AGE CHANGES IN OCCUPATIONAL PRESTIGE: A PERCEPTUAL MODEL

Dissertation for the Degree of Ph. D.

MICHIGAN STATE UNIVERSITY
KAREN RASMUSSEN LOUNSBURY

1973

This is to certify that the

thesis entitled

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presented by

Karen Rasmussen Lounsbury

has been accepted towards fulfillment
of the requirements for

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John Paul McKinney
Major professor

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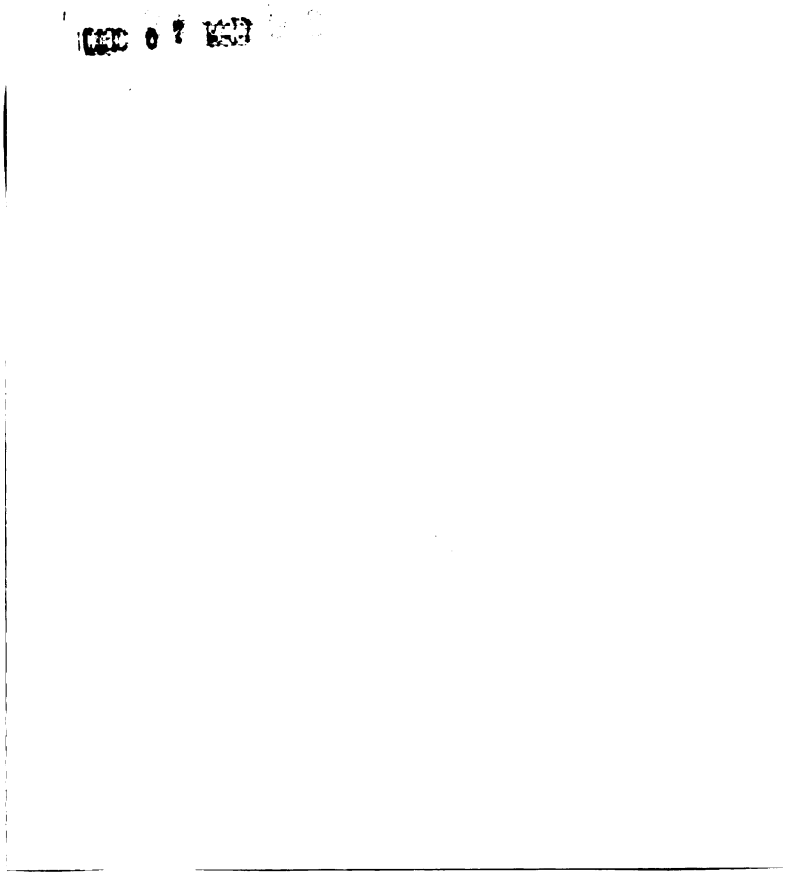

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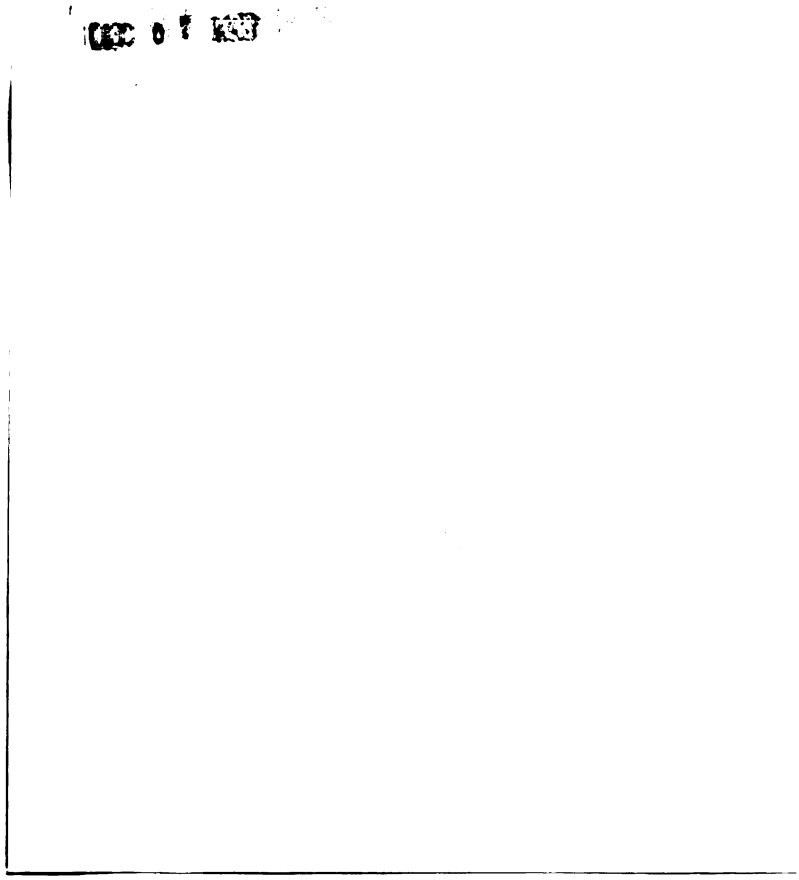

ABSTRACT

AGE CHANGES IN OCCUPATIONAL PRESTIGE:
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By

Karen Rasmussen Lounsbury

The following study was conducted to determine whether or not children predict and value occupations as a function of the social feedback each perceives as he/she grows older. Children of both sexes, working and middle-upper classes, ranging in age from five to fourteen years were questioned about occupations of prediction (intent), wish, reasonable expectation, and ideal, and these were scored by means of the Duncan Socio-Economic Status Scale. Analyses of variance were done on the above occupation prestige scores as well as selected difference scores between these prestige scores for the three main variables of age, sex, and class. Results indicated clear-cut age differences, as well as interactions between the three variables. These were interpreted as support for the perceptual hypothesis, although the nature of the environmental feedback appears to be different for girls as opposed to boys. Suggestions were made for vocational counseling of girls and working class boys.

AGE CHANGES IN OCCUPATIONAL PRESTIGE:

A PERCEPTUAL MODEL

By

Karen M. Rasmussen Lounsbury

A DISSERTATION

Submitted to
Michigan State University
in partial fulfillment of the requirements
for the degree of

DOCTOR OF PHILOSOPHY

Department of Psychology

1973

To John and Kirsten

ACKNOWLEDGMENTS

Special thanks go to the following people: John and Kirsten Lounsbury, Cindy Null, Dr. E. Jacobson, Sue Weesner and the entire staff of the Infant and Toddler Units. In addition, the assistance of the two school Superintendents, Mr. Smoker of Waverly School District and Mr. Watts of Mason School District, is very much appreciated, as well as the following principals and the teachers in their schools: Mr. Craig, Mr. Doran, Mr. Flower, Mr. Harvey, and Mr. Soderman.

Finally, I wish to express my appreciation to my thesis committee, who was supportive throughout the ordeal. They are Dr. Hiram Fitzgerald, Dr. David Wessel, Dr. Louis Tornatzky, and my thesis chairman, Dr. John P. McKinney, to whom I am especially grateful.

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I. INTRODUCTION

The question of whether or not different sets of values are held by different strata of a society has been the subject of controversy for the past two decades in the sociological literature. Some writers have asserted that there is a set of basic values common to all social classes within a society, while others take the opposite position, namely that values vary from class to class. In order to clarify the following discussion, it is first necessary to identify what is meant by "value" for the purposes of this thesis. Following Rodman (1963), the term "value" will be used to mean a normative aspiration or goal. Rodman is one of the proponents of the view that all social classes share a common set of values.

An example of the common value system approach is the high rate of illegitimacy among the lower class in the Caribbean, although the lower class does regard this as deviant behavior (Blake, 1955; Goode, 1960). Rodman interprets this as a belief in the common value of legitimacy; Blake and Goode, however, report that the illegitimacy rate is typically more than fifty percent of all births there--it is difficult to regard an occurrence with greater probability than half as non-normative behavior. Rodman, then, takes this data as support of his value stretch hypothesis which will be reviewed in depth later.

Discussing juvenile delinquents, Taft (1950) holds that a value system common to the society as a whole still operates, or an "honor among thieves" approach. Sykes and Matza (1957, 1961) enlarge upon this notion, postulating a mechanism by which the delinquent can assuage his own guilt (which they define as feelings resulting from actions dissonant with the value system a person holds).

The notion that a stratified class structure gives rise to different sets of values for each class is one held by other value theorists. Davis (1946) is a proponent of differential values, particularly exemplified by lower-class persons who have adapted their values to their deprived circumstances. While his assertion is that the end-resultant values are different as a result of that adaptation process, one may draw the conclusion that the initial values may not have been that disparate. A more adamant adherent to the differential approach is Miller (1958) who applies this particularly to juvenile gangs. Miller has worked out the juvenile gang value system which he feels is an integral part of the lower class cultural system.

Hyman (1952) attempts to give empirical evidence for differences in the value systems of different classes by correlating levels of aspiration of various classes (defined by educational, income and occupational aspirations) with class level and obtaining a positive relationship between the two variables. Stephenson (1957) explains these results in terms of "mobility orientation"--

aspiration levels within the stratification system that may serve as points of motivation in competition for position in the societal structure. Hyman therefore could be interpreted as finding similar mobility orientation throughout the stratification system, and regardless of one's position in that system, the orientation is toward commonly perceived and desired goals; this would tend to temper the Hyman interpretation from a strictly stratified, separate value system for each social class to a more intermediate position between the strictly common value system theorists and the proponents of a view of stratified, different value sets for each class.

In an attempt to reconcile the two antagonistic positions, namely the common value system and the separate value system proponents, Rodman (1963) proposed what he considers to be a compromise position in which he focuses upon the reactions of the members of the lower class to their deprived circumstances. A group response which would be the most important mechanism, Rodman argues, is what he labels the "lower class value stretch." By value stretch, he means "that the lower class person, without abandoning the general values of the society, develops an alternative set of values. Without abandoning the values placed on success, such as high income and high educational and occupational attainment, he stretches the values so that lesser degrees of success also become desirable." The result, Rodman postulates, is that the members of the lower class have a wider range of values than others within the society. They

come to tolerate and eventually to evaluate favorably certain deviations from the middle class values. In this way they need not be continually frustrated by their failure to live up to unattainable values (Rodman, 1963, p. 209).

Taking a similar position to Rodman in terms of resulting value change, McKinney (1972) has postulated a perceptual model. In it, McKinney (following Campbell, 1963) stresses the role of sensory feedback from self-produced movement in value development. He postulates a "schema" interpretation which maintains that the strength of a person's values and also the clarity with which these values are perceived are determined by the amount of self-produced movement (measured by whether the person is externally or internally controlled, Rotter, 1966). This approach developed out of the perceptual data collected by Held (1961) which stressed the importance of self-produced movement in adaption to prism-induced visual distortion. Held demonstrated, basically, the importance of movement which is self-initiated rather than passive, in the production of the necessary correlator-storage mechanism.

McKinney (1972) summarizes his theory this way: "It becomes apparent that for a subject to develop a value (correlator storage mechanism), he must freely choose (self-produced movement) and perceive the stimulus changes contingent on his own behavior (reafferance)."

These same value changes would be predicted by a cognitive consistency theory of attitude change such as Festinger's cognitive

dissonance theory (for a review, see Fishbein and Ajzen, 1972). Cognitive dissonance holds that when a person's attitudes about two related things or people conflict with each other, this "dissonance" must be resolved by changing one of the conflicting attitudes. The same thing happens when a person's attitude(s) (or, in this case, values) are in conflict with his capabilities. If there is feedback from the environment that he is not capable of attaining his valued position, his values about that desired behavior or goal change (such as a 4.0 GPA if he is consistently a 2.0 student). The predicted value change is identical in the perceptual (McKinney) model and the cognitive consistency (Festinger) model; the perceptual model postulates a process that explains the change, while the cognitive consistency model simply predicts the changing values.

Applying these models (specifically, the perceptual model) to lower class value problems, then, one can interpret inconsistent reward contingencies arising in an unstable environment, resulting in an inability to predict environmental responses. This would lead to reporting society's values verbally, but being unable to incorporate them until some consistency has been perceived, namely that those commonly desired goals or values of the society cannot be attained, and a new, broader set of values incorporated which would include those goals that are reasonably attainable. From an age-stage theory of value development, we would predict that these changes would occur as the child grows older, and that it would be possible to identify different amounts of value change by examining at different ages, children's perceptions of attainable goals.

If one can justify that standard measures of level of aspiration (LOA) are related to long-term aspirations, some light may be shed on age differences. LOA is usually measured by asking the subject to predict performance on some task(s), and then measuring the discrepancy between that predicted performance and actual performance on the same task. Presumably, then, LOA is attained by judging the realism of the prediction (e.g., Milgram, Shore, Riedel, Malasky, 1970; Sears, 1940). Sears (1940) reported unrealistically high LOA in poorly achieving school children and suggested that verbalizing unrealistically high performance may be reinforcing in and of itself. This might indicate that his value change has not yet occurred in these children, since they still had high expectations, and had not come to expect and value middle range goals. Sears explained the finding by reasoning that the homes of disadvantaged, poor achievers do not train cognitive, motivational differentiation; for example, between wishes and expectations. It seems logical to suppose that if those children do begin to differentiate later on between wishes and expectations, that the disparity between the two would be greater than for the child who might reasonably expect there to be less difference between his wishes and his expectations based on experience alone. Who is more likely to differentiate between wishes and expectations--the child who has a greater probability of receiving more of the things he wishes for (whether it is material goods such as toys, bicycles, or attainment of a goal such as a good grade or parental interest)

or the child who rarely has his wishes realized. Milgram et al. (1970) take the Sears approach, stating that "LOA probably consists of an admixture of wishes and expectations; when the advantaged child is asked to predict how well he will do on a particular task, his realistic expectation will dominate over his wish." The advantaged child is less likely to have disparity between the two and it is more difficult to determine what is "reasonable expectation" and what is "wish" for him than for the disadvantaged child.

The Milgram et al. study used six-year-olds, and despite the questionable interpretation of reasonable vs. unreasonable expectations, the results are of interest. There were no differences between either males or females or white or black children in the LOA measures. Disadvantaged children in general were characterized by higher and less accurate levels of aspiration. They employed "accuracy incentives" for half of the subjects, but this did not facilitate accuracy for either of the advantaged groups of children. The most important finding, however, seems to be the lack of discrimination for disadvantaged subjects between level of aspiration and achievement.

Surveying ninth graders, Stephenson (1957) questioned them about occupational plans as well as occupational aspirations. He first asked if they planned to a) quit high school, b) complete high school, or c) go to college. At each alternative, the student was asked, "After you (alternative) what kind of work do you intend to do?" He then asked what they really wanted to do. Stephenson

found that these students tended to state a lower occupation of intent than aspiration.

Caro (1966) used slightly older subjects (high school juniors), only males, and a similar technique to the Stephenson study in an attempt to test the Rodman (1963) value stretch hypothesis. His contention, that values fit the lack of voluntary actions rather than vice versa, fits the perceptual model (McKinney) as well; the resulting values are a function of a lack of self-produced movement due to reward contingencies that keep changing in the environment. According to Caro (1966), youth studies in which class is compared to occupational aspiration consistently show that those from the higher social strata tend to aspire to more prestigious occupations than those from lower social strata. Caro evaluated "dominant success goals, activities potentially instrumental for the realization of success goals, and beliefs regarding access to those goals." To rank occupations, Caro used the North-Hatt scale of occupational prestige (National Opinion Research Center, 1953). Results show class differences in perceptions of opportunity and greater flexibility in the value orientations of working than middle class students.

From these studies, it is possible to make some inferences about age differences. The six-year-olds in the Milgram et al. (1970) study, despite the possible interpretational problems, do not yet seem to discriminate between what they want to do, what they expect to do, and what they might reasonably hope to do. If asked

to predict what they would be when they grow up, they would likely not take into account class differences in the probability of attaining that goal. There were no sex differences or race differences, although the lack of sex differences may be due to the measures used not being ones that society differentiates itself on as clearly as occupational choice. There were, however, significant differences between advantaged and disadvantaged children, which may be due to cognitive factors.

By the age of fourteen, the subjects in Stephenson's (1957) study seem to have become better able to differentiate between what they would like to do and what they intend to do. Caro (1966) finds similar results with high school junior males, so it may be possible to conclude that for both middle and working class boys, at least, differentiation is complete; while the middle class boys know that they have greater likelihood of high prestige occupations, they, too, discriminate between what they would like to be versus what they think they will be occupationally.

Information regarding sex differences is also somewhat inferential. Occupational information about girls is sparse and incomplete, and the majority comes from vocational counseling literature, so is subsequently composed mainly of information about college women. In a relatively recent study, Rose and Elton (1971) found that college males were different from college females in personality profiles between occupational categories. While they did not report this as a surprising result, it does suggest that many of the measures

used to steer girls into certain occupations based on personality profiles will be less accurate when the sex factor is not taken into account. They concluded that: "Existing research leads to the inescapable conclusion that men and women tend to choose different occupations . . . [and] . . . that choice is directed by sex stereotypes." Personality types within the same field were not similar.

When does this differentiation take place? The Milgram et al. (1970) study found no sex differences in the six-year-olds they studied, although they were not employing occupational measures. But by fourteen, Stephenson (1957) found that girls tended to report lower occupations of intent than the boys did. Like the social class differences in occupational choice, then, sometime between six and fourteen girls learn what is sex-appropriate and what is not in terms of occupational choice, it appears.

II. PURPOSE

The purpose of this study is to examine the development of occupational prestige between the ages of five and fourteen years in three-year increments. These extreme ages were selected as the base and ceiling rates on the basis of the Milgram et al. (1970) and Stephenson (1957) studies. Differences in occupational predictions for sex were measured to establish if a) children picked different occupations at different ages, b) girls picked occupations different from boys, and c) girls picked occupations with lower prestige value as they got older and social pressures begin to dictate that "girls become nurses rather than doctors." Similarly, socio-economic status was predicted to operate like the expected sex differences in that the working class children should have picked occupations different from the middle class children, particularly as they got older, when lower prestige occupations should become more valued on the basis of the value stretch hypothesis.

By asking children at different ages:

1. What job do you think you will have as an adult?
2. What job would you really like to have as an adult?
3. What is the best job that you can reasonably expect as an adult?
4. What is the best job anybody can have as an adult?

it should have been possible to see at what age(s) children tend to differentiate between what they want to be and what is possible for them to be. When the listed occupations were scored for occupational prestige (using the Duncan Socio-Economic Status Scale, 1961), discrepancy scores were obtained between the scores given responses to the four questions. Differences between the first and second question, for instance, yielded a "resignation" score indicating that while the individual would like to be a certain occupation, he/she had resigned himself to another, less prestigeful occupation. (Throughout all of the study is the underlying assumption that high prestige occupations are desirable.) A discrepancy score between questions 2 and 3 measured an individual's perception of his limitations as an adult (question 3) versus what he/she would really like to be (question 2). It measured differences in their own versus society's interpretation of a good job for them (and difference scores were both positive and negative), while the difference in prestige scores between questions 3 and 4 obtained an "objectivity" score. In other words, while the best profession in the world might be being president of the country, this person had objectively decided that the best profession he could possibly have would be as a lawyer. For some children, there were no differences between these two; for others, there were large differences.

By grouping the subjects into male/female and working/middle class categories (as well as age grading), it was possible not only to see if the ages at which differentiation seems to occur is

different for the classes and sexes, but also if professional choices within the same age group tend to be similar or dissimilar and when this changes. Question 4 (above) was a useful index of the value strength hypothesis; if working class subjects (and, similarly, girls) have stretched their values, rather than totally incorporating a new set and abandoning the old ones, there should have been little difference between working and middle class (and male-female) responses. If, however, the entire set had shifted downward for working class and girls, bringing the "ideal" down with it, there should have been significant differences between middle-working class groups and males-females.

It is hypothesized, then, that as children get older, predicted and ideal occupations change for them as a function of the perceived social feedback each receives. This feedback is different for children of different sex (learning what "sex appropriate" occupations are) and of different socio-economic background and occurs with increasing frequency as the child gets older. Working class children and girls, then, resolve these changes by picking and valuing lower prestige occupations.

III. METHOD

Subjects

One hundred and sixty subjects in equal numbers of males and females were randomly selected from nearby public schools. Half of the subjects were from working class families and half from middle-upper class families. This distinction was made on the basis of prestige scores assigned to the occupations of subjects' fathers. Mean fathers' occupation prestige score for working class children was 31.75; for middle-upper class children, mean fathers' occupation prestige score was 59.64. In the next section, a discussion of the assignment and meaning of prestige scores is available.

The two main groups of working and middle class subjects were then subdivided into four equal sized groups of the following ages: five, eight, eleven, and fourteen years.

Materials

Occupation predicting questions (see Appendix A) were written to survey the subjects. These were scored for occupational status using the Duncan Socio-Economic Status Scale (1961) which is currently the most comprehensive interval measure for large sample surveys (Robinson, Athanasian, Head, 1969). The tabled scale assigns

occupational prestige (status) scores ranging between 0 and 96 (dentist) to a wide range of occupations. Sample occupations with corresponding status scores are available in Appendix B.

Procedure

Superintendents of two school districts in the Lansing area were contacted and arrangements made through them to further contact the principals of the junior high and grade schools involved in the study. Final arrangements were made with the principals, who elicited the cooperation of the teachers of classrooms used in the study. With the exception of the five-year-old subjects, subjects were interviewed as a group, with responses to the questions written by the subjects. The experimenter entered a pre-arranged school classroom, introduced herself and explained that she wanted some information about what kinds of professions that children want to be, promising a more complete explanation after the data was obtained. After distributing paper and instructing the subjects not to look at anyone else's paper (a transcript of the instructions is available in Appendix C), subjects were asked to write down the occupation of each parent and their own age, sex, and school district; secondly, the experimenter read each of the four occupation-predicting questions through slowly, waiting several minutes for the subjects to respond, then repeated each question before moving on to the next question. After this had been completed for all four occupation questions, papers were collected, and a brief explanation of the experimenter's

interest in the changes of occupation choice as children get older followed.

For the youngest subjects, essentially the same procedure was followed with one exception. After the introduction of the experimenter to the class, children were called individually and the above data gathered from them by means of the experimenter both reading the questions and recording the information. This was necessary with the young subjects since the majority of this age group were not able to write down their own responses.

IV. RESULTS

Results of the study were analyzed by means of a series of three factor analyses of variance. They were run on the following seven scores:

1. predicted occupation prestige scores (score 1);
2. wish occupation prestige score (score 2);
3. reasonably expected occupation prestige scores (score 3);
4. ideal occupation prestige scores (score 4, "socialization" score);
5. difference score 2 - 1 (wish - predicted)--"resignation" score;
6. difference score 2 - 3 (wish - reasonable expectation) --"limitation" score;
7. difference score 3 - 1--reasonably expected - predicted difference;
8. difference score 4 - 2--ideal - wish score;
9. difference score 4 - 3--"objectivity" score.

Correspondingly numbered tables illustrate the significant differences that were obtained through these analyses. Duncan's Multiple Range tests were performed to determine the nature of the differences in main effects. Row and column means are listed in Appendix D.

The seven analyses yielded the following results:

Analysis 1:
Predicted Occupation Scores

Age was found to be a significant variable ($p < .001$) and a subsequent post hoc test indicated the nature of the differences. The five-, eight-, and eleven-year-olds, while not different from each other when averaged across sex and social class, were all significantly smaller than the fourteen-year-olds in the prestige scores assigned their predicted occupations.

Table 1.--Analysis of Variance of Predicted Occupation Scores.

Source	df	MS	F
Class	1	63.76	.10
Sex	1	841.81	1.28
Age	3	4328.51	6.60***
Class x Sex	1	3581.56	5.46*
Class x Age	3	945.56	1.44
Sex x Age	3	535.47	.82
Class x Sex x Age	3	888.19	1.35
Within Cell Variance	144	637.60	
Total	159		

* indicates $p < .05$
** indicates $p < .01$
*** indicates $p < .001$

In addition to the Age finding, there was a significant Class x Sex interaction ($p < .05$) which is graphed in Figure 1 and will be discussed in a later section. It can be noted from the figure, however, that when averaged across age, middle-upper class males predicted occupations with higher prestige values than working class males, while both groups of females predicted very similar occupations in terms of prestige values (and, correspondingly, the occupations on which the prestige ratings were made).

Analysis 2:
Wish Occupation Scores

As can be noted in Table 2, only the Age test was significant in this analysis.

Table 2.--Analysis of Variance of Wish Occupation Scores.

Source	df	MS	F
Class	1	864.90	1.48
Sex	1	1030.23	1.77
Age	3	6808.34	11.67**
Class x Sex	1	705.60	1.21
Class x Age	3	190.55	.33
Sex x Age	3	846.71	1.45
Class x Sex x Age	3	25.35	.04
Within Cell Variance	144	577.43	
Total	159		

** indicates $p < .01$

Subsequent post hoc tests showed that five-year-olds had lower prestige wish scores than either eleven- or fourteen-year-olds; similarly, eight-year-olds had lower prestige wish scores than either of the older two groups.

Analysis 3:
Reasonably Expected Occupation Scores

As can be seen in Table 3, this analysis yielded one significant F test--Age ($p < .01$).

Table 3.--Analysis of Variance of Reasonably Expected Occupation Prestige Scores.

Source	df	MS	F
Class	1	232.81	.31
Sex	1	24.81	.03
Age	3	4126.27	5.44***
Class x Sex	1	2095.26	2.76
Class x Age	3	486.75	.64
Sex x Age	3	1224.09	1.61
Class x Sex x Age	3	420.27	.55
Within Cell Variance	144	759.02	
Total	159		

** indicates $p < .001$

As in the previous analysis, post hoc tests showed that only the fourteen-year-olds were different from the others; in this case,

they were different only from the eight-year-olds in that the fourteen-year-old mean was greater than the eight-year-old mean. The Class x Sex interaction, while insignificant ($p < .10$), for the sake of interpreting the previous similar interaction of Class and Sex on predicted occupation scores, has been illustrated in Figure 2. Like the previous analysis, the males differentiated themselves according to their social class--the middle-upper class males picked higher occupations in prestige value than the working class boys did. The girls, again, made very similar choices regardless of class, but the lower class girls, on the average, chose slightly higher prestige occupations than the middle-upper class girls did. What this is probably indicative of is that more of the middle-upper class chose the occupation of "housewife" which carries a prestige score of 0 (since there is no direct income), which would consequently bring down the mean for that group. It is worth noting here that both groups of females chose occupations which were, on the average, higher in prestige value than those picked by the working class males, but lower than those of the middle-upper class males. This was not the case in the Class x Sex interaction in the first analysis.

Analysis 4:
Socialization (Ideal Occupation) Scores

As can be seen in Table 4, the only significant variable was, again, Age ($p < .001$). When averaged across Sex and Social Class, all of the age groups were significantly different from each other ($p < .05$) with the exception of the oldest two groups (eleven and

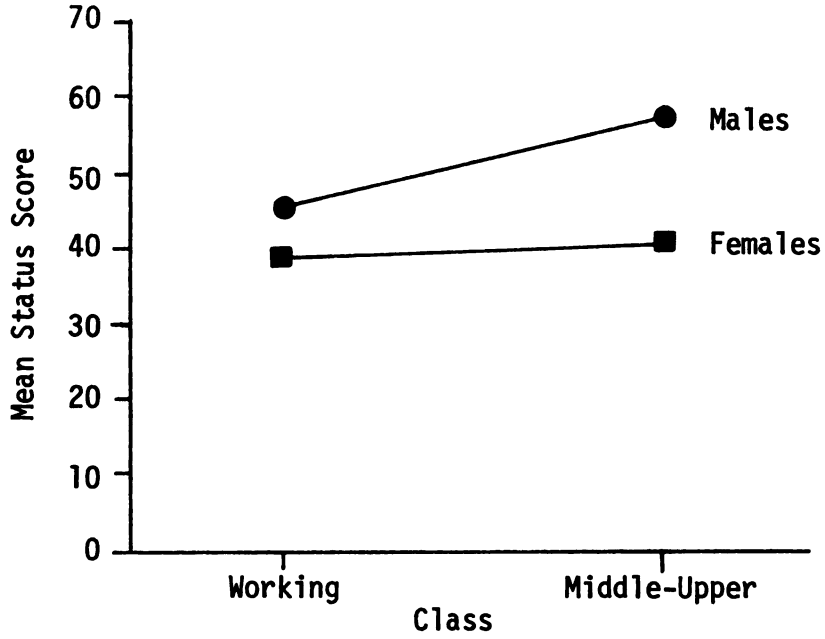


Figure 1.--Class x Sex Interaction Averaged Across Age for Predicted Occupation Prestige Scores.

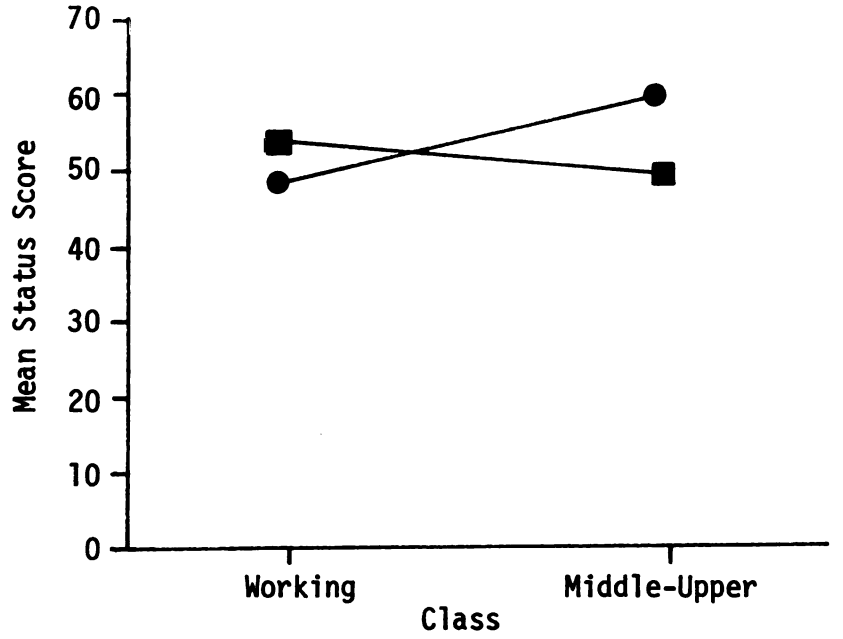


Figure 2.--Class x Sex Interactions Averaged Across Age for Reasonably Expected Occupation Prestige Scores.

fourteen years) which were not different from each other, but different from all of the rest. The nature of the differences was that ideal occupation prestige scores tended to increase with age. There were no significant interactions in the analysis.

Table 4.--Analysis of Variance of Socialization Scores.

Source	df	MS	F
Class	1	164.03	.19
Sex	1	6.40	.01
Age	3	9254.88	10.56***
Class x Sex	1	189.23	.22
Class x Age	3	1294.61	1.48
Sex x Age	3	439.38	.50
Class x Sex x Age	3	1390.54	1.59
Within Cell Variance	144	876.25	
Total	159		

*** indicates $p < .001$

Analyses 5 and 6:
Resignation Scores and Limitation Scores

As evidenced in Tables 5 and 6, there were no significant F tests in either of these analyses for the main variables or any interactions. In analysis 4, however, there was an insignificant age trend ($p < .06$), supporting the previously mentioned age findings.

Table 5.--Analysis of Variance of Resignation Scores.

Source	df	MS	F
Class	1	452.26	.69
Sex	1	8.56	.01
Age	3	1578.66	2.43†
Class x Sex	1	1097.26	1.68
Class x Age	3	373.11	.57
Sex x Age	3	142.71	.22
Class x Sex x Age	3	1049.31	1.61
Within Cell Variance	144	650.79	
Total	159		

† indicates $p < .06$

Table 6.--Analysis of Variance of Limitation Scores.

Source	df	MS	F
Class	1	778.81	1.27
Sex	1	676.51	1.11
Age	3	1015.92	1.66
Class x Sex	1	412.81	.68
Class x Age	3	626.56	1.03
Sex x Age	3	870.69	1.43
Class x Sex x Age	3	121.19	.20
Within Cell Variance	144	611.18	
Total	159		

Analysis 7:
Differences Between Ideal and Wish Scores

As can be seen in Table 7, there were no significant main effects or interactions in this analysis.

Table 7.--Analysis of Variance of Difference Between Ideal and Wish Scores.

Source	df	MS	F
Class	1	93.03	.07
Sex	1	409.60	.31
Age	3	520.18	.40
Class x Sex	1	448.90	.34
Class x Age	3	1761.01	1.34
Sex x Age	3	1067.82	.81
Class x Sex x Age	3	811.28	.62
Within Cell Variance	144	1314.00	
Total	159		

Analysis 8:
Reasonably Expected - Predicted Occupation
Difference Scores

While none of the main effects were significant (see Table 8), both the Class x Age and the Class x Sex x Age interactions were significant ($p < .05$ for both). The Class x Age interaction, shown in Figure 3, demonstrates that when scores were averaged across

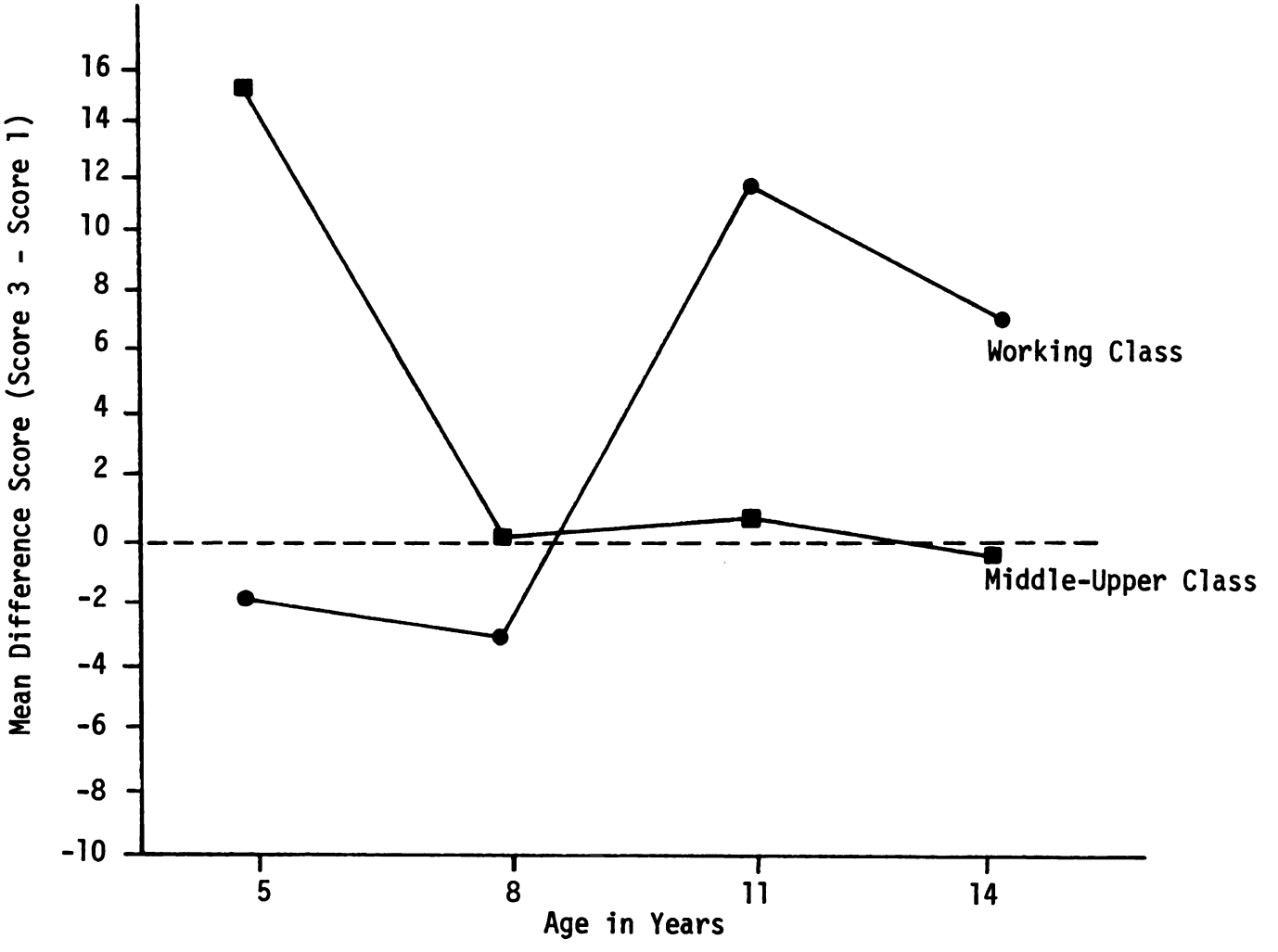


Figure 3.--Class x Age Interaction Averaged Across Sex for the Difference Between Expected Occupations (Score 3) and Predicted Occupations (Score 1).

sex, working class children tended to state similar occupations of intent (predicted occupation) and reasonable expectation when young, but in the latter two age groups, they show positive discrepancies between the scores--in other words, they were giving higher prestige occupations that they might reasonably attain than those that they would most likely have as adults. The middle-upper class children, however, showed large discrepancies at age five between occupations of intent and reasonable expectation, but by eight years of age and consistently thereafter, they showed little discrepancy between the prestige values of their listed occupations.

Table 8.--Analysis of Variance of Reasonably Expected - Predicted Occupation Difference Scores.

Source	df	MS	F
Class	1	14.40	.03
Sex	1	360.00	.65
Age	3	629.55	1.13
Class x Sex	1	308.03	.55
Class x Age	3	1705.42	3.07*
Sex x Age	3	785.72	1.42
Class x Sex x Age	3	1575.81	2.84*
Within Cell Variance	144	555.07	
Total	159		

* indicates $p < .05$

Both Age and Class also interacted with Sex, yielding the significant three-way interaction illustrated in Figures 4a and 4b. Here, the previously mentioned Age x Class interaction has been separated to investigate the role of sex in this interaction. Figure 4a represents the differences for females in the study; working class girls showed virtually no differences between the occupations they might reasonably expect as opposed to occupations of intent until the age of eleven, at which age the differences are positive and fairly large. The fourteen-year-olds, however, showed negative differences, although not of any sizable magnitude. It should be pointed out that differences of five or six points in either direction of 0 on the graph may look conspicuous, but considering the potential range of scores represented in the scale (0-96 points), these cannot be interpreted as being of particular importance. On the average, however, these fourteen-year-old working class girls seem to be giving slightly lower prestige occupations of reasonable expectation than intent.

Middle-upper class girls showed a somewhat different profile. The five-year-old girls show slightly higher positive differences than either the other group of five-year-old girls or other middle-upper class girls. This may be indicative of a differential interpretation of what "reasonable expectation" means to the different class groups, which will be discussed at length in another section. The other groups of middle-upper class girls, however, displayed fewer differences between occupations of reasonable expectation and

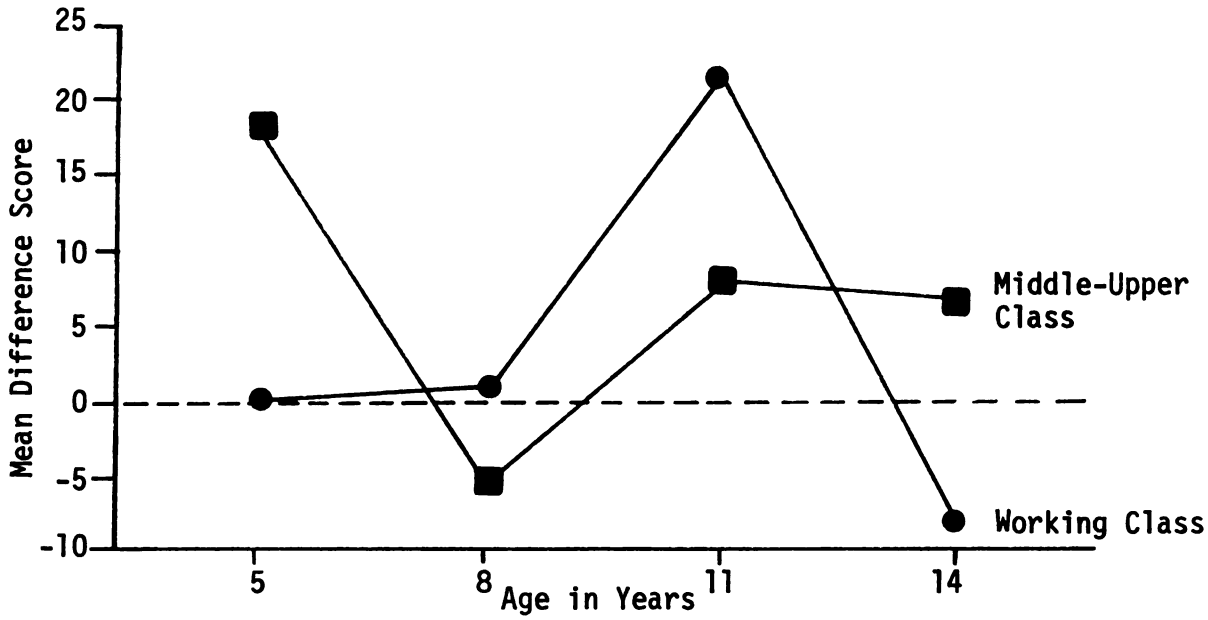
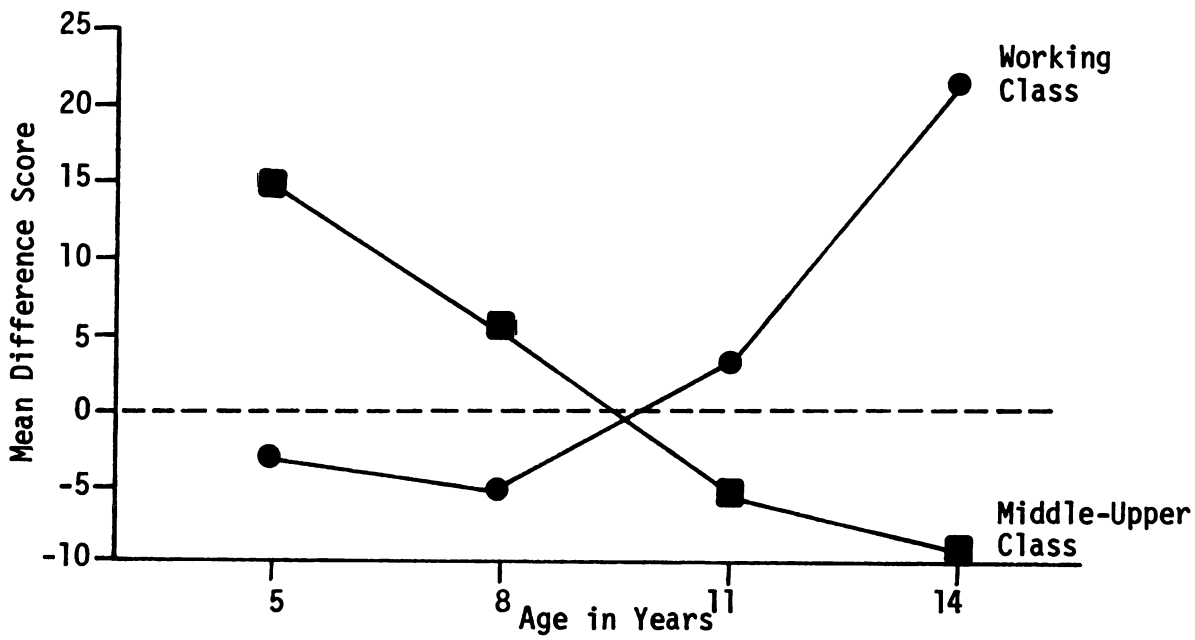


Figure 4a.--Females' Interactions on Class and Age, Computed on Difference Scores Between Reasonably Expected and Predicted Occupation Prestige Scores.



Fibure 4b.--Males' Interactions on Class and Age Computed on Difference Scores Between Reasonably Expected and Predicted Occupation Prestige Scores.

intent. While there were differences, they had stabilized in direction in the eleven-year-olds, yielding slightly higher occupations of reasonable expectation than intent.

Contrary to the findings with the girls, the boys (see Figure 4b) show clear-cut differences between the classes. Middle-upper class boys show a very consistent trend to give higher occupations of reasonable expectation than intent; then, in the older groups, differences decrease to the point that in the eleven- and fourteen-year-olds, differences are negative. By fourteen, middle-upper class boys are expressing higher predicted occupations than reasonably expected occupations. The main point appears to be that the middle-upper class boys show more similarity between the two scores as they get older, while the working class boys have increasingly positive difference scores with increasing age. Occupation of intent and occupation of reasonable expectation apparently mean different things to the working class boys, while the middle-upper class boys seem to be interpreting them as similar.

Analysis 9:
Objectivity Score

The scores this analysis was computed on were the difference scores between score 4 (ideal occupation prestige score) minus score 3 (reasonably expected occupation prestige score) for each subject. In this analysis only the three-way interaction between Class, Sex, and Age was significant (see Table 9). However, when averaged across

age, the Class x Sex interaction does demonstrate a trend ($p < .10$) for working class females to give scores more similar in prestige value to the questions regarding ideal occupation and reasonably expected occupations, while middle-upper class females show large positive differences--the ideal occupation is much higher in prestige value than the one the girls thought they might reasonably attain.

Table 9.--Analysis of Variance of Objectivity Scores.

Source	df	MS	F
Class	1	1071.23	.86
Sex	1	42.03	.03
Age	3	2859.75	2.31
Class x Sex	1	3610.00	2.91
Class x Age	3	1743.58	1.41
Sex x Age	3	264.54	.21
Class x Sex x Age	3	3810.92	3.07*
Within Cell Variance	144	1241.34	
Total	159		

* indicates $p < .05$

The boys showed exactly the opposite trend. The working class boys tended to give higher ideal occupations than reasonably expected occupations, while the middle-upper class boys showed differences that were much smaller and slightly negative--they seem to

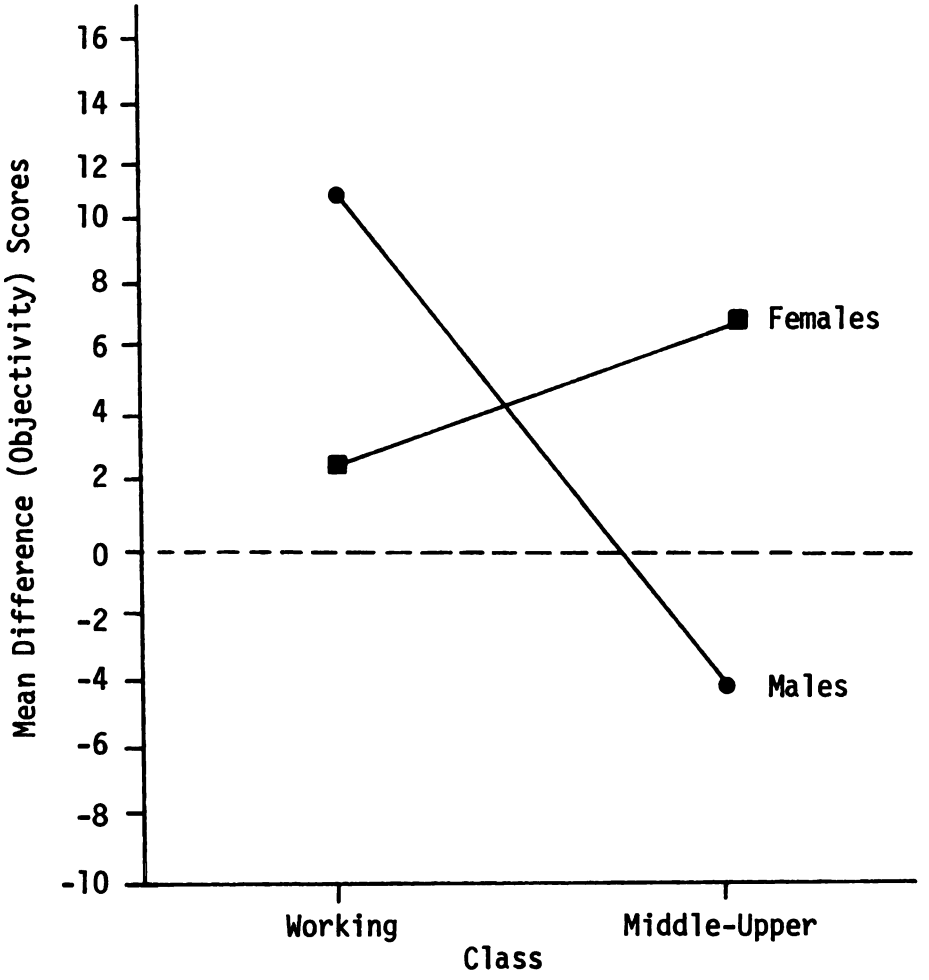


Figure 5.--Class x Sex Interaction Averaged Across Age for Objectivity Scores (Score 4 - Score 3).

think that they can reasonably attain occupations in at least equal prestige value to their ideal occupation.

The significant three-way interaction then extends these trends to the different ages. Figures 6a and 6b illustrate this for males and females separately. In Figure 6a, the above discussion appears to still hold for all of the age groups except the fourteen-year-olds, where there are no differences between the two class groups in difference scores. In Figure 6b, the females show a somewhat different profile. In all age groups except the fourteen-year-olds, the upper-middle class girls show greater differences between their ideal occupation and the reasonably expected occupation than the working class girls do; this difference between the two class groups also appears to be greater for the older subjects. The oldest group of girls, however, show just the opposite. This may simply be due to sampling error, or it may mean that the working class fourteen-year-old girls have higher ideal than reasonably expected occupations while it is just the opposite for the middle-upper class girls. For this age group, the perceptual model of value adjustment does not seem to be functioning; it would predict more similarity between the two scores for the oldest subjects, while this is clearly not the case.

It should be noted in closing this chapter that in almost all of the analyses, the lack of significant F tests appears to be as much a function of the large amount of within cell variability as a lack of variability between the groups. The very low F values

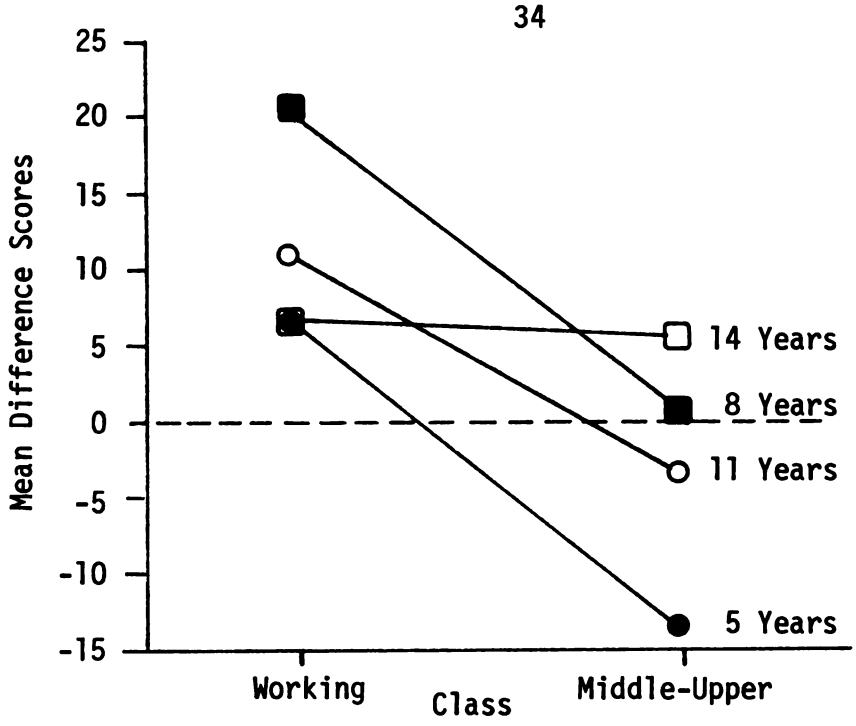


Figure 6a.--Males' Interactions on Class and Age, Computed on Difference Scores Between Ideal and Reasonably Expected Occupation Prestige Scores (Objectivity Score).

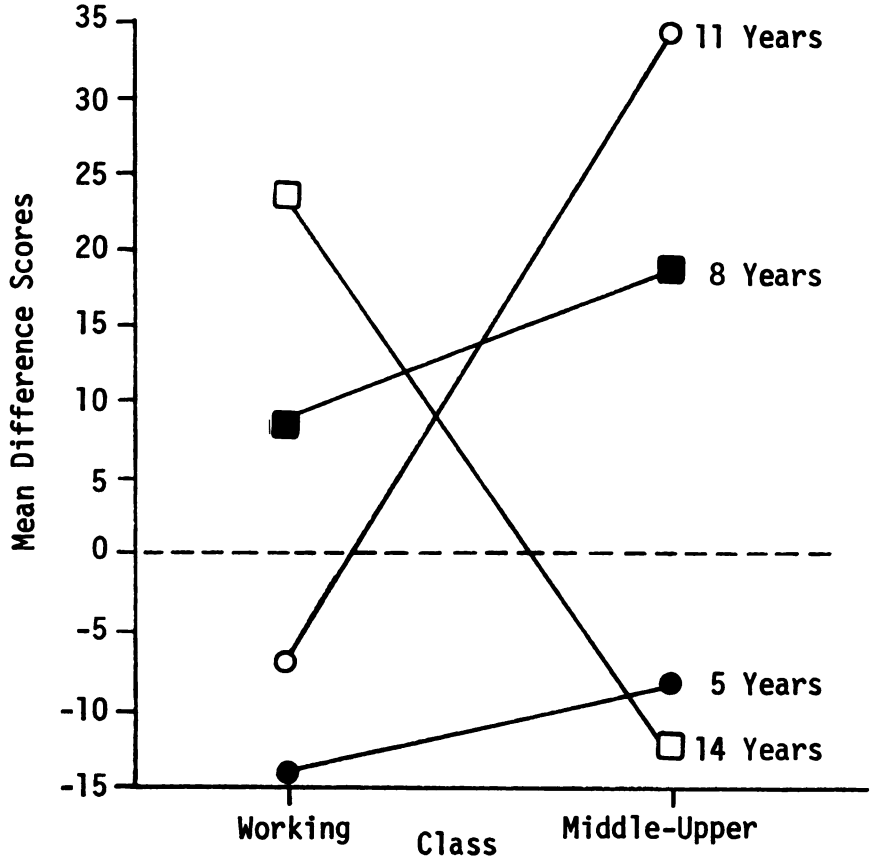


Figure 6b.--Females' Interactions on Class and Age, Computed on Objectivity Scores (See Above).

found in some of the analyses reported, despite fairly high mean square values, bears this out. This means that each sex in each class at the different ages listed a fairly wide range of occupations in many of the analyses.

V. DISCUSSION

As regards the original purpose(s) of the study, the results were mixed in terms of confirming or not confirming the hypotheses. The two main hypotheses of the study were that working class children would demonstrate the "value stretch" (or perceptual change) by stating similar ideal and predicted occupations, that this would change with age, and that girls, regardless of class, would demonstrate the same phenomenon. It was also predicted that, using the five-year-olds as a base age (inferred from the Milgram et al., 1970, research), it would be possible to pinpoint when this value stretch seems to occur. While there was some evidence for this value change on the part of the working class children, the results were very different for the girls as opposed to the boys. Age, however, did seem to be working as expected.

Social Class and Sex

There is some evidence that for social class, the perceptual changes may be operating, but considering all of the results as a whole it appears that sex is a major consideration in interpreting this phenomenon. While working class boys predicted and reasonably expected lower prestige occupations than the middle-upper class boys, they did not necessarily give lower ideal scores than the upper-middle

class boys did (see analysis 4). This finding is also reflected in the difference scores between reasonable expectation and ideal occupation scores (analysis 9). In the latter analysis, there were differences in scores, but these reflected the different expected occupations of the boys rather than different ideal occupations, which was the main content of the perceptual (value stretch) hypothesis.

Similarly, other tests of the perceptual hypothesis did not support the perceptual model for the working class boys. One unpredicted finding can be interpreted as support for a perceptual change model, however: The working class boys tended to give higher prestige expected occupations than predicted occupations, while the middle-upper class boys had similar prestige occupations of expectation and intent as would be predicted for all subjects. This may be a perceptual change in the other direction--while the working class boys did not alter their values about the ideal occupations in society, they see these ideal occupations as closer in prestige value to their predicted occupations. What this might mean is that instead of stretching the values of society down to fit in with their own expectations, they have extended (stretched) their expectations upward; in other words, they perceive the value of their predicted occupations as being higher than the "real" or scale prestige value of a given occupation. This may also mean that they are interpreting "reasonable expectation" as being "what I might do, given a chance."

Interestingly enough, the girls in the working class did not seem to make the same kind of responses. Girls of both social classes picked middle prestige-range occupations (see Figures 1 and 2) with a varying frequency of housewives accounting for the small differences in female group means in these analyses. In analysis 8, the Class x Age x Sex interaction showed that the girls were also interpreting occupations of intent vs. reasonable expectation somewhat differently, but not to the extent to which the males had done. With the exception of the five-year-old middle-upper class girls, age seemed to be dictating the interpretational variance more than class.

In the final analysis (see Figure 5), girls in both classes had discrepancy scores between ideal and expected occupations that were fairly small, on the average. This supports the original perceptual model hypothesis which would predict only small differences for girls between these two prestige scores. Working class girls had smaller differences on the average than middle-upper class girls. The reason for this may be that in this society women establish prestige not only on the basis of their own occupation, but also on the basis of each's father's occupation when young and then husband's occupation as an adult. Accordingly, when a working class girl decides to be a housewife, she is being not only a housewife, but the "wife of a mechanic." Correspondingly, the middle-upper class girl who wrote "housewife" may be implying "wife of a lawyer." While there is currently a movement within this society for women to

increasingly seek their own identities, it should be acknowledged that this indirect occupational prestige may well account for the class differences for these girls. On the average, both groups of girls did exhibit the perceptual phenomenon to some extent, although this effect was somewhat differential with respect to age (Figure 4b). Only the fourteen-year-old girls do not fit this pattern--the working class girls gave much higher ideal occupations than expected occupations, and the middle-upper class girls gave much lower ideal than expected prestige occupations. This would indicate that if, indeed, the perceptual model works, it works for the younger girls but is not evident in the older girls of either class.

One consideration must be made when comparing the males and females in this study. How meaningful is it for a female even to think about a future occupation? Boys in this society are expected to consider occupations and are frequently asked from an early age what they intend to be when they grow up. One working class five-year-old boy in the study looked startled when asked for the ideal occupation, after having answered the previous three questions with standard occupational titles, and responded: "Why, nothing, of course!" Girls, on the other hand, seem to have much more latitude in choosing whether or not they wish to work outside the home. The question of occupation was not as meaningful for them, particularly for the youngest girls who were most likely not aware as yet of the range of occupations that women can fill.

Age

It was predicted that, while no main effects might appear for any of the variables, interactions involving Class and Age would be likely. While this was true to a certain extent (Sex and Class were never significant main effects in any of the seven analyses), Age was a significant variable in four analyses of the prestige scores (analyses 1, 2, 3, and 4). Children clearly did have different notions of what occupations they want, reasonably expect, and consider to be ideal as they get older, and this seems to be fairly independent of sex and class. Drawing from the post hoc tests it appears that the fourteen-year-olds had the most different ideas about all three questions. For the predicted and reasonably expected occupations, the younger three groups failed to differentiate themselves from each other, but were different from the oldest group. When questioned about an ideal occupation, however, all groups were different from each other except the oldest two groups, which were similar to each other. As can be seen in Table 8, the column means were in an ascending order with age--the older the children were, the higher the mean prestige value of the ideal occupation. While this is hardly a surprising result, it does point out, particularly in the absence of any interactions involving age, that the children for the most part seem to be accepting and espousing the societal norms as they get older.

This was also the case for predicted occupations. As age increased, so did mean status values for predicted occupation. The

mean differences across age were not significant except between each of the younger three groups and the fourteen-year-olds. This may be due to a number of things: as children get older, they are exposed to an increasing number of occupations as well as to the ascribed status of each occupation. While one fourteen-year-old wanted to be a geologist, it is not likely that many of the five-year-olds had heard of the occupation, so the likelihood of one of them mentioning it was low. Very visible occupations in our society--doctors, policemen, nurses, firemen, etc.--were frequently the choice of the youngest children, while an increasing number of less visible, but higher prestige occupations are mentioned with increasing frequency in the older children.

This study adds considerable information to what was already known in occupational value research (Caro, 1966; Stephenson, 1957). These results are somewhat dissimilar to those found by the above lines of research, which also used occupational measures. Clear-cut class differences for boys did support the Stephenson data, but not the Caro study which confirmed the value stretch hypothesis for high school boys. While Caro used only male subjects, when one equates for the sex differences, the results are still not similar. This may be due to some extent to the inclusion of the younger subjects in this study and therefore a smaller number of high school subjects on which the Caro data was based. The additional questions asked in this study and the eight intervening years between the studies may also have some bearing on the dissimilar results. During the past

eight years, increasing efforts have been made to allow working class children the opportunity to develop their potential through public education. Even though the working class boys predicted lower prestige occupations than upper class boys, they did see the higher prestige occupations as being reasonably attainable. In addition to this, much of the data for both classes of fourteen-year-old boys was similar.

From the Milgram et al. (1970) data it would be predicted that there should be less differentiation between the four questions for the five-year-olds than for the older subjects. In some of the analyses, large differentiation was observed, indicating perhaps that occupational prestige is not a meaningful dimension in occupational choice for five-year-olds. Sex differences in prestige scores, even at this age, however, indicate that the girls were picking sex appropriate occupations as much at five, and perhaps more so, than at the other three ages considered in this study.

These results have wide-reaching implications for vocational counseling. First of all, it is evident that for both classes of girls and for working class boys, the range of occupations attainable to them should be made known. In the youngest groups in the study, the children were most likely listing occupations they had frequent exposure to (parents, relatives, neighbors) who were also available models for these children. This is the age at which both sexes should be acquainted with a wide variety of adult occupations as part of classroom activity. Not only should mothers who are nurses and housewives

come to talk to classes, but women (preferably women close to the children, such as mothers, relatives, and neighbors) who are lawyers, architects, and doctors should present their views as well. Similarly, in working class schools, a wide range of occupations should be presented by both sexes.

With the older children, the wide range occupational exposure should be continued. While the problem does not appear to be as acute with the boys as with the girls, continued emphasis should be made on the alternatives open to both sexes in terms of available occupations while they are growing up. Particular emphasis would be placed on the girls since they appear to be more limited in terms of perceived alternatives than the males on the basis of the results from this study.

In the future, more research needs to be done, particularly identifying perceived sex classifications of jobs and varied means of exposing children to potential occupations effectively.

VI. SUMMARY

This study was conducted to ascertain whether or not as children get older, predicted and ideal occupations change for them as a function of the perceived social feedback each receives. It was predicted that working class children and girls learn what appropriate occupations are for their sex and class with increasing clarity as they get older. They should therefore resolve any dissonance they might have about it not being appropriate to attain high prestige occupations by picking and valuing lower prestige occupations.

Subjects for the study were male and female, working and middle-upper class children in four equal sized age groups of five, eight, eleven, and fourteen years. They were asked occupation questions of predicted occupation, wish occupation, reasonably expected occupation, and ideal occupation. These were scored by means of the Duncan Socio-Economic Status Scale for the three main variables of Class, Sex, and Age on four difference scores between the four occupations scores which were selected to measure the subjects' resignation to lower prestige occupations, perceived limitation, objectivity, and difference between reasonably expected and predicted occupations.

Results yielded clear-cut age differences for the three occupation questions analyzed, Class x Sex, Class x Age, and three-way interactions. These results were discussed in terms of social class,

implications of differential sex results, and changes in responses due to age.

While the results reflect some support for the main contention of perceptual change due to environmental feedback, it was clearly the case that this environmental feedback is different for girls than it is for boys. Both classes of girls made responses consistent with the original downward value stretch hypothesis, although this was more the case with the working class girls than the middle-upper class girls. This class difference was interpreted in terms of indirect status ascribed females on the basis of family status as opposed to individually attained status.

Working class boys seemed to stretch their perceptions of predicted and expected occupation prestige upwards closer to the high prestige ideal occupations they gave.

Fourteen-year-olds listed significantly higher prestige occupations than the other age groups, although predicted occupations were different for all age groups. This was interpreted in terms of 1) occupational prestige being a more meaningful consideration as children get older and 2) an increased exposure to a wide range of occupations.

Finally, suggestions were made for vocational counseling of both girls and working class boys.

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APPENDICES

APPENDIX A

QUESTIONNAIRE

APPENDIX A

QUESTIONNAIRE

SCHOOL DISTRICT: MASON _____

WAVERLY _____

SEX _____

AGE _____

GRADE: K 3 6 9

FATHER'S OCCUPATION _____

MOTHER'S OCCUPATION _____

QUESTIONS:

1. What job do you think you will have as an adult?

   _____

2. What job would you really like to have as an adult?

   _____

3. What is the best job that you can reasonably expect as an adult?

   _____

4. What is the best job anybody can have as an adult?

   _____

APPENDIX B

SELECTED OCCUPATIONS AND CORRESPONDING DUNCAN STATUS SCORES

APPENDIX B

SELECTED OCCUPATIONS AND CORRESPONDING DUNCAN STATUS SCORES

Occupation	Status Score
Automobile worker (operative)	21
Automobile worker (assembly)	17
Banker	85
Carpenter	31
Construction worker	18
Dentist	96
Engineer	87
Fireman	37
Farmer	14
Housewife (also Mommy)	0
Lawyer	93
Nurse	46
Physician	92
Policeman	40
Retail trade (sales)	39
Secretary	61
Teacher	72
Waitress or waiter	16

APPENDIX C

INSTRUCTIONS FOR SUBJECTS

APPENDIX C

INSTRUCTIONS FOR SUBJECTS

On the sheet I have handed out please put an X at the top of the page next to the _____ (appropriate school district) school district. On the other side of the top of the sheet, place an X next to female if you are a girl (female) and next to male if you are a boy (male). Next, fill in your age (pause), circle your grade (pause), then fill in your father's occupation on the line next to where it says "father's occupation." Do not worry about spelling--simply sound it out; if you do not know exactly what his title is, tell me what he does at work, or simply where he works. (pause) Now do the same thing for your mother's occupation. (pause) Everybody finished?

On the next four questions, I will read these with you then wait until everyone is finished before moving on to the next question. For each one of these, please fill in a specific job that people do. If you don't know the name of the job, describe it; again, don't worry about spelling--simply sound out words you cannot spell. Until we have finished, please look only at your own paper. Any questions?

(Read questions, waiting until everyone is finished before moving on.)

APPENDIX D

TABLE OF MEANS

APPENDIX D

TABLE OF MEANS

Variables	Mean Status Scores				Mean Difference Scores				
	Analysis 1	Analysis 2	Analysis 3	Analysis 4	Analysis 5	Analysis 6	Analysis 7	Analysis 8	Analysis 9
Class									
Working	42.37	49.11	46.90	47.77	1.78	-1.16	-6.77	3.59	6.59
Middle-Upper	48.85	47.01	52.69	56.64	5.14	3.19	2.96	4.19	1.42
Sex									
Male	50.42	47.23	51.88	48.99	3.69	3.04	2.12	2.39	3.49
Female	40.80	54.80	50.59	55.43	3.23	-1.01	-5.93	5.39	4.52
Age									
5 Years	37.90	36.03	49.03	36.00	-2.87	-6.00	-0.27	7.48	-7.85
8 Years	44.65	45.65	43.40	51.23	0.98	2.23	5.65	-1.25	11.23
11 Years	46.93	59.40	53.92	66.93	12.52	5.98	7.68	6.50	8.68
14 Years	62.50	64.70	65.08	68.35	2.20	1.98	1.80	2.83	3.95