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EDUCATIONAL OPPORTUNITIES AND OCCUPATIONAL ASPIRATIONS: A TWO-DIMENSIONAL APPROACH

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This article proposes that the study of early career formation has failed to notice that inequalities in educational opportunities may generate alternative patterns of occupational aspirations. In particular, standard scales of aspirations cannot identify the economically ambitious who aim at occupations that generate high income but require low education. This type of ambition is likely when schooling cannot function as an effective means of mobility. To examine this proposition, the authors constructed a scale that captures this dimension and used it, together with the standard scale, to study the occupational aspirations of high school students in Israel. The results show that the aspiration levels for the two dimensions are affected by individual (gender) and institutional (tracking) factors.

Much of the literature on the earlier determination of social mobility has emphasized the role of schooling in this process, especially during the formative years of high school. This literature can be broadly distinguished in terms of two major approaches: the status-attainment model, which is grounded in the tradition of the functional school (Knottnerus 1987; Sewell and Hauser 1975) and the structuralist approach, which, despite its many variations,¹ shares the assumption that the educational system should be conceived mainly as an agency of social control.

ASPIRATIONS AND OPPORTUNITIES

One of the clearest manifestations of the differences between the two approaches is the relationship between career opportunities and

aspirations. In the framework of the status-attainment model, particularly as developed by Sewell and his colleagues, levels of educational and occupational aspirations tend to develop mainly on the basis of academic performance and interpersonal influences. Because of this linkage, levels of aspiration are likely to be translated into actual levels of educational attainment and, ultimately, into levels of socioeconomic achievement. In short, according to this model, aspirations constitute a critical intervening variable in the determination of opportunities in the labor market.

This conceptualization has been challenged by the structuralist perspective, which assumes a reversal in the causal order between opportunities and aspirations. Consistent with its critical view of the educational system, this perspective calls attention to various institutionalized mechanisms, such as tracking, that have been developed by that system to fulfill its function as a guardian of the status quo. This task involves complex processes of screening, selection, and classification that generate large differentials in the expectations for and attainment of levels of schooling and credentials. In short, the structuralist approach maintains that the opportunity structure is already shaped by the system of education and that this system is largely responsible for systematic variations in educational aspirations and achievement (Alexander, Cook, and McDill 1978; Heyns 1974; Hout and Garnier 1978; Kerckhoff 1976; Rosenbaum 1975; Shavit and Williams 1985).

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¹ In the framework of the structuralist approach, we can point to Collins's (1979) neo-Weberian theory of credentialism, the Marxist approach of Bowles and Gintis (1976), and the cultural capital approach of Bourdieu (1977). In spite of the variations among these approaches, they all emphasize structural factors in the analysis of educational systems.

Notwithstanding the sharp differences in explanatory schemes, it must be recognized that both approaches are nevertheless alike in their emphasis on the primacy of schooling as a determinant of career opportunities in the labor market. Such an emphasis seems highly warranted, given the empirical support it has received from the well-established relationships between levels of education and occupational status, on the one hand, and between the former variables and income levels, on the other hand (see, for example, Duncan, Featherman, and Duncan 1972; Hauser and Featherman 1977; Kalleberg and Griffin 1980; Robinson and Kelley 1979). The implications of these observations are obvious: Those who do not acquire the proper dose of schooling are most likely to occupy the lower positions of the socioeconomic hierarchy.

However, despite the importance of schooling and its underlying processes, it should be realized that the labor market does not respond uniformly to the educational credentials of its members. Along with the familiar high regard for such assets, the labor market contains various segments and positions that are highly rewarding socially and economically, yet undemanding educationally. A typical example is the self-owned enterprise, in which neither the ownership nor the operation of the business necessarily require high levels of education as much as they do other types of human capital, especially entrepreneurship.

Perhaps the most significant consequence of this reality is the availability of alternative ways of achieving socioeconomic mobility that may bypass the central avenue of schooling. These alternatives may offer some unique opportunities for social mobility, especially for those who lack educational attainment (Yuchtman-Yaar 1985).

A relevant issue that follows from this observation is the stage at which people become aware of such alternatives. On the one hand, it is possible that the realization of these opportunities usually occurs only upon or after entrance to the labor market, following the better acquaintance with the market on the basis of personal experience. On the other hand, it is possible that such an awareness already begins at the earlier stage of schooling through informal networks of information. Students may acquire knowledge of the characteristics of occupations through information they receive at home and at

school, as well as through the media, personal acquaintances, and other sources of communication. Obviously, we do not refer here to exact information on the nature of educational requirements and the income level attached to each occupation. However, it is likely that high school students acquire some generally valid knowledge about the realm of occupations, including the educational requirements and the income levels associated with them.

In this case, it seems reasonable to expect that the utilization of alternative channels will be attractive to certain groups of students, especially those who realize that the opportunities to pursue their career ambitions via higher levels of education are limited. Such a realization is likely to become particularly salient following the activation of ability grouping and curricular tracking, the practice of which is most clearly exemplified by the Israeli system of secondary education.

This system has a long tradition of using the mechanisms of grouping and tracking to separate students into different types and levels of educational programs, presumably on the basis of individual differences in cognitive skills and intellectual capacity (Shavit 1984; Yogev 1981; Yogev and Ayalon 1986; Yuchtman-Yaar and Samuel 1975). This separation typically results in the placement of students in one of two distinct types of high school: academic or nonacademic (vocational or commercial). Those who are selected for the academic type are considered worthy of the prize of higher education and thus receive a college preparatory curriculum. Those who are placed in the nonacademic type are expected to terminate their formal education at the end of high school. Their curriculum is oriented, therefore, toward some kind of vocational training to facilitate their entrance to the labor market.

This brief account may suffice to suggest the potential for a differential impact of tracking on the nature of occupational aspirations. Specifically, it seems reasonable to expect that the more ambitious students in academic high schools would attempt to exploit their advantage in the acquisition of educational assets to have access to occupations for which such assets are necessary, but that ambitious students in nonacademic tracks, being educationally disadvantaged, would attempt to advance through educationally nondemanding occupations.

In the empirical part of this article, we

examine these hypotheses in a population of junior and senior high school students in Israel. However, before turning to this examination, it is necessary to address a major methodological problem that bears directly on the possibility of testing these hypotheses at the empirical level.

METHODOLOGICAL CONSIDERATIONS

Occupational aspirations have been traditionally assessed according to two related and well-known scales of occupational status and prestige (see, for example, Haller and Miller 1971; Marini 1978; Sewell and Hauser 1975; Sewell, Hauser, and Wolf 1980). For the purpose of our discussion, it is important to note that the ordering of occupations on these scales reflects essentially the additive combination of the educational and income levels of occupations. Hence, aspirations are more likely to score higher to the extent that the occupations aspired to are associated with higher levels of *both* education and income. Furthermore, the additive nature of these scales does not allow one to distinguish among qualitatively different combinations of education and income that generate the prestige, or status, scores of occupations. For example, occupations characterized by low levels of education and high levels of income will generally be given the same prestige score as occupations having medium levels of income and education. Thus, students who prefer occupations that maximize economic gains and minimize educational requirements will not be regarded as particularly ambitious, according to the standard yardstick of levels of aspiration.

What follows from this discussion is the need for an additional measure that will make it possible to capture this pattern of ambition as well. The logic of such a measure should be based on the scaling of occupations according to relative amounts of education and income, as follows: The greater the amount of income relative to the amount of education associated with an occupation, the higher its hierarchical position. The substantive difference between such a scale of "economic return"² and the standard scale of occupational status or pres-

tige can be readily seen from the following example: Suppose that two occupations, A and B, generate the same amount of income, but that occupation B is characterized by a higher level of education than is occupation A. According to the status scale, occupation B will score higher than occupation A, whereas in terms of the scale of economic return, the latter will get a higher score than the former.

A question that might arise at this point is, What is the substantive meaning of the new scale? Clearly, the scale is not measuring income aspirations per se, since it taps income relative to educational investment. A simpler measure, such as the median or the average income of the aspired occupation, would have been inappropriate in the present context. Such a measure would tap aspirations for economic success disregarding the educational component of occupations, while our purpose was to identify aspirations for those occupations that are capable of generating high income despite relatively low levels of education. In other words, it was by ordering occupations on the basis of income relative to education that we could explore the potential existence of aspirations for alternative channels of social mobility.

The incorporation of such a scale, along with the standard one, would make it possible, then, to assess levels of aspiration with respect to two independent hierarchies: (1) a prestige hierarchy, in which the position of occupations varies positively with their economic as well as their educational levels, and (2) an economic-return hierarchy, in which the position of occupations varies positively with their income level and negatively with their educational level.

As the first step in the construction of this scale, we calculated a regression equation that allows the estimation of the monthly average income of occupations on the basis of the average educational level associated with them. The data for this calculation were available from the standard manpower surveys conducted by the Israeli Bureau of Statistics in 1974. Using a two-digit classification that yields a total of 99 occupational titles, the following regression equation was obtained:

$$\hat{y}_i = 508.48 + 86.132x_i$$

where: \hat{y}_i = expected income and x_i = average number of years of schooling.

² We are aware of the fact that our definition of economic return differs from the more common specification of that concept, which is based on the b value of the proper regression equation.

On the basis of this equation, we calculated for each occupation the residual value ($y_i - \hat{y}_i$) where y_i = actual income level of an occupation. The difference between y_i and \hat{y}_i indicates the gap between actual and expected levels of income; a negative value means that the actual level is lower than the expected level, whereas a positive value indicates a higher actual-than-expected income level.

It should be noted that, being a residual, the property of this measure is such that the probability of obtaining either positive or negative scores is independent of the educational level of occupations. Furthermore, keeping in mind that the scale of economic return is based on the ordering of occupations according to the amount of income relative to the level of education, while the prestige scale is based on ordering them according to the additive combination of these parameters, it follows that the two scales are mutually independent. Indeed, the product-moment correlations between them was found to be .07. This independence can be readily observed through the statistics in Table 1, which show that the occupations yielding positive scores are virtually identical to those having negative scores with respect to the means and standard deviations of years of schooling. The independence of the two scales allows the identification of different patterns of ambition, such as the types shown in Figure 1. In Figure 1, Type A represents an all-out ambition directed to maximize prestige as well as economic return. Type B is as concerned with prestige as is Type A but lacks the latter's desire for money. Such a desire is shared by Type C, except that this type is exclusively concerned with income, disregarding the value of prestige; this type generates the pattern of mobility that may bypass schooling. Finally, Type D is the opposite of Type A, lacking ambition with respect to both income and prestige.

These schematic types do not reflect, of course, the variations among real configurations of occupational aspiration. Nevertheless, they seem to clarify the conceptual

Table 1. Mean Educational Level (Years of Schooling) of Occupational Groups

	Mean	SD	N
Positive Return	10.97	3.38	47
Negative Return	10.90	3.58	52

	Economic Return	
	High	Low
Occupational	A	B
Prestige	C	D

Figure 1. Different Patterns of Ambition

distinction between the two measures, which are examined empirically in the next section.

THE STUDY

Procedure

The population of the study consisted of the junior and senior high school students in a small town in Israel. Thanks to the cooperation of the school's authorities, we were able to administer standardized questionnaires to the students during special class hours. This procedure ensured the inclusion of almost the entire population (94 percent), except for those who were absent on the day of the investigation. Altogether, we obtained information from 603 students, 431 from the junior high school and 202 from the senior high school.

The variables selected for analysis were as follows:

Sex, coded 0 for girls and 1 for boys.

Age, from 13 to 15 years and from 16 to 18 years in the junior and senior high school cohorts, respectively.

Socioeconomic background (SEB), a weighted index composed of parental education, father's occupational prestige, and household density.³

Individual academic performance (IAP), the standardized average grade of the student in his or her class.

Ability grouping (AG), a continuous vari-

³ The variables that constitute the index were operationally defined as follows: Parents' education was measured by years of schooling. For father's occupational prestige, we employed Hartman's scale of occupational prestige for Israel (Hartman 1979). Household density was obtained by dividing the number of family members by the number of rooms in the household. The index was based on the sum of standardized scores for the four components, weighted by their factor loadings, which were obtained by factor analysis (using the principal factor method).

able that pertains to junior high school students only and reflects the average grouping level of these students.⁴

Educational track, coded 2 for academic and 1 for nonacademic high schools, respectively.

Significant others' influence (SOI), an index measuring the extent to which the student is encouraged by others who are significant to him or her—parents, peers, and teachers—to obtain a postsecondary education.⁵

Occupational aspirations, the occupational title given by students in response to the question: "What is the occupation you most desire to have?" In accordance with the preceding discussion, each occupation was coded twice: once in terms of prestige and once in terms of economic return. The scales generated by these codings were the dependent variables in the analysis.

Results

The first set of findings contains the results of regression analyses that were obtained for the two dependent variables in the junior high school and senior high school cohorts (see Table 2). (The descriptive statistics and correlational matrices pertaining to the variables involved in these analyses are presented in Tables 3 and 4.)

⁴ The students are grouped according to their scholastic aptitude in four subjects (mathematics, Hebrew, English, and natural studies). In each subject, there are four ability levels, ranging from 1 (lowest level) to 4 (highest level). The variable is defined as the simple mean of the ability levels in the four subjects. The activation of grouping at the junior high school level represents the first major stage of institutional intervention in the educational destination of high school students. The subsequent separation of students according to track, which takes place toward the transition to senior high school, is strongly influenced by the group level to which they have been assigned (Shavit and Williams 1985; Yogev 1981).

⁵ The index is similar to those used in the framework of the status attainment model (Sewell, Haller, and Ohlendorf 1970; Sewell, Haller, and Portes 1969). Accordingly, students were asked to indicate if they were encouraged to continue at higher levels of education by (1) parents, (2) teachers, and (3) close friends. For both cohorts, the index was computed as a simple mean of the three items.

The most salient findings of the regression analyses pertain to the contrasting effects of gender and tracking on the two measures of aspiration. When assessed with respect to the scale of economic return, aspirations appear to be influenced mostly by gender. Conversely, when indexed in terms of occupational prestige, they are more strongly affected by tracking. These results testify to the differential meaning of the two measures of aspirations and to the usefulness derived from their simultaneous application. Thus, had we employed only the standard measure of occupational aspirations, we would have come to the conclusion that girls are as ambitious as boys, since they prefer occupations that have, on the average, the same level of prestige. However, the results for the second measure show that when it comes to considerations of monetary return, boys manifest much greater ambition than do girls.

This tendency can be seen most clearly from the mean scores of the two groups on the measure of economic return. Among the junior high school students, the scores for boys and girls were 210.58 ($SD = 428.33$) and -312.55 ($SD = 421.57$), respectively. The corresponding figures for the senior high school cohort were 105.94 ($SD = 18.22$) and -339.72 ($SD = 392.66$). These findings demonstrate that the gender differences on this dimension of aspirations are meaningful in relative as well as absolute terms. Thus, boys tend to target occupations that yield a higher return than expected relative to education, whereas the occupations preferred by girls are associated with returns that are lower than expected.

It seems worthwhile to note that the patterns of aspirations that were obtained for boys and girls in the study are compatible with the reality of sex-role differentiation in the labor market. On the one hand, women tend to have the same level of occupational status as do men (England 1979, Treiman and Terrell 1975). On the other hand, women are grossly underrepresented at the higher levels of earned income from jobs (Bridges 1980; Roos 1981; Rosenfeld 1980; Semyonov and Kraus 1983). The findings of this study suggest, then, that the occupational aspirations of females seem to anticipate this reality at the earlier stage of junior high school.

One question that may be raised at this point is that of the link between the score of an occupation on the scale of economic return and its gender composition. It has already

Table 2. Regressions of Prestige Level and Economic Returns of the Aspired Occupations for the Two Cohorts: Standardized Coefficients

Independent Variables	Economic Return		Prestige Level	
	Junior High School Cohort	Senior High School Cohort	Junior High School Cohort	Senior High School Cohort
SEB	.00	-.05	.09	.01
Age	-.05	-.14 ^a	-.07	.02
Gender	.53 ^a	.40 ^a	-.06	.16 ^a
AG/track	.05	-.13	.19 ^a	.59 ^a
Grades	.03	.14 ^a	.11 ^a	.04
SOI	.01	-.02	.18 ^a	.08
R ²	.29	.30	.20	.36

^a *b* is more than twice its standard error.

been established that the income level of an occupation and the economic returns attached to it are highly correlated with its gender composition (see, for example, England, Chassie, and McCormack 1982). This link was redemonstrated in our findings: The correlation between the score of an occupation in the scale of economic return and its percentage of male workers is as high as .60. Hence, our findings may be interpreted as another indication of a well-known phenomenon: The sex typing of occupations is a central factor in the formation of adolescents' vocational aspirations (see, for example, Marini and Greenberger 1978). Being aware of the possibility of this interpretation of our findings, we shall come back to it in the course of our empirical analysis.

Turning now to the institutional factors of ability grouping and tracking, one may notice that the direction of their influence is consistent with the expected consequence of such interventions: Students placed in educationally superior contexts tend to develop higher levels of aspiration with respect to

educationally demanding occupations. However, considering the strength of these influences, it appears that the effect of tracking in the senior high school cohort is much greater than the effect of grouping in the junior high school cohort.⁶ There are two related reasons for this difference:

1. The separation of students into academic and nonacademic programs at the senior high school level is more decidedly consequential for the formation of their career plans because of the sharp differences in curriculum, social composition, and overall educational climate. These factors facilitate the comprehension among students of the kind of occupational career for which they are prepared according to the tracks to which they have been assigned.

2. The activation of tracking takes place at an older age when students come closer to the time when they will have to plan their careers. It seems reasonable to assume,

Table 3. Means and Standard Deviations for All the Variables: Both Cohorts

Variables	Junior High School Cohort		Senior High School Cohort	
	\bar{X}	SD	\bar{X}	SD
Age	14.05	.99	16.73	.83
Gender	.46	.50	.42	.49
SES	-.00	1.49	.00	1.55
Grades	-.00	.98	-.01	.94
AG	2.76	1.11	—	—
Track	—	—	1.33	.94
SOI	2.51	.51	1.87	.71
Prestige	63.64	17.66	67.43	18.18
Return	-88.96	495.37	-161.96	457.60

⁶ Tracking and ability grouping are measured in different scales. Hence, the comparison of *b* values is inappropriate. Usually, comparison of β values may be misleading because of the sensitivity of this parameter to the variances of the variables. However, the possibility that the substantial gap between β values is due solely to difference in variances seems exaggerated, when compared with the almost equal variances of occupational aspirations in both groups, on the one hand, and the relatively small difference in the coefficients of variability of grouping and track, on the other hand (see Table 3). In any case, tracking is, obviously, the dominant factor in the equation of the senior high school cohort, while AG is as important as SOI in the determination of the level of prestige of the aspired occupations in the junior high school cohort.

Table 4. Product-Moment Correlation Coefficients among the Variables^a

	Gender	Age	SES	AG	Grades	SOI	Prestige	Return
Gender	—	-.06	.07	-.13	-.03	-.23	-.13	.52
Age	-.16	—	-.13	-.18	.00	-.21	-.16	-.08
SEB	-.08	.17	—	.22	.08	.21	.20	-.03
Track	-.23	.00	.17	—	.10	.46	.35	.01
Grades	.13	.05	.09	-.04	—	.22	.24	-.04
SOI	-.39	.04	-.16	.26	-.02	—	.33	-.07
Prestige	.02	.04	.11	.57	.04	.15	—	.07
Economic Return	.48	-.20	-.08	-.24	.19	-.20	-.08	—

^a The coefficients for the junior high school cohort are above the diagonal and those for the senior high school cohort are below the diagonal.

therefore, that the implications of placement are more fully understood and more seriously taken at the senior than at the junior high school level.

This line of reasoning is supported by the findings of the effects of SOI, which are significant at the junior high school but not at the senior high school level. Replicating the results of previous research on this factor in Israeli society, these findings are consistent with the argument that the effects of SOI become less relevant toward the end of high school, since, by that time, the accumulated consequences of ability grouping and curricular tracking severely constrain the students' range of occupational choices (Yogev 1981; Yuchtman-Yaar and Samuel 1975).

Of the three remaining independent variables, SEB did not exert direct effects on either measure of aspirations. This finding is probably due, in part, to the relatively low socioeconomic status of the town's population⁷ and in part to some overlap between this measure and those of grouping and tracking. The findings with respect to age

apparently reflect its restricted range in both cohorts, whereas the negligible influence of academic performance is probably due to the fact that much of its variation is already captured by the consequences of grouping and tracking.

Taken together, the results of Table 2 are instructive mostly in demonstrating the contribution made by the incorporation of a distinct dimension of economic return to the study of occupational aspirations. However, these results do not provide evidence to support the hypothesis concerning the differential influence of tracking on aspirations.

According to that hypothesis, it was expected that the academic track would encourage higher levels of aspiration for prestige, whereas the nonacademic track would enhance economic aspirations. What we found, instead, is confirmation only for the first type of influence. In other words, students in the nonacademic high school do not score higher on the scale of economic return.

These results, together with the finding on the greater economic ambition of boys, led us to suspect the existence of an interaction between tracking and gender so that the anticipated influence of the nonacademic track applies mostly to boys. To examine the possibility of such an interaction, we created four dummy variables, based on the combinations of tracks and gender. The means of the two measures of aspirations pertaining to each combination are presented in Table 5.

The most salient result indicated by the comparison of these means was the uniqueness of economic considerations among boys in the nonacademic track. Not only did these boys exhibit the highest level of aspirations for economic return, but they were the only group whose score on that scale was positive.

⁷ The population of the town, which belongs to a category of urban settlements known in Israel as "development towns," is characterized by relatively low levels of education, occupational prestige, and income (on development towns, see, for example, Borukhov and Werczberger 1980; Semyonov 1981; Spilerman and Habib 1976; Yuchtman-Yaar and Heller 1977). These characteristics largely reflect the fact that the community consists mainly of new immigrants of Middle Eastern and North-African origin (about 95 percent of the students in our sample are of that origin, which prevented us from referring to ethnic origin in our analyses). The latter constitute an ethnic group of lower prestige and lower socioeconomic position in Israeli society (Ginor 1983; Peres 1985; Rosenstein 1981; Smootha 1978, 1984; Yuchtman-Yaar 1985).

Table 5. Means and Standard Deviations (in parentheses) of the Two Measures of Aspirations for the Gender and Track Combinations

Gender and Track Combinations	Occupational Prestige	Economic Return
Vocational track boys	61.90 (16.28)	182.93 (359.08)
Vocational track girls	58.37 (12.59)	-319.89 (360.01)
Academic track boys	90.85 (12.98)	-126.69 (535.47)
Academic track girls	79.21 (15.48)	-356.78 (435.22)

In contrast, the same group's aspirations for prestige were far beneath those of students in the academic track, regardless of their gender. Girls in the nonacademic track exhibited lower levels of aspiration on the scales of both prestige and economic return. Girls in the academic track, however, though similar to those in the nonacademic track with respect to economic aspirations, scored much higher than the latter on the scale of prestige. Indeed, their score on this measure was higher than that of boys in the nonacademic track.

The pattern revealed by these means suggests that, as expected, gender and track interacted with respect to the scale of economic return so that the boys in the nonacademic tracks had distinctively high

levels of aspirations. In addition, another gender-and-track interaction appeared with respect to the scale of prestige, in which gender differences in the academic track appeared to be considerably larger than the corresponding differences in the nonacademic track.

These observations invite the performance of additional regression analyses that incorporate interaction terms based on the foregoing track-and-gender combinations. The regression equations are presented in Table 6.

As can be seen from Table 6, a substantial track-gender interaction effect is revealed in the equation pertaining to economic return. Boys in the vocational track expressed remarkably high economic aspirations. The main effect of gender, the central factor before the incorporation of the interaction terms, is secondary and reaches only the threshold of statistical significance. In contrast, the inclusion of the interaction term in the prestige equation produces only minor changes. The centrality of tracking remains straightforward, indicating that students in the academic track, regardless of their gender, aspired to the more prestigious occupations. The only interaction term with non-zero effect ("academic track boys") is marginal in terms of both magnitude and statistical significance. However, its inclusion reduced the main effect of sex.

Table 6. Regressions Equations Predicting Economic Return and Prestige Level of the Aspired Occupation, Metric (*b*) and Standardized (β) Coefficients

Independent Variables	Economic Return		Prestige Level	
	<i>b</i>	β	<i>b</i>	β
SEB	-19.08	-.06	.67	.05
Age	-75.06 ^a	-.14 ^a	.99	.04
Grades	69.02 ^a	.14 ^a	.84	.04
SOI	2.29	.01	1.21	.06
Sex	205.33 ^b	.22 ^b	4.00	.10
Track	26.57	-.03	22.07 ^a	.55 ^a
<i>Gender and track combinations^c</i>				
Vocational track boys	266.02 ^a	.26 ^a	.00	.00
Academic track boys	.00	.00	2.73 ^b	.13 ^b
Academic track girls	.00	.00	.00	.00
<i>R</i> ²	.31		.41	
<i>a</i>	930.08		38.59	

^a *b* is more than twice its standard error.

^b *b* is almost twice its standard error.

^c The combination of gender and track forms four dummy variables. For example, in vocational track boys, those who belong to that category are coded 1; otherwise 0. The additional combinations are coded similarly. Vocational track girls was omitted from the analysis and hence serves as the base for comparison.

These findings demonstrate that the levels and types of occupational aspirations, as indexed by the two measures, are determined by different patterns of influence. The nature of these influences suggests that high school students tend to develop aspirations in accordance with their opportunity structure. Thus, boys in the vocational tracks, on the one hand, seemed to cope with their condition by focusing on occupations that are characterized by relatively high levels of income and low levels of education. On the other hand, students of either sex in the academic track tended to conform to the type of mobility expected of them, by targeting occupations with higher levels of both income and education. In other words, the first group gave priority to the economic utility of occupations, whereas the second one was oriented to the prestige value of occupations. Finally, the observation that girls in the nonacademic track were the least ambitious of the four groups is probably an expression of their double disadvantage in terms of their gender and the track in which they were placed.⁸

SUMMARY AND DISCUSSION

In this article we have argued against the unidimensional approach prevailing in the study of occupational aspirations. According to this approach, aspirations are indexed by

⁸ As noted, gender differences in the nonacademic track could have been interpreted in light of the youths' tendency to develop preferences according to the sex typing of occupations, rather than as an expression of a gender-differential attitude toward economic success. To examine the validity of the alternative interpretation, we performed additional regression analyses. These regressions are identical to those described in Table 1 in all aspects but one: they include control for the sex ratio of occupations (defined by the percentage of males in the occupations). The introduction of the control indeed caused some reduction in the effect of gender; the β coefficient was reduced to .14 in the junior high school cohort and to .27 in the senior high school cohort, but it remained statistically significant. Control of the sex ratio of occupations in the analyses that included interaction terms (parallel to Table 6) brought about similar results. The control caused a reduction of the effect of "vocational track boys" in the equation pertaining to economic return, but the effect remained highly significant.

the prestige or status levels of the occupations aspired to. Since such scales reflect the additive combination of income and educational levels of occupations, they are biased against aspirations that are directed toward occupations involving relatively high levels of income and low levels of education. This pattern of aspirations is likely to develop during the process of schooling among students for whom the opportunities to move ahead via the educational ladder are limited because of individual and institutional constraints.

To test these propositions, we constructed a new index of occupational aspirations that is based on the ordering of occupations according to the amount of income they produce relatively to the amount of education they require. After applying the new measure of "economic return," along with a standard scale of occupational prestige, to the population of junior and senior high school students in a small Israeli community, we found that the results permitted the following conclusions.

First, high school students tend to have both different levels and types of occupational aspirations that cannot be fully detected unless the two scales are used simultaneously. Thus, students who would have been classified as lacking in aspirations by the yardstick of occupational prestige may be shown to be highly ambitious according to the index of economic return.

Second, the patterns of aspirations that were detected by the two scales indicate that the students coped with their educational and occupational opportunities during high school and beyond. Thus, those having better opportunities to succeed via the educational route tended to target occupations that are associated with a higher level of education. In contrast, students whose chances to gain a higher level of education were restricted, tended to be attracted to occupations that do not require much schooling yet generate a high income.

Notwithstanding that these findings are based on a study of a single and a relatively poor community, a discussion of their broader relevance seems in order. In addressing this issue, we wish to emphasize that the rationale with which these results are compatible has been formulated on the basis of a priori theoretical and methodological considerations. This rationale implies that the exis-

tence of any form of structured inequality in the process of schooling is likely to generate different types and levels of aspiration that correspond to the structure of opportunities. However, since the nature of such differences is probably influenced by characteristics of the local community and its educational system, specific patterns of aspiration may vary from one social context to another.

In our study, we found that students in the academic track had high levels of aspirations only when the aspirations were indexed in terms of occupational prestige. However, according to the proposed rationale and given the mutual independence between the two scales derived from it, it is possible for students in the academic track to target occupations that provide high levels of economic return as well as occupational prestige. The observation that such a pattern was not found among students in the present study may well have to do with the poorer socioeconomic characteristics of the local community.

This line of reasoning gains support from empirical evidence provided by another study of high school students in a more affluent Israeli community (Ayalon 1984). The results of that study replicate the present one in showing that boys in the nonacademic track scored high on the scale of economic return and low on the scale of prestige. However, boys in the academic tracks were found to be highly ambitious in terms of both scales of occupational prestige and economic return.

These results seem to justify the two-dimensional conceptualization of occupational aspirations suggested in this article. In particular, by making it possible to recognize the potential existence of high levels of aspirations among students who would otherwise have been classified as unambitious, this approach rectifies a serious limitation inherent in the unidimensional assessment of occupational aspirations.

The implications of these conclusions are particularly relevant for understanding the pattern of occupational aspirations among disadvantaged groups in society. Such groups, as exemplified by Sephardic Jews and Arabs in Israel as well as various ethnic minorities in the United States, are typically confronted with numerous difficulties during the process of schooling and are discouraged from developing higher levels of educational aspirations. For this class of student, perhaps the

only realistic avenue of socioeconomic achievement is to bypass the obstacle of schooling and target occupations that promise economic success without the burden of higher education.

As a final note, we wish to suggest that the two-dimensional approach to the study of occupational aspirations may prove useful in the broader context of research on stratification and social mobility. In the tradition of that research, hierarchical positions in the stratification structure are typically assessed according to the unidimensional scales of occupational status or prestige. The proposed two-way scaling of occupations, which involves their ordering in terms of prestige as well as economic return, promises to capture more fully and realistically the meaning of socioeconomic positions and mobility across them. Similar to the advantage of this approach in the realm of occupational aspirations, its application in the study of stratification and mobility is likely to demonstrate that the reality of socioeconomic hierarchies is more varied and complex than its depiction by unidimensional scales such as status or prestige.

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