsin in 1947-1948.⁶ Students whose parents were farmers were excluded from the analysis because the available information would not permit their classification by status level. Since the 4,167 persons included in the study are all high school seniors, it may be assumed that their statements of aspirations are more nearly devoid of fantasy than at any other time previous to actual labor market entry. Because the sample was randomly drawn from a population in a state with a complex occupational and social structure, it may be assumed that a wide range of status positions and occupational and educational aspirations is represented.

Two dependent variables are used in the analysis: level of educational aspiration and level of occupational aspiration. Data for the dependent variable, educational aspiration, were taken from responses to a series of questions concerning education the student planned to obtain after graduation. The questions asked whether and when the stuplanned to attend college, and, if any, the name of the college. All students definitely planning to enter a regular four-year college program or its equivalent were classified as having high educational aspirations, All others were classified as having low educational aspirations. Data for the second dependent variable, level of occupational aspiration, were taken from a question concerning the vocation the student planned to enter. The responses to this question were assigned actual or interpolated North-Hatt occupational prestige values.7 Using the prestige value of the public school teachers (78 N-H points) as the cutting point, the occupational prestige scores were dichotomized into high and low categories. Persons choosing occupations equal to or higher than public school teachers were considered to have high occupational aspirations, and all others, low occupational aspirations.

Social status, as measured by the prestige of parental occupation, is the independent variable. Data for the assessment of this variable were taken from a question regarding the present occupation of the student's parent. These responses were assigned North-Hatt occupational prestige values, actual or interpolated. The students were then ar-

⁶The data were gathered from the high schools by the Wisconsin Student Counseling Center as a part of a regular program of intelligence testing. The years 1947-1948 were chosen because they are the earliest for which data are available for a projected longitudinal study of educational and occupational behavior.

⁷ National Opinion Research Center, "Jobs and Occupations: A Popular Evaluation," *Opinion News*, 9 (September, 1947), pp. 3-13.

ranged into five equal-sized rank-ordered parental occupational prestige categories. The control variable, measured intelligence, was treated similarly. Data for the latter were taken from scores on the Henmon-Nelson Test of Mental Ability.⁸ The subjects were each placed in one of five equalsized categories rank-ordered from highest to lowest intelligence. Because there was variation in the number of cases for which there were pertinent data on the several variables involved, rankings on social status and intelligence were made separately for As the table shows, the proportion intending to go to college varies systematically both with social status (reading row-wise) and with measured intelligence (reading column-wise). The hypothesis is tested by computing and summing five independent chi-square values and the degrees of freedom from the data presented in Table 1, one chi-square with four degrees of freedom within each of the five intelligence categories.⁹ The effects of intelligence on levels of aspirations are thus statistically controlled by an over-all test based upon chi-square

 TABLE 1. PER CENT WITH HIGH-LEVEL EDUCATIONAL ASPIRATIONS BY PARENTAL OCCUPATIONAL PRESTIGE

 Status and Intelligence: Females

 .	Parental Occupational Prestige Status Quintiles								
Intelligenc e Quintiles	V (N-H: 93-72)	IV (N-H: 72-67)	III (N-H: 67-60)	II (N-H: 60-55)	I (N-H: 55-37)	Cent (N)			
v									
(IQ: 139-118) IV	. 84	70	60	47	40	65 (463)			
(IQ: 118-112) III	72	53	37	48	34	49 (463)			
(IQ: 112-107) II	46	42	36	33	26	36 (463)			
(IQ: 107–101) I	50	35	28	23	23	30 (463)			
(IQ: 101-65) Total	23	27	21	13	8 .	18 (463)			
Per cent (N)	62 (463)	45 (463)	36 (463)	28 (463)	27 (463)	40 (2315)			

each null hypothesis tested. The IQ and N-H quintiles for each table have overlapping values; persons with these values were proportionately assigned to the appropriate quintile.

RESULTS

The first null hypothesis, that among females there is no significant association between level of educational aspiration and social status when intelligence is controlled, is tested by data presented in Table 1. The entry in each cell of the table is the percentage of females of a specific level of measured intelligence and a specific social status level who have high level educational aspirations, i.e., that intend to go to college. values calculated for each level of intelligence. This procedure is illustrated by the data in Table 1. For Intelligence Quintile V (IQ V), the chi-square of parental occupational prestige status on level of educational aspiration is $\chi^2_{o(4)} = 52.80$; for IQ IV, $\chi^2_{o(4)} = 38.05$; for IQ III, $\chi^2_{o(4)} =$ 10.39; for IQ II, $\chi^2_{o(4)} = 13.61$; and IQ I, $\chi^2_{o(4)} = 18.02$. Summing these component χ^2 values, $\chi^2_{O(20)} = 132.87$. Comparing this with the critical value of χ^2 at the .05 probability level, $\chi^2_{o(20)} = 132.87 > \chi^2_{t(20)}.05 = 31.41$. This means that the first null hypothesis must be rejected. The direction of the relationship as indicated by the

⁸ V. A. C. Henmon and M. J. Nelson, *The Henmon-Nelson Test of Mental Ability*, Chicago: Houghton Mifflin Company (1942).

⁹ George W. Snedecor, Statistical Methods, 4th ed. Ames: Iowa State College Press, 1946, pp. 188-189; G. Udny Yule and M. G. Kendall, Introduction to the Theory of Statistics, 13th ed., rev. London: Charles Griffin and Company, 1948, p. 426.

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changes in the percentages of each row, shows that at all intelligence levels females from high status families are more likely to have high level educational aspirations than are those from lower status families. It is concluded that among females, there is a significant positive relationship between level of educational aspiration and parental social status. This relationship is independent of any correlation between intelligence and either of these variables. dicates that females from high status families^{*} more frequently choose high level occupations than do those from families of lower status, but the relationship is not so consistent as was the relationship between status and aspiration to attend college. However, it may be concluded tentatively that among females there is a positive relation of level of occupational aspiration to parental social status when intelligence is controlled.

	Parental Occupational Prestige Status Quintiles								
Intelligence Quintiles	V (N-H: 93-72)	IV (N-H: 72-67)	III (NH: 6760)	II (N-H: 60-55)	I (N-H: 55–39)	Cent (N)			
v			· · ·	· · · · · · · · · · · · · · · · · · ·					
(IQ: 139–118) IV	49	40	35	32	33	40 (371)			
(IQ: 118-113) III	39	36	33	35	30	35 (371)			
(IQ: 113-108) II	28	35	27	25	13	26 (370)			
(IQ: 108–102) I	35	19	24	21	20	23 (370)			
(IQ: 102-65) Total	25	21	13	15	11	16 (370)			
Per cent (N)	39 (371)	31 -(371)	27 (370)	24 (370)	20 (370)	28 (1852)			

 TABLE 2. PER CENT WITH HIGH-LEVEL OCCUPATIONAL ASPIRATIONS BY PARENTAL

 OCCUPATIONAL PRESTICE STATUS AND INTELLIGENCE: FEMALES

The same routine is used to test the second null hypothesis that among females there is no significant association between level of occupational aspiration and social status with intelligence controlled. (See Table 2.) The results indicate that there is no significant relationship between level of occupational aspiration and social status when intelligence is controlled: $\chi^{2}_{o(20)} = 29.95 <$ 3^{2} (20).05 = 31.41. However, the table indicates that this may be due to the fact that there is little difference in the occupational appiration level of the girls of a given intelligence level in each of the three lower tatus categories. This has the effect of using up 15 degrees of freedom without accounting for much variation. For this reason the lachest two and the lowest three status statiles were combined and the hypothesis to retested. In this case, $\chi^2_{0(5)} = 16.95 >$ et 4.05 mm 11.07. On the basis of this evisince the null hypothesis may be rejected. V in the direction of the relationship in-

The third null hypothesis is tested by data on males presented in Table 3. Here again high level educational aspirations or college plans are most characteristic of those from high status families and of those of high intelligence. Ninety per cent of the subjects of high status and high intelligence plan to attend college, and 32 per cent of the subjects of low status and low intelligence plan to attend college. The null hypothesis is tested in the same way as before. In this case, $\chi^2_{o(20)} = 65.51 > \chi^2_{t(20)}.05 =$ 31.41, which indicates that the hypothesis of no association between educational aspiration level and social status must be rejected when the educational aspiration effects of intelligence are controlled. Exami-, nation of each row from left to right, column by column, shows that the high status categories consistently have the highest proportion of those planning to attend college. Thus, with the present data, it is not possible to refute by controlling intelligence the

	Parental Occupational Prestige Status Quintiles									
Intelligence Quintiles	V (N-H: 93-72)	IV (N-H: 72-67)	III (N-H: 67-60)	II (N-H: 60-55)	I (N-H: 55-39)	Cent (N)				
v										
(IQ: 139-119) IV	90	79	79	71	66	79 (384)				
(IQ: 119–113) III	71	70	53	57	61	63 (384)				
(IQ: 113-109) II	58	62	51	55	43	54 (383)				
(IQ: 109-102) I	66.	45	32	41	24	40 (383)				
(IQ: 102–59) Total	34	35	23	26	32	30 (383)				
Per cent (N)	68 (384)	.59 (384)	47 (383)	48 (383)	43 (383)	53 (1917)				

TABLE 3.	PER	Cent	WITH	HICH-L	EVEL E	DUCAI	TIONAL	ASPIRATI	IONS 1	₿Y	PARENTAL
	Occ	UPATIC	DNAL B	RESTICE	Status	AND	INTEL	LIGENCE:	Mal	ES	

hypothesis of a direct positive relationship of educational aspiration level with social status among males.

The fourth hypothesis is tested by the data in Table 4. Testing the null hypothesis as before, $\chi^2_{o(20)} = 53.73 > \chi^2_{t(20)} .05 = 31.41$. According to the standard followed in the present study, the null hypothesis must be rejected. In this table, as in earlier ones, a study of the direction of percentage changes in each intelligence category shows that those from families of higher social status are more likely to have high level occupational aspirations than are those of lower status families. Therefore, it must be concluded that among males the apparent positive rela-

tionship of level of occupational aspiration to parental social status cannot be accounted for by controlling measured intelligence.

SUMMARY AND CONCLUSIONS

In summary, four tests have been made of the hypothesis that levels of educational and occupational aspiration of youth are not associated with the social status of their families when the effects of measured intelligence are controlled. On the basis of these tests, it must be concluded that the apparent effects of social status on levels of educational and occupational aspiration are not simply due to the common relationship of these variables to intelligence, although in-

TABLE	4,	Per	Cent	WITH	HIGH-LI	evel Oc	CUPA	TIONAL	ASPIRAT	IONS	BY	PARENTAL
		000	CUPATI	onal]	PRESTICE	STATUS	AND	INTELI	IGENCE:	MAL	ES	

	Parental Occupational Prestige Status Quintiles									
Intelligence	V	IV	III	II	I	Cent				
Quintiles	(N-H: 93-73)	(N-H: 73-67)	(N-H: 6760)	(N-H: 60-55)	(N-H: 55-39)	(N)				
v					<u> </u>					
(IQ: 139-119) IV	84	48	55	64	45	63 (278)				
(IQ: 119-113) III	54	51	51	37	35	45 (278)				
(IQ: 113–109) II	41	42	43	29	32	37 (278)				
(IQ: 109–103) I	45	36	21	27	22	29 (278)				
(IQ: 103–59) Total	25	19	16	18	17	18 (277)				
Per cent (N)	57 (278)	38 (278)	36 (278)	33 (278)	27 (277)	39 (1389)				

telligence is related to both types of aspirations.¹⁰ This conclusion is specific to persons

1º Following the procedure used in testing the hypotheses in the body of this article, chi-square values were computed so as to test within each sex category the association of levels of educational and occupational aspiration to measured intelligence with social status controlled. One such test was made for each of the four tables in the article. The results of these tests are as follows. Table 1: instance the null hypothesis must be rejected. Thus, for the present study, it is concluded that within either sex group, levels of educational and occupational aspiration are associated with measured intelligence when social status is controlled. This finding corroborates previous research concerning the relationship of levels of educational and occupational aspiration to intelligence (see note 4).

from nonfarm families. Within this group, however, the relationship of level of aspiration to social status with intelligence controlled holds for both sexes and for both educational and occupational aspirations. Because the sample was drawn randomly from a broad population of high school seniors (the entire state of Wisconsin), and because the effects of measured intelligence and sex were controlled, the present tests lend support to the sociological claim that values specific to different status positions are important influences on levels of educational and occupational aspiration. This does not deny the importance of intelligence to educational and occupational aspirations, but suggests that status makes an independent contribution to these aspirations.