ACHIEVEMENT VARIABLES AND CLASS CULTURES:

FAMILY, SCHOOLING, JOB AND FORTY-NINE DEPENDENT VARIABLES

IN THE CUMULATIVE GSS

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## Abstract

This study asks whether and how the core achievement variables
(Father's Occupation, Educational Attainment, and Respondent's Occupation)
affect a variety of attitudes and behaviors.  Contingency table models are
used to give operational definitions of effects produced by score mobility,
sheer mobility, investment psychology, and status consistency as well as the
general hypothesis of "class cultures."  Forty-nine items from the 1972-80
cumulative NORC General Social Survey are analysed to test these hypotheses.
The conclusions are:  (1) There is no evidence to support the hypothesis of
sheer mobility effects.  (2)  There is no evidence to support the hypothesis
of status consistency effects.  (3) The associations of achievement variables
with the 49 dependent variables are mostly weak and not generally
statistically significant except in extra-large samples.  (4) Respondent's
occupational stratum has nontrivial associations with about a third of the
dependent items and the differences tend to follow the prestige order of the
strata, but the magnitudes are small and the associations are concentrated in
two clusters, cynicism and items directly related to jobs and economic
security.  (5) Among Americans from non-farm backgrounds, prestige stratum of
father's occupation has no net association with any of the 49 items.  Persons
from farm backgrounds tend to be more conservative as adults.  (6) The
evidence is strongly against the hypothesis that score mobility per se affects
any of the items.  (7) There is no evidence that Education operates as an
"investment" and occupation as a "return" in terms of their effects on
attitudes and behaviors, (8) Of the achievement variables, Education is
clearly the most powerful predictor.  It explains any associations between
Father's stratum and the dependent items and it has more and stronger
associations with dependent items than does respondent's occupational
stratum.  (9) All in all, the notion of class cultures receives little support
from these data.

Introduction

Blau and Duncan (1967) call their book The American Occupational
Structure but its main effect has been to recast rank variables as stages in
an achievement process whose core variables (Duncan, Featherman, and Duncan,
1972:5) are:

$$\text{family} \longrightarrow \text{schooling} \longrightarrow \text{job}$$
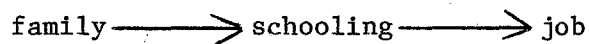
Since occupational levels remain fairly constant in the later adult
years, this perspective has tended to view job (and earnings) as the end of
the line, dependent variables to be explained by family background,
intervening events, or residual random fate. Thus, for example, Coleman and
Rainwater (1978: 4-5) argue:

> In the development of empirical sociological approaches to social
> stratification, a number of problems have aroused researchers'
> interests...the principle question must be (sic) that of the actual
> distribution of goods...Sociologists have been interested mainly in
> the distribution of occupations and secondarily in the distribution
> of education. Economists have concentrated on the size distribution
> of income."

Jencks, et. al. (1979) summarize it crisply in the title of their
book, Who Gets Ahead?

The attainment approach has tended to eclipse an older tradition
which studies the effects of stratification, both objective (crime, family
stability, mortality, morbidity, etc.) and subjective (morale, attitudes,
values, political preferences, etc). This paper is in this older tradition of
treating scores on rank measures as independent variables. It follows a
sequence of studies dating back many decades (Sorokin, 1927; Centers, 1949;
Stouffer, 1955; Lipset, 1959; Hyman, 1966; Kohn, 1969; Curtis and Jackson,
1977; Hyman and Wright, 1979).

Such novelty as this report may hold lies not in the problem —
whether and how achievement variables influence subjective and behavioral
variables — but in two recent technical advances, the NORC General Social
Survey (Davis, 1980) and the "Goodman techniques" (1978) for analysing tabular
data.

## GSS

The cumulative General Social Survey (GSS) pools 8 national NORC
personal interview surveys between 1972 and 1980 totalling 12,120 respondents
representing continental U.S., English speaking persons, 18 years of age and
older, living in non-institutional quaters. Since most GSS items are repeated
annually or in a rotation scheme, one may combine the individual surveys to
increase the case total and dampen effects of current events near field work
times. The 49 tables analysed here have N's ranging from 1,673 to 9,480 with
a median of 5,700.

Since the GSS was designed to be eclectic it is possible to find items
on most topics covered in previous research and in some cases exact
replications. No standard grouping of "subjective and behavioral" variables
exists, but the studies cited cover similar themes from Centers' "class
sympathies and antipathies, racial and ethnic prejudices, religion, women,
success and opportunity, satisfactions and frustrations, values and desires"
(1949:214-216) to Jackson and Curtis's "Formal social participation, informal
social participation, political liberalism, satisfaction and symptoms of
stress, intolerance, anomie, and aspirations for son" (1972:707). I chose 49
GSS items which seemed to tap issues raised in the literature, grouping them
as (1) morale, (2) attachments, (3) politics, (4) values and tastes, and (5)
social issues. Readers who prefer their own groupings may use Table 10 for
that purpose.

I can hardly claim the 49 are a representative sampling of any universe of content, but I am prepared to argue (1) no major themes in prior research are missing, (2) because the GSS was designed with the advice of many sociologists, the topics cover areas of interest to professional Sociology, and (3) these results are based on considerably more items and considerably larger or more representative sampling than any previous studies.

Table 1 gives the items, mnemonics, wordings, category groupings, and N's.

(Table 1 here)

For the achievement variables I chose Father's Occupation (PAOCC16), "What kind of work did your father (father substitute) normally do while you were growing up?," Respondent's Education (EDUC), "What is the highest grade in elementary school or high school that you finished and got credit for?" and Respondent's Occupation (OCC), "What kind of work do you (did you) normally do?" Occupations were coded into the standard five-fold Census groups (a=Professional, Technical and kindred; Managers and Administrators, b=Clerical and sales, c=Craftsmen and kindred; d=Operatives, Laborers, Service workers; e=Farm) and education was trichotomized as 0-11, 12, and 13 or more years. Table 2 shows the marginals.

(Table 2 here)

Because so few contemporary Americans are farmers, the "e" category was excluded from Respondent's Occupation (but not, of course, Father's) to avoid empty cells. Note that the sample includes both men and women and furthermore, retirees, housewives, and the unemployed are not currently holding the job they report as their normal occupation.

These three achievement variables were cross-tabulated against each of the 49 dependent variables to see whether and how family (father's

occupation), schooling (years completed) and job (respondent's normal occupation) are related to various attitudes and behaviors.

## Goodman Analysis

The Goodman approach (iterative proportional fitting of hierarchical models) enables us to make significance tests for seven possible associations involving a dependent variable, D. Calling Father's occupation "F," Educational attainment "E," and respondents's occupation, "R," the possible associations or "effects" are FERD, FED, FRD, ERD, RD, ED, and FD. A table showing the seven effects for each of the 49 D's, i.e. 343 tests, would constitute an answer to our research question.

Note, however, that an F x R table defines the classic "Father-Son/Daughter mobility matrix" and an E x R table defines combinations of interest to theorists of status consistency or, alternatively, those who view occupation as a return on educational investment. Thus, a closer examination of the possible effects may enable us to build a bit more Sociology into what otherwise would be a routine analysis.

I start with mobility. Mobility effects have been much studied and debated. I draw on the discussion by Curtis and Jackson (1977:110-115) but recast their ideas into the lingo of contingency tables, using a hypothetical example to make the points. Consider a fictitious numerical variable with pre and post measures (e.g. F and R) and for simplicity, just three scores, as shown in Table 3.

(Table 3 here)

Each cell in Table 3a is the mobility score for respondents with a particular origin and destination, e.g., the upper left hand corner cell is associated with people who started at 7, ended up at 2, and hence have a mobility score of -5. Any measure of mobility or any dependent variable

which is a linear function of mobility should track the cell values for Table

3a. Let us consider what to expect when we analyse an F x R x D table for a D

closely related to mobility. The right hand columns and bottom rows in Table

3a give the answer. Consider first, the effect of R scores on D with a given

value of F. The +2's in the far right column tell us that when we compare

High and Medium R's from the same origins we always get a difference of +2 and

when we compare Medium and Low R's we always get a difference of +3. That is,

controlling for origin, the higher the destination the greater the mobility.

Similarly, when we look at the effects of origin (R) on level of D we see the

same difference values, but the signs <u>reverse</u>. Controlling for destination,

the higher the origin, the <u>less</u> the mobility. Combining these two results:

> In an origin by destination by dependent variable (FxRxD) table,
> score mobility effects will produce FD and RD effects with opposite
> signs.

> If only one of FD or RD is present, we doubt that score mobility is
> generating the effect although there will probably be a zero order
> association between mobility scores and D. If FD and RD have the
> same sign and similar magnitudes, the evidence is strongly against a
> mobility interpretation and the zero order association between
> mobility scores and D will be very small.

I will call mobility, as defined above, "score mobility" since it

manifests itself as scores with plus or minus signs. The great theorists of

the discipline, however, have often used their Sociological imaginations to

produce a different definition. Sorokin (1927:509), for example, wrote:

> When a man throughout his life works at the same occupation and has
> the same economic and social status, his mind is decidedly
> marked...he is doomed to think and to look at the world through the
> glasses of his "social box"...Another picture is given by the mind of
> a man who passes from occupation to occupation, from poverty to
> riches, from subordination to domination and <u>vice versa.</u> (emphasis
> in original)

And Durkheim (1897: 252) said:

> In the case of economic disasters, indeed, something like
> declassification occurs which suddenly casts certain individuals into
> a lower state than their previous one...their moral education has to

> be recommenced...It is the same if the source of the crisis is an
> abrupt growth of power and wealth...the scale is upset and a new
> scale cannot be immediately improvised.

The notion here is that the sheer amount or fact of change is more important
than its direction.  I will call this second version "sheer mobility."

If sheer mobility were operating on D, we would remove the signs from
the cell entries in Table 3a to get Table 3b.  Necessarily the pattern of
differences for FD and RD changes, producing an interaction effect:  the sign
of RD varies according to level of F (if you start at the bottom, the higher
your R, the greater your sheer mobility, but if you start at the top, the
higher your R, the less your sheer mobility).  Of mathematical necessity FD
will have a similar interaction.  Thus:

> In an origin by destination by dependent variable (FxRxD) table,
> sheer mobility effects will appear as an FRD interaction.

This is a necessary but not sufficient condition.  If and when such
interactions turn up (Curtis and Jackson's results do not lead us to be
optimistic), we must inspect the cell by cell results to see whether they
follow the diagonal pattern suggested by Table 3b.

> In summary, when looking at FD, RD, and FRD:
>
> 1) An FRD interaction suggests examining the data for <u>sheer</u>
> mobility effects.
>
> 2) FD and RD effects with opposite signs and no interaction suggest
> the operation of mobility <u>scores.</u>
>
> 3) All other patterns suggest "mobility" is a poor concept for
> interpreting the results.

Exactly the same reasoning may be applied to ED, RD, and ERD, giving
us operational definitions of the concepts "return on investment" and "status
consistency."

Achievement research is heavily influenced by Economics in general and
the "human capital" approach in particular.  Many Sociologists interpret

Educational attainment as an "investment" with adult occupation and income as "returns" on that investment. Whether the generality of Americans apply an "investment psychology" to their achievement has not been studied. How would data behave if investment psychology were operating? Exactly like the pattern for score mobility, I argue. If occupation operates as a return, then at any level of education, the higher the occupation the greater the return while at any level of occupation, the greater the education, the less the return.

Sociology itself has provided a second concept for interpreting ED and RD, "status consistency" (Jackson and Curits, 1972). The notion is that particular combinations of, say, Education and Occupation, produce particularly high or low scores on D. Often consistency theorists argue that for highly correlated variables like E and R scores off the main diagonal in either direction generate inconsistency effects. In other words, we would expect an ERD interaction.

In summary, when looking at ED, RD, and FRD:

1) An ERD interaction suggests the operation of status consistency.

2) ED and RD effects with opposite signs and no interaction suggest the operation of a "return on investment" psychology.

The concepts score mobility, sheer mobility, status consistency, and return on investment give us a framework for interpreting any RD, ED, FRD, and ERD effects which turn up. The two remaining effects involving D, FERD and FED seem to have no precursors in the theoretical literature. I will worry about them if and when we catch one.

Substantively, what should we expect? The literature leads us to expect: (1) higher rank will be associated with higher morale, stronger attachments, conservative economic positions, distinctive tastes and values, and liberal positions on social issues. (2) Sheer mobility and status

inconsistency should be associated with lower morale, lesser attachments, and more liberal politics and social attitudes. (This follows from the theoretical tradition. The empirical research tradition is to believe neither variable is related to anything.) (3) In the absence of a theoretical literature common sense suggests the greater the occupational return on educational investment, the greater the morale and the more conservative the politics ("I made it, why don't those people just get jobs?"). (4) It is difficult to predict for score mobility since few theorists distinguish between sheer and score mobility, but my intuition suggests the greater the mobility the higher the morale and the more conservative the politics.

More generally, we also wish to consider the magnitude of the various associations to see whether achievement has strong and diverse effects or weak and scattered ones and also to see which of the achievement variables seems the most powerful predictor--if they differ.

Collectively these questions test the hypothesis of "class cultures." To the extent the effects are large in magnitude, pervasive across content, and involve all the achievement variables operating in the same direction, the notion that the U.S. is layered into class cultures seems fruitful. To the extent the effects are small in magnitude, concentrated in limited topics, and limited to fewer achievement variables, the notion of class cultures would seem forced or artifical.

To test these various hypotheses and concepts I tested the fit of eight hierarchical models for each of the 49 D's in Table 1. The models are defined in Table 4 and their rationale will be explained as they turn up in the discussion of the results.

(Table 4 here)

## Results

### Interactions

The findings for interactions are clear cut: there aren't any.

Consider Table 4 and line 1 of Table 5. The model H1 = (FER) (FD) (ED) (RD) excludes all four interactions involving D (FERD,FED,FRD,ERD). H1 fails to fit the data at the .05 level using textbook formulas in just 3 of 49 tables. Since one would expect 2.45 out of 49 failures when testing 49 independent sets of random data when using the .05 level, the three exceptions are not very persuasive.

But even these results are extravagant since they assume simple random sampling (SRS). Since the General Social Survey, like all modern national samples, is clustered, the raw N's overestimate its power. The rule-of-thumb advice (Davis, et. al., 1980:187) is to treat N as .667N, that is to consider a sample of 1,500 to have the power of an SRS sample of 1,000. When this is done (right hand column of Table 5) none of the 49 tests produces a significant discrepancy for H1.

H1, of course, is a shotgun test of the null hypothesis that the four D interactions are collectively nil. It is possible (but not likely) that one is significant and the others very-much-not, so as a group the effects are weak. Lines 2-3-4 shoot down this notion. Since the models H2, H3, and H4 differ from H1 only by the presence of FED (H2), FRD (H3) or ERD (H4), differences between each and H1 test the null hypothesis that a particular three variable interaction is nil. Rows 2-3-4 of Table 5 show the results: we are tempted to reject the null hypothesis only once for cluster-adjusted N's and at most 6 out of 49 times (FRD) under SRS assumptions.

These results are so negative one is almost puzzled. Do we, perhaps, lack power to detect interactions? Since the median N over the 49 tables is 5,700 (3,800 cluster adjusted), sample size is hardly the problem. Therefore

it is of some comfort to find that GSS data can actually produce a significant "mobility" effect, though not for our achievement variables. The aphorism, "converts are more Catholic than the Pope" suggested that if one looks at religious mobility against a dependent measure of religiosity, an interaction effect of the "sheer mobility" type might turn up. That is, we might find religious switchers either-way score higher on religiosity than Catholics who remain Catholic and Non-Catholics who remain Non-Catholic. Table 6 shows the results, using Item #18 from Table 1 ("Would you call yourself a strong ___?") as the measure of religiosity.

(Table 6 here)

Table 6 does show a "sheer mobility effect," albeit opposite to the aphorism's prediction. Converts are less "strong" (36.9 percent and 30.6 percent) than the religiously stable (42.2 percent and 41.1 percent). This "ABC" interaction is statistically significant as the model (AB)(AC)(BC) generates a Likelihood Ratio Chi Square ($L^2$) of 11.334, which exceeds the 1 d.f. criterion level of 3.84 even after correction for clustering (11.334 x .667 = 7.56). The mobility effect in Table 6 is not very strong (this will be justified later) but it is precious as I suspect it is the only statistically and intuitively plausible support for the Sorokin-Durkheim sheer mobility hypothesis in the history of social science. Movement to or from Catholicism appears to lower religiosity.

Back to the less exciting findings on achievement, rows 1-4 in Table 5 suggest the following substantive conclusions:

Conclusion 1: There is no evidence to support the hypothesis of sheer mobility effects for these 49 dependent items.

Conclusion 2: There is no evidence to support the hypothesis of status consistency effects (Education and Occupation or Father's Occupation and education) for these 49 dependent items.

Conclusions 1 and 2 unambiguously confirm, update, and extend the findings in Jackson and Curtis (1972).

## Two Variable Effects:  An Overview

The plethora of negative results (low $L^2$s) evaporates when we shift to the two variable effects, FD, ED, and RD.  Consider them first as a package. H5 (Table 4) differs from H1 by setting FD and ED and RD to nil.  When the difference between the $L^2$s for H5 and H1 is small, we tend to accept the null hypothesis that the two-variable effects involving D are collectively nil; when the difference in $L^2$s is large, we tend to infer that some of the achievement variables are associated with d.  It has been noted that comparisons like H1 v. H5 are analagous to the multiple correlation in regression.

Line 5 in Table 5 gives the verdict.  H5 almost never fits.  In 47 out of 49 cases the cluster adjusted chi squares are statistically significant. With the exceptions of "Hard Work" (#13 in Table 1) and "Chance to Advance" (#34) the achievement triad shows significant relations across the board - morale, attachment, politics, values and tastes, and social issues.

But how strong are these statistical effects?  With N's averaging 5,700, statistical significance per se doesn't mean much.  $L^2$ is the obvious candidate as a measure of magnitude but it requires a bit of doctoring as chi square is a notoriously ambiguous measure of association strength.  First, chi square is strictly proportional to sample size.  If you double sample size, you will double chi square.  Because our N's range from 1,673 to 9,480 (not all D's appear in every GSS) it is necessary to correct for sample size.  We begin by dividing $L^2$ by N, but this gives inconveniently small figures, e.g. 7.56/8,252=.0009151.  Multiplying $L^2/N$ by the arbitrary value 1,500 changes things to a more convenient scale (.0009151 x 1,500 = 1.37).  Such results may

be interpreted as the $L^2$ one would get if these data came from a single GSS. Second, the chi square distribution also varies with the degrees of freedom, df. Researchers often divide chi square by df, but this is an over-correction as the relationship between df and chi square at a given probability level is virtually linear but not proportional. For example, at the .05 level the criterion value for 10 df, 18.307 is only 4.8 times the 1 d.f. value, 3.841. Dividing by d.f. tends to bias magnitude measures against effects with more degrees of freedom. Taking our "data" from the standard chi square table, we find the following results when regressing chi square on df values 1 through 20:

(Table 7 here)

The slope varies with the probability level, but not much, increasing from 1.00 to 1.41 to 1.75 as we shift from probability levels .50 to .05 to .001. Since we are generally more interested in magnitude when Chi Square is significant and since we are looking for a plausible approximation rather than an exact function, I will use the rule of thumb that chi squre increases 1.5 per df at any particular probability level. As with N, it is convenient to take an arbitrary yardstick value. I chose 2 df.

Combining the two corrections:

$$L^2_{adjusted} = (L^2 * \frac{1500}{N}) - [(df - 2) * 1.5] \quad (1)$$

The adjusted $L^2$ may be interpreted as a rough estimate of what $L^2$ would have been if the data had come from a single GSS and the test used two degrees of freedom, as in testing the significance of a two variable effect for a trichotomous D. One might tack on a .667 for multi-stage sampling but in this paper that would be a constant. It is easier to multiply to two df, .05 criterion value, 5.992 by 1.5 to get 8.9865, or for all practical purposes, 9.

The $L^2_{adj}$ for Table 6 (1.37 + 1.5 = 2.87) is less than 9, so we would not expect to capture the effect in a single GSS.

We will use equation (1) to roughly equate chi squares from various sample sizes and comparisons with various degrees of freedom, using the value of 9 or larger to sort out relationships that would probably be significant in a single GSS. As insurance, however, we will also look at the findings in terms of the more familiar percentage difference.

As happens so often when one shifts from significance tests to magnitudes when analysing large samples, the subjective and behavioral effects of the achievement triad appear less impressive in Table 8 where the adjusted $L^2$ are summarized.

(Table 8 here)

Starting in the bottom half of the table we see median adjusted scores of 27, 2, 8, and 4 for FER, F, E, and R. In terms of the benchmark value of 9. The joint F-E-R effect is "usually significant" (in a single GSS) but the median values for F and R are well below 9 and the median of 8 for E is borderline. Only 51 out of 147 (35.9%)of the adjusted direct efforts in Table 8b exceed 9. In other words, if we pick a single GSS and tabulate the FER triad against a variety of dependent variables, we would routinely find something going on but we would not routinely find each item in the triad has a significant association with most dependent variables. The impressive significance levels in Table 5 are very much influenced by the extra-large sample sizes of the cumulative GSS.

Since $L^2$, like the odds ratio, has no upper limit, who is to say how large is large? One benchmark would be the relationships among the achievement triad variables themselves. The top half of Table 8 gives us these figures from the cumulative GSS. For comparison, the right hand column

gives b's (standardized regression coefficients) from Blau and Duncan
(calculated from data in 1967:169). Although our sample includes both sexes,
excludes farmer as a respondent's occupation, and is almost a decade newer,
the pattern of magnitudes is similar: F and E have a large joint effect (234)
on R, the effects of F on E and E on R are similar, (234 and 369) and the
effect of F on R is small, but not zero (48). In a way, these are the main
"point" of the core achievement model. Thus, Featherman and Hauser (1978:4)
write:

> From their basic model, Blau and Duncan concluded that years of
> formal schooling accounted for nearly all of the direct effects of
> paternal occupational status and education on son's occupational
> standing as of 1962.

Duncan, et. al. (1972:12) put it this way:

> While education is of great importance in transmitting the effect of
> background, there is in the basic model a nontrivial direct influence
> of background on occupational achievement.

Assuming the RE net association ($L^2$ = 48) to be "at least small but
nontrivial" our adjusted yardstick value of 9 seems very small. Let us
arbitrtarily take "25" as a definition of a "significant and nontrivial direct
effect." By this longer yeardstick, our results fall even shorter, as shown
in Table 8b.

> Only 16 out of 147 (11 percent) of the direct effects reach the value
> of 25 or more.

> Only 2 out of 147 (1 percent) have values of 25 or larger for more
> than one predictor variable.

> The largest of all, 91.7 for Education and Intermarriage, is less
> than half the value for the effects of F on E or E on R (Table 8).

It is sometimes alleged that "subjective" measures are less reliable
than "objective" measures such as years of schooling. If so, our D magnitudes
may be biased downward by technical factors. Table 9 casts doubt on this
hypothesis. It gives adjusted $L^2$s for three GSS items that are "subjective"

but definitely part of the achievement domain - ratings of the parental

family's relative income, the present family's current income, and social

class self-placement. The median direct effect, 20.5, is much larger than the

D medians in table 8; two of the three items have direct effects of 50 or

more; and each of the three have larger multiple effects than all but the top

quarter of D's-even though the substances of the items in each case might seem

rather "iffy." To review:

> All but two of the 49 items show statistically significant
> associations with achievement variables.

> When, however, the data are adjusted to the sample size 1,500, (an
> arbitrary number but one typical of the national surveys frequently
> cited in the literature), only a third of the direct (FD, ED, RD)
> effects remain significant.

> When, furthermore, magnitudes of the significant associations are
> compared with those for relations among the achievement variables
> themselves, only 11 percent are of comparable magnitude.

Conclusion 3:

> The associations of achievement variables with the 49 subjective and
> behavioral variables are mostly weak and not generally statistically
> significant except in extra large samples.

The conclusions on magnitude, of course, depend on the plausibility of

the adjusted $L^2$ measure. Readers who are dubious about the measure may use

the right hand columns in Table 10 to explore the same questions using the

traditional percentage difference. The entries are pooled d's (Davis, 1975:

126-9) or variance weighted averages of d's over combinations of control

categories. In each case one category is chosen as a reference - for FD and

RD it is category "a," Professional, Technical, and Managerial, and for ED it

is 13 or more years. Consider the top line and the dependent item "the

future." The blanks for the columns headed FD say the adjusted $L^2$ for FD was

less than 9 (the left side of the table shows it to be 2.6). The -.09 for "12

under ED says that the percentage of optimistic respondents among high school

graduates averages 9 points less than the percentage among those with a year

or more of college, and -.24 says that respondents with 0-11 years of school

are 24 points lower than the college group.  The -.07, -.09 and -.17 under the

columns headed  RD say that in contrast to Professionals and Managers,

clerical workers average 7 points lower on optimism, crafts workers average 9

points, and the operative-service-labor workers average 17 points lower.

There are 143 d's in table 10 and only 15 (10 percent) are 20 points or more,

only 3 exceed 30 points.  (Nothing is lost, believe me, by leaving out the

percentages for L's under 9.  I have looked at them and there is nothing

interesting in percentage terms there.)

<div align="center">(Table 10 here)</div>

<div align="center">Occupation</div>

Respondent's occupation has significant net associations (cluster

adjusted controlling for Education and Father's Occupation) with 37 of 49

items (76 percent) but:

> ...using the more conservative $L^2_{adj}$ measure, it produces values of
> 9 or more for only 18 of 49 (37 percent)

> ...the median $L^2_{adj}$ is 4

> ...only one $L^2_{adj}$ (Job Satisfaction = 25.4) is larger than 25.

Looking at the specific items in Table 10, the effects of Occupation

appear pervasive and diffuse, but a closer inspection modifies the

impression.  With the exception of Death Penalty, where craftsmen are more

harsh (perhaps partly because they are almost all males), there are no effects

at all in the "social issues" cluster and the remaining items tend to bunch up

in two areas:

> Narrowly occupational and economic:  lower prestige workers are
> less satisfied with their jobs (25.4), give less priority to
> meaningful work (23.2), give more priority to secure jobs
> (11.4), report less financial satisfaction (10.1) are more
> favorable to welfare spending (9.8) and are less likely to
> espouse the work ethic (9.5).

Cynicism: Lower prestige workers are less likely to say others are trustworthy (22.8), to say others are helpful (18.0), to be optimistic about the future (17.0), to believe the lot of the average man is improving (11.8) or to think well of public officials (9.2).

The theme here seems to fit the dictionary definition of cynicism ("distrustful of human nature and motives") better than the original classification of "morale" or "attachments," since lower prestige strata do not differ on happiness, marital happiness, family satisfaction, sociability, neighboring, religiosity, etc.

Aside from these clusters, the net effects of occupation boil down to these: compared with a's (Professional, Technical, Managers, Administrators):

b-c-d workers have fewer voluntary association memberships and are less likely to read newspapers.

c's (heavily male) are lower on church attendance and religious intensity, more favorable to the Death penalty.

c's and d's (blue collar workers) are less likely to be Republicans.

The three columns of differences at the right of Table 10 give us insight into classical "white collar v. blue collar" issues since we can use them to calculate the differences between adjacent strata. (Thus for "the future" in the top line, since the b-a difference is -.07 and the c-b difference is -.09, the c-b difference is -.02.) Table 11 summarizes the differences among adjacent strata.

(Table 11 here)

If in each case the category differences in the D proportion were in the order a-b-c-d, the stratum comparisons would all have negative signs. If, on the other hand, the big gulf was between collar levels, we would find all negative d's for c v.b, but not for b v.a, or d v.c. I read Table 11 as follows:

Most of the differences (37 of 51 or 73 percent) are negative, with an average value of -.04.

> For each comparision of adjacent strata, the mean and median are
> negative, as are 59 percent to 82 percent of the items.
>
> Of the adjacent comparisons, the d-c (operatives-service-labor
> v. crafts) gaps seems least sharp. But of the seven positive
> d's, the three largest, Death Penalty, Church Attendance, and No
> Religion, are probably inflated by the concentration of males in
> crafts jobs and sex differences in these items.

All in all, these data seem to support the hypothesis of ranked strata.

Another way of viewing these findings is to say they cast considerable

doubt on the "class culture" notion that occupational strata have vast and

diffuse effects on the texture of our lives. Centers (1949:141), for example,

claims:

> The differences in basic politico-economic orientations found to
> exist between classes...do not by any means exhaust the existing
> contrast in psychological characteristics between
> them...Differences exist, for example, in sympathies and
> antipathies, prejudices, beliefs, satisfactions and
> dissatisfactions, goals and desires.

To be sure, Center does not define class strictly in terms of

occupation, but the notion of broad cultural differences between the

occupational strata permeates academic and pop social science through such

concepts as "middle class values," "the culture of poverty," "hard hat

mentality," "bourgeoise morality," "working class authoritarianism," etc.

The GSS data do show some occupational differences that suggest

cultural patterns: newspaper reading, membership in voluntary associations,

and party identification. But the same data do not show occupational

differences (once Education is controlled) for attitudes toward free speech,

communism, military spending, race relations, sex roles, chastity, marital

happiness, marijuana, etc., etc.

Perhaps the Census categories do not capture occupational prestige

well enough to reveal its effects. Since a cross-tab of our GSS occupational

levels against Hodge-Segal-Rossi prestige scores in four groups gives a $L^2_{adj}$

of 1658, I do not find this hypothesis promising.

Conclusion 4:

> Respondent's Occupational stratum has nontrivial associations
> with about a third of the dependent items. The differences tend
> to follow the prestige order of the strata but the magnitudes
> are weak and the associations are concentrated in two clusters,
> cynicism and items directly related to jobs and economic
> security.

## Father's Occupation

If the effects of respondent's occupation are disappointing, they are

enormous compared with the associations for father's occupation (stratum of

origin). Thus:

> 30 of 49 (61 percent) of the associations are statistically
> significant (cluster adjusted) in the raw data.
>
> The median $L^2_{adj}$ is 2.
>
> 11 of 49 (22 percent) have $L^2_{adj}$ values of 9 or more.
>
> Three have adjusted $L^2$s of 25 or more:
>
>> Premarital 42.7
>> Free Speech 33.5
>> Intermarriage 30.1

Scrutiny of Table 10 suggests that even these modest results are

overstated. The big differences are concentrated in the column headed "f"

(e.g., -.28 for Premarital, -.23 for free Speech, -.21 for Intermarriage).

For the eleven "keepers" with magnitudes of 9 or more the big difference is

between people who grew up on the farm and nonfarm people from whatever

stratum. This hypothesis is easily tested by re-analysing the eleven large

effects after removing respondents from farm backgrounds. The result is

clear: when the farm reared are removed only six of the eleven are still

statistically significant (cluster adjusted) and none of the $L^2_{adj}$ values

exceeds 4.8.

Conclusion 5:

> Among Americans from non-farm backgrounds, prestige stratum of
> father's occupation has no net association with any of the 49
> items. Persons from farm backgrounds tend to be more
> conservative as adults.

Recalling that the signed mobility hypothesis implies opposite signs for RD

and FD:

Conclusion 6:

> The evidence is strongly against the hypothesis that sign
> mobility per se affects any of the 49 items.

I am not aware of any Sociologists since the Warner school who have

placed much stress on the net effects of origin stratum. Certainly such

differences are a staple of Anglo-American literature (from the Yoknapatawpha

novels of William Faulkner to The Great Gatsby to My Fair Lady) and again the

language is rich with phrases such as "nouveau riche," "parvenu," "social

climber," "arriviste," "come down in the world," "upstart," and "genteel

poverty" which imply our behavior is shaped by where we came from as well as

where we ended up. Nevertheless, Table 10 suggests 38 exceptions to the

idea. The eleven non-exceptions – effects produced by farm origins – have the

further consequence of suggesting that when parental social location has

lasting effects, they stem from some qualitative or sub-cultural aspect of

social structure, not from the ranked layers implicit in the word

"stratification."

These conclusions do not imply that people who grew up in different

occupational strata are totally homogeneous. The relationships among the FED

variables are so strong they can produce zero order associations when some net

effects are nil. For example, Table 10 shows adjusted $L^2$s of 2.0, 36.1, and

6.6 for FD, ED, and RD when D is "Anti-Communism." ED has a healthy value,

but when education is controlled Father's Occupation and Occupation have

virtually no effect on attitudes toward Communism. But if one runs the two variable tables for FD and RD one gets respectable $L^2$s of 17.8 for FD and 20.6 for RD – both explained by .Education. Americans of different occupational strata, past or present, differ in their attitudes to Communism, but their Educational differences account for both associations.

## Education

Education atainment has a more impressive box score. ED...

...is significant (cluster adjusted) for 35 of 49 (71 percent) items.

...has adjusted $L^2$s of 9 or more for 24 of 49 (49 percent).

...has adjusted $L^2$s of 25 or more for 13 items (26 percent).

| | | | |
|---|---|---|---|
| Intermarriage | 91.7 | Life Exciting | 37.4 |
| Free Speech | 75.7 | Anti-Communism | 36.1 |
| Woman's Place | 63.8 | Marijuana | 34.9 |
| Wives work | 49.2 | Redistribution | 29.3 |
| Future | 45.9 | Meaningful work | 27.0 |
| Gay Sex | 43.7 | Extra-Marital | 26.3 |
| Memberships | 40.1 | | |

Thus a hypothetical "typical GSS" would turn up significant net associations for about half of our items and nontrivial magnitudes for about a quarter.

Again the figures in Table 10 may be used to ask whether a relationship is ordinal. For the 24 cases with adjusted $L^2$s of 9 or more, each difference is negative and in each case the magnitude for 0-11 v. 13+ is larger than 12 v. 13+, i.e. all the differences are ordinal. For 12 years v. 13+ the mean is -.0996, the median -.10; for 0-11 v. 12, the mean is -.0988, the median -.08. When nontrivial net Education differences appear, the typical gap between college and high school graduates or between high school graduates and fewer years is about 10 percentage points.

As the literature persistently suggests, controlling for father's and

respondent's occupations, better educated Americans tend to be more optimistic and less cynical (but not happier or more happily married), joiners, more sociable, less anti-Communist, give greater priority to intrinsic apsects of work, are less addicted to TV, less favorable to large families, more permissive on issues of sex behavior and women's roles, and (among whites) more liberal on race prejudice items.

These reports are solid, but short of colossal. After all, half the time "ED" "doesn't work" and other analyses (Davis, 1979) show that items associated with Education tend to be associated with Age (being young or perhaps being born more recently almost always operates in the same direction as having more schooling) so when Age is controlled the education association is usually reduced, though seldom eliminated. Nevertheless, education is a much better predictor than Occupation. It has more "9's" (49 percent v. 37 percent) and more "25's" (26 percent v. 2 percent). If we simply take the difference between the adjusted $L^2$'s for ED and RD, ED is stronger in 34 of 49 cases (69 percent) and surpasses RD by 25 points in 11 cases while there is no item where RD exceeds ED by 25 points - the Job Satisfaction difference of 24.3 being the largest value of RD-ED.

The magnitudes of adjusted $L^2$ for ED and RD are uncorrelated (r = -.003) and when both happen to have an effect, their "signs" never disagree. Hence there is zero support for the "investment psychology" hypothesis. Even for Job Satisfaction itself, within levels of occupation there is no association between Education and Satisfaction - although the investment hypothesis would predict a strong negative association.

Conclusion 7:

> There is no evidence that Education acts as an investment and Occupation as a return in terms of attitudes and behaviors.

The zero correlation between the effect sizes for ED and RD casts doubt on yet another familiar Sociological concept – the notion of an underlying "socioeconomic status dimension" with various stratification measures acting like items in a test.

Finally:

Conclusion 8:

> Of the three achievement variables, education is clearly the most powerful predictor. It explains any associations between Father's stratum and the dependent items and it has more and stronger associations with dependent items than does respondent's occupational stratum.

Conclusion 9:

> All in all, given the weak magnitudes, disappointing effects of occupation, and lack of agreement between occupational and education effects, the notion of class cultures receives little support from these data.

## Conclusion

As is so often the case, the more sweeping and subtle, the less successful the Sociological theory is when put to the demanding test of large and representative samples, operational definitions, multiple measures, and considerations of magnitude as well as significance. At the same time, by and large, our more stringent scrutiny has supported most of the specific findings in the previous literature. If these results are problematic, the problem does not lie in our inability to generate reliable findings; rather the problem lies in the inability of Sociological Theory to shed much light on the major theme in the data – the disappointingly small effects of occupational stratum, origin or destination, compared with the relatively persistent, rather diverse, and moderately strong associations between Educational attainment and dependent variables.

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TABLE 1
DEPENDENT ITEMS (GSS MENEMONIC TOPIC, WORDING, PLUS
AND MINUS CATEGORIES, AND N)

## Morale

1) ANOMIA5    Average man: "...the lot of the average man is getting
              worse, not better," (Disagree, Don't Know) v. (Agree),
              5689

2) ANOMIA6    The Future: "It's hardly fair to bring a child into the
              world with the way things look for the future" (Disagree,
              Don't Know) v. (Agree), 5688

3) HAPPY      Happiness: "Taken all together, how would you say things are
              these days..." (Very Happy) v. (Pretty happy, Not Too
              Happy), 9480

4) HAPMAR     Marriage Happiness: "Taking all things together...would you
              say your marriage is..." (Very Happy) v. (Pretty Happy, Not
              Too Happy), 5420

5) LIFE       Life exciting?: "In general, do you find life exciting,
              pretty routine, or dull?" (Exciting) v. (Routine, dull, NO
              Opinion), 5608

6) SATFAM     Family Satisfaction: "Tell me the number that shows how much
              satisfaction you get from...your family life" (A very
              great deal) v. (A Great Deal, Quite a Bit, a Fair Amount,
              Some, a Little, None), 7965

7) SATFIN     Financial Satisfaction: "So far as you and your family are
              concerned, would you say you are...with your present
              financial situation?" (Pretty Well Satisfied) v. (More or
              less satisfied, Not satisfied at all), 9156

8) SATFRND    Friendship Satisfaction: "Tell me the number that shows how
              much satisfaction you get from...Your friendships" (A Very
              Great Deal) v. (A Great Deal, Quite a Bit, A Fair Amount,
              Some, A Little, None), 5688

9) SATJOB     Job Satisfaction: "On the whole, how satisfied are you with
              the work you do?" (note: includes housewives) (Very
              Satisfied) v. (Moderately Satisfied, A Little
              Dissatisfied, Very Dissatisfied), 7377

## Attachment

10) ANOMIA7   Public Officials: "Most public officials are not really
              interested in the problems of the average man" (Disagree,
              Don't Know) v. (Agree), 5688

11) ATTEND     Church Attendance: "How often do you attend religious services?" (Never, Less than once a year, About once or twice a year, Several times a year) v. (About once a month, 2-3 times a month, Nearly every week, Every week, Several times a week), 9142

12) DIVORCE     Divorced: "Have you ever been divorced or legally separated?" (Yes plus Marital Status = Divorced or Separated) v. (No) (Note: Never Married are excluded), 7950

13) GETAHEAD     Hard Work: "Some people say that people get ahead by their own hard work; others say that lucky breaks or help from other people are more important. Which do you think is most important?" (Hard work most important) v. (Hard work and luck equally important, Luck most important), 5565

14) HELPFUL     People Helpful: "Would you say that most of the time people try to be helpful, or that they are mostly just looking out for themselves?" (Try to be helpful) v. (Just look out for themselves, Depends), 6821

15) MEMNUM     Memberships: "Here is a list of various kinds of organizations. Could you tell me whether or not you are a member of each type? (Total of 2 through 16) v. (zero or one), 5764

16) PARTYID     Neither Party: "Generally speaking, do you usually think of yourself as a Republican, Democrat, Independent, or what?" (Independent close to neither party) v. (Republican, Democrat or Independent close to Republican or Democrat), 9002

17) RELIG     No Religion: "What is your religious preference? Is it Protestant, Catholic, Jewish, some other religion, or no religion?" (None) v. (Protestant, Catholic, Jewish, Other), 9165

18) RELITEN     Strong Religion: "Would you call yourself a strong (religon)?" (Strong) v. (Somewhat strong, Not very strong) (Note: No religion excluded), 6305

19) SOCOMMUN     Neighboring: "How often do you spend a social evening with someone who lives in your neighborhood?" (Almost every day, Once or twice a week, Several times a month, About once a month) v. (Several times a year, About once a year, Never), 4652

20) SOCFREND     Social Friends: "How often do you spend a social evening with friends who live outside the neighborhood?" (Almost every day, Once or twice a week, Several times a month) v. (About once a month, Several times a year, About once a year, Never), 4657

21) TRUST   <u>People Trustworthy</u>: "Generally speaking, would you say that most people can be trusted or that you can't be too careful in dealing with people?" (Most people can be trusted) v. (Can't be too careful, Other, Depends), 6812

## Politics

22) COMMUN  <u>Anti-Communism</u>: "Thinking about all the different kinds of governments in the world today, which of these statements comes closest to how you feel about Communism as a form of government? (It's a good form of government, It's all right for some countries, It's bad, but no worse than some others) v. (It's the worst kind of all), 5551

23) EQWLTH  <u>Redistribution</u>: "Some people think that the government in Washington ought to reduce the income differences between the rich and the poor, perhaps by raising the taxes of wealthy families or by giving income assistance to the poor. Others think the government should not concern itself with reducing this income difference between the rich and the poor. (On a scale from 1 = government should to 7 = government shouldn't) Which score between 1 and 7 comes closest to the way you feel? (4-7) v. (1-3), 1673

24) NATARMS  <u>Military Spending</u>:"..are we spending too much, too little, or about the right amount on the military, armaments, and defense?" (Too Little) v. (About the right amount, Too Much), 7540

25) NATCITY  <u>Urban Spending</u>: "..are we spending too much, too little, or about the right amount on solving the problems of the big cities?" (Too Little) v. (About the right amount, Too Much), 6992

26) NATCRIME <u>Anticrime Spending</u>: "..are we spending too much, too little or about the right amount on halting the rising crime rate?" (Too Little) v. (About the right amount, Too Much), 7603

27) NATFARE  <u>Welfare Spending</u>: "..are we spending too much, too little or about the right amount on Welare?" (Too Little, About the right amount) v. (Too Much), 7673

28) PARTYID  <u>Republican</u>: "Generally speaking, do you think of yourself as a Republican, Democrat, Independent, or what?" (Republican) v. (Democrat), 7829

29) POLVIEWS <u>Conservative</u>: "Where would you place yourself on this scale (1 to 7) from Extremely Liberal to Extremely Conservative)? (1-2-3-4) (5-6-7), 3962

30) SPKCOM  <u>Free Speech</u>: "Supposed this admitted Communist wanted to make a speech in your community. Should he be allowed to speak or not?" (Yes, allowed to speak) v. (Not allowed, Don't Know), 6824

## Values and Tastes

31) CHLDIDEL    <u>Fertility Norms</u>: "What do you think is the ideal of number of children for a family to have?" (0-1-2) v. (3-7), 6332

32) JOBINC    <u>Lucrative Job</u>: "Would you please look at this card and tell which one thing on this list you would most prefer in a job? High Income" (Most, Next) v. (3rd, 4th, 5th), 5565

33) JOBMEANS    <u>Meaningful Work</u>: (Same as #32) "Work important and gives a feeling of accomplishment" (Most, Next) v. (3rd, 4th, 5th), 5565

34) JOBPROMO    <u>Chance to Advance</u>: (Same as #32) "Chances for advancement." (Most, Next) v. (3rd, 4th, 5th), 5565

35) JOBSEC    <u>Job Security</u>: (Same as #32) "No danger of being fired." (3rd, 4th, 5th) v. (Most, Next), 5565

36) NEWS    <u>Newspaper Reading</u>: "How often do you read the newspaper?" (Every Day) v. (A few times a week, Once a week, Less than once a week, Never), 4696

37) RICHWORK    <u>Work Ethic</u>: "If you were to get enough money to live as comfortably as you would like for the rest of your life, would you continue to work or would you stop working?" (Continue to work) v. (Stop working, Don't know), 3582

38) TV HOURS    <u>TV watching</u>: "On the average day, about how many hours do you personally watch television?" (zero, 1) v. (2 through 24), 4626

## Social Issues

39) CAPPUN    <u>Death Penalty</u>: "Do you favor or oppose the death penalty for persons convicted of murder? (Favor) v. (Oppose, Don't Know), 6860

40) COURTS    <u>Courts Tough</u>: "In general, do you think the courts in this area deal too harshly or not harshly enough with criminals?" (Too harshly, About right) v. (Not harshly enough), 8012

41) DIVLAW:    <u>Ease Divorce</u>: "Should divorce in this country be easier or more difficult to obtain than it is now?" (Easier, Stay as it is) v. (More Difficult), 5499

42) FEHOME    <u>Women's Place</u>: "Women should take care of running their homes and leave running the country up to men." (Disagree) v. (Agree), 4527

43) FEWORK    <u>Wives Work</u>: "Do you approve or disapprove of a married woman earning money in business or industry if she has a husband capable of supporting her?" (Approve) v. (Disapprove), 5721

44) GRASS      Marijuana: "Do you think the use of marijuana should be made legal or not?" (Should, Don't Know) v. (Should Not), 5665

45) HOMOSEX    Gay Sex; "What about sexual relations between two adults of the same sex do you think it is always wrong, almost always wrong, wrong only sometimes, or not wrong at all?" (Almost always wrong, Wrong only sometimes, Not wrong at all) v. (Always wrong), 5354

46) PREMARSX   Pre-marital: "If a man and a woman have sex relations before marriage, do you think it is..." (Almost always wrong, Wrong only sometimes, Not wrong at all) v. (Always wrong), 5613

47) RACMAR    Intermarriage: "Do you think there should be laws against marriages between (Negroes/Blacks) and whites?" (No) v. (Yes, Don't Know) (Note: tabulation based on whites only), 7167

48) RACOPEN   Open Housing: "Suppose there is a community-wide vote on the general housing issue...Which law would you vote for?" (The second law says that a homeowner cannot refuse to sell to someone because of their race or color) v. (One law says that a homeowner can decide for himself whom to sell his house to, even if he prefers not to sell to Negroes/Blacks), 5014

49) XMARSEX   Extra-marital: "What is your opinion about a married person having sexual relations with someone other than the marriage partner -- is it.." (Almost always wrong, Wrong only sometimes, Not wrong at all) v. (Always wrong), 5606

TABLE 2

MARGINALS FOR ACHIEVEMENT VARIABLES (N=9749)
(Percent)

|  | Father | Respondent |
|---|---|---|
| **Occupation** | | |
| a = Professional, Technical, and Kindred; Managers and Administrators | 19.7% | 24.2% |
| b = Clerical and Sales | 6.9 | 26.3 |
| c = Craftsmen and Kindred | 22.8 | 12.7 |
| d = Operatives, Laborers, Service | 29.3 | 34.8 |
| e = Farm | 21.3 | 2.8 |
|  | 100.0% | 100.0% |
| **Years of Education** | | |
| 13+ | | 32.5% |
| 12 | | 36.8 |
| 0-11 | | 30.7 |
|  | | 100.0% |

TABLE 3

HYPOTHETICAL MOBILITY DATA

### (a) Signed Mobility

|  | R's Score | | | Differences | |
|---|---|---|---|---|---|
|  | Low = 2 | Medium = 5 | High = 7 | Med. v. Low | High v. Medium |
| **F's Score** High = 7 | −5 | −2 | 0 | +3 | +2 |
| Medium = 5 | −3 | 0 | +2 | +3 | +2 |
| Low = 2 | 0 | +3 | +5 | +3 | +2 |
| High v. Medium **Differences** | −2 | −2 | −2 | | |
| Medium v. Low | −3 | −3 | −3 | | |

### (b) Sheer Mobility

|  | R's Score | | | Differences | |
|---|---|---|---|---|---|
|  | Low = 2 | Medium = 5 | High = 7 | Med. v. Low | High v. Medium |
| **F's Score** High = 7 | 5 | 2 | 0 | −3 | −2 |
| Medium = 5 | 3 | 0 | 2 | −3 | +2 |
| Low = 2 | 0 | 3 | 5 | +3 | +2 |
| High v. Medium **Differences** | +2 | +2 | −2 | | |
| Medium v. Low | +3 | −3 | −3 | | |

## TABLE 4

### DETAILS OF TEST MODELS[*]

| Effects | | | | | Models | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Type | Variables | | | | H1 | H2 | H3 | H4 | H5 | H6 | H7 | H8 |
| **4 Variable Interactions** | F | E | R | D | – | – | – | – | – | – | – | – |
| **3 Variable Interactions** | F | E | R | | M | M | M | M | M | M | M | M |
| | F | E | | D | – | (M) | – | – | – | – | – | – |
| | F | | R | D | – | – | (M) | – | – | – | – | – |
| | | E | R | D | – | – | – | (M) | – | – | – | – |
| **2 Variable Associations** | | | | | | | | | | | | |
| With dependent | F | | | D | M | + | + | M | (–) | (–) | M | M |
| | | E | | D | M | + | M | – | (–) | M | (–) | M |
| | | | R | D | M | M | + | + | (–) | M | M | (–) |
| Among priors | F | E | | | + | + | + | + | + | + | + | + |
| | F | | R | | + | + | + | + | + | + | + | + |
| | | E | R | | + | + | + | + | + | + | + | + |
| **1 Variable Skews** | F | | | | + | + | + | + | + | + | + | + |
| | | E | | | + | + | + | + | + | + | + | + |
| | | | R | | + | + | + | + | + | + | + | + |
| | | | | D | + | + | + | + | + | + | + | + |
| **Degrees of Freedom** | | | | | 50 | 42 | 38 | 44 | 59 | 54 | 52 | 53 |

[*]Symbols

Variables:  F=Father's Occupation, E=Respondent's Educational Attainment, R=Respondent's Occupation, D=Dependent Variable

Models:

    H1 = No interactions = (F E R) (F D ) (E D ) (R D)
    H2 = FED interactions only = (F E R) (R E D) (R D)
    H3 = FRD interactions only = (F E R) (F R D) (E D)
    H4 = ERD interactions only = (F E R) (E R D) (F D)
    H5 = No D effects = (F E R) (D)
    H6 = No interactions, no FD association=(F E R) (E D) (R D)
    H7 = No interactions, no ED association=(F E R) (F D) (R D)
    H8 = No interactions, No RD association=(F E R) (F D) (E D)

Cell entries:

    M = Fitted marginals
    ( ) = Differs from H1
    + = Implied by fitted marginals
    – = Assumed absent (odds ratio = 1.000)

TABLE 5

SIGNIFICANCE TEST RESULTS

(Likelihood Ratio Chi Square, $L^2$)

| Null Hypothesis | Accept if ... | Significance over 49 dependent items[*] | | | |
| --- | --- | --- | --- | --- | --- |
| | | Neither | SRS Only | Ad-justed | Total |
| **Interactions** | | | | | |
| (1) All insignificant | H1 fits | 46 | 3 | 0 | 49 |
| (2) FED insignificant | H2 v. H1 insignificant | 43 | 5 | 1 | 49 |
| (3) FRD insignificant | H3 v. H1 insignificant | 43 | 6 | 0 | 49 |
| (4) ERD insignificant | H4 v. H1 insignificant | 45 | 4 | 0 | 49 |
| **2 Variable Associations** | | | | | |
| (5) All insignificant | H5 v. H1 insignificant | 2 | 0 | 47 | 49 |
| (6) FD insignificant | H6 v. H1 insignificant | 14 | 5 | 30 | 49 |
| (7) Ed insignificant | H7 v. H1 insignificant | 7 | 7 | 35 | 49 |
| (8) RD insignificant | H8 v. H1 insignificant | 7 | 5 | 37 | 49 |

[*]Adjusted = Significant at the .05 level after Chi Square multiplied by .667 to adjust for clustering in sample design

SRS Only = Significant at the .05 level for raw Chi Square, but not significant for adjusted

Neither = Not significant at .05 level

TABLE 6

RELIGIOUS MOBILITY AND RELIGIOUS INTENSITY (GSS 19740-1980 POOLED)

(Proportion "Strong" on Religion Item = C)

| A = In What Religion Were You Raised? | B = Current Religious Preference | | | |
|---|---|---|---|---|
| | Other* | | Catholic | |
| Catholic | 36.9% | (225) | 42.2% | (1,996) |
| Other* | 41.1% | (5,789) | 30.6% | (242) |

\* = Protestant, Jewish, Other Religion

For the model (A B) (A C) (B, C), Chi Square = 11.334

|  | N = 8,252 |
|---|---|
| No Religion on A or B | 646 |
| No answer | 105 |
|  | 9,003 |

TABLE 7

LINEAR REGRESSION, CHI SQUARE AND D.F. (1-20)

| Probability Level | Equation | $r^2$ |
|---|---|---|
| .50 | -.5958 + 0.9929 d.f. | .999 |
| .05 | 3.7421 + 1.4136 d.f. | .997 |
| .001 | 11.3179 + 1.7521 d.f. | .994 |

TABLE 8

SUMMARY OF EFFECT MAGNITUDE ($L^2_{adjusted}$)

| Effect | Controlling for ... | Comparison | | | | | | | $L^2$ | $b^*$ |
|--------|---------------------|------------|---|---|---|---|---|---|-------|-------|
| | | | | | | (a) | | | | |
| F on E | - | | (F) | (E) | v. | (FE) | | | 234 | .44 |
| FE on R | - | (FE) | (FR) | (ER) | v. | (FE) | (R) | | 530 | .62 |
| F on R | F | (FE) | (FR) | (ER) | v. | (FE) | (FR) | | 369 | .52 |
| | | | | | | | | | (Median) | |
| FER on D | - | H5 | | v. | | H1 | | | 27 | |
| F on D | E,R | H6 | | v. | | H1 | | | 2 | |
| E on D | F,R | H7 | | v. | | H1 | | | 8 | |
| R on D | E,F | H8 | | v. | | H1 | | | 4 | |

(b)

| $L^2_{adjusted}$ | FD | ED | RD | Total |
|------------------|----|----|----|-------|
| 25+ | 3 | 12 | 1 | 16 |
| 9-24 | 8 | 11 | 16 | 35 |
| 0-8 | 38 | 26 | 32 | 96 |
| Total | 49 | 49 | 49 | 147 |

[*]Regression coefficients from Blau and Duncan (1967, p. 169)

TABLE 9

EFFECT MAGNITUDE ($L2_{adj}$) FOR SUBJECTIVE SES MEASURES

|  | Item | | |
|--------|-------------------|----------------|--------------|
| Effect | Parental Income[a] | Current Income[b] | Social Class[c] |
| All | 66.6 | 122.5 | 224.4 |
| FD | 52.4 | 0.4 | 15.7 |
| ED | 16.8 | 13.0 | 24.2 |
| RD | 6.9 | 19.6 | 62.3 |

[a]INCOM16  "Thinking about the time when you were 16 years old, compared with American families in general then, would you say your family income was ... (Average, Above Average, Far Above Average) v. (Below Average, Far Below Average)" (9111)

[b]FINRELA  "Compared with American families in general, would you say your family income is (Far Below Average, Below Average) v. (Average, Above Average, Far Above Average)" (9135)

[c]CLASS  "If you were asked to use one of four names for your social class, which would you say you belong in: (The Lower Class, The Working Class) v. (The Middle Class, The Upper Class)" (8600)

TABLE 10

ADJUSTED CHI SQUARE AND d'S FOR INDIVIDUAL ITEMS

| Item | Chi Square ($L^2$) | | | | Pooled d | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | FD | | | | ED | | RD | | |
| | All 3 | FD | ED | RD | b | c | d | f | 12 | 0-11 | b | c | d |
| **Morale** | | | | | | | | | | | | | |
| The future | 145.3* | 2.6* | 45.9* | 17.0* | | | | | -.09 | -.24 | -.07 | -.09 | -.17 |
| Life exciting | 82.4* | 1.7* | 37.4* | 1.5 | | | | | -.15 | -.23 | | | |
| Average man | 65.2* | 0.2 | 17.2* | 11.8* | | | | | -.10 | -.15 | -.04 | -.09 | -.14 |
| Job satisfaction | 28.4* | 4.9* | 1.1 | 25.4 | | | | | | | -.11 | -.10 | -.20 |
| Financial satisfaction | 13.7* | 6.7* | 0.5 | 10.1* | | | | | | | -.04 | -.08 | -.13 |
| Happiness | 7.8* | 4.7* | 0.2 | 5.4* | | | | | | | | | |
| Marriage happy | 6.4* | 1.2* | 1.7 | 2.6* | | | | | | | | | |
| Family | 1.6* | 0.0 | 4.4* | 1.3* | | | | | | | | | |
| Friendship satisfaction | 0.0 | 2.3* | 1.7 | 1.2* | | | | | | | | | |
| **Attachments** | | | | | | | | | | | | | |
| Memberships | 110.3* | 0.0 | 40.1* | 19.0* | | | | | -.12 | -.23 | -.13 | -.06 | -.14 |
| People trustworthy | 94.6* | 0.0 | 20.8* | 22.8* | | | | | -.07 | -.19 | -.07 | -.11 | -.18 |
| Public officials | 45.5* | 0.2 | 10.7* | 9.2* | | | | | -.09 | -.24 | -.07 | -.09 | -.17 |
| People helpful | 39.0* | 0.0 | 4.9* | 18.0* | | | | | | | -.01 | -.17 | -.11 |
| Social friends | 35.5* | 11.2* | 16.1* | 1.4 | +.01 | -.03 | +.01 | -.14 | -.05 | -.15 | | | |
| Low church attendance | 27.3* | 21.3* | 0.4 | 13.9* | -.05 | -.04 | -.04 | -.19 | | | -.03 | -.12 | -.03 |
| No religion | 17.2* | 2.5* | 12.3* | 0.6* | | | | | -.05 | -.06 | | | |
| Strong religion | 15.8* | 12.0* | 0.6 | 9.3* | -.02 | -.03 | -.03 | +.09 | | | +.00 | -.12 | -.05 |
| Divorced | 3.5* | .0 | 2.7* | 4.2* | | | | | | | | | |
| Neighboring | 0.0* | 0.0 | 8.2* | 0.0 | | | | | | | | | |
| Neither party | 0.0* | 1.1* | 1.1 | 0.1 | | | | | | | | | |
| Hard work | 0.0 | 0.1 | 0.4 | 0.0 | | | | | | | | | |
| **Politics** | | | | | | | | | | | | | |
| Free speech | 204.1* | 33.5* | 75.7* | 1.2* | -.00 | -.06 | -.07 | -.23 | -.15 | -.33 | | | |
| Anti-Communism | 63.6* | 2.9* | 36.1* | 6.6* | | | | | -.16 | -.23 | | | |
| Republican | 48.6* | 11.0* | 3.3* | 12.2* | +.04 | -.06 | -.12 | -.02 | | | -.02 | -.12 | -.12 |
| Redistribution (anti) | 27.4* | 2.3 | 29.3* | 0.5 | | | | | -.10 | -.25 | | | |
| Welfare spending | 15.9* | 0.0 | 8.2* | 9.8* | | | | | | | -.06 | -.01 | -.12 |
| Conservative | 13.1* | 10.3* | 5.3* | 3.3* | -.02 | -.05 | -.05 | -.18 | | | | | |
| Urban spending | 8.3* | 6.0* | 1.8 | 4.0* | | | | | | | | | |
| Military spending | 2.0* | 0.0 | 3.0* | 2.2* | | | | | | | | | |
| Anticrime spending | 0.0* | 0.0 | 1.3 | 0.0 | | | | | | | | | |

TABLE 10--Continued

| Item | Chi Square ($L^2$) | | | | Pooled d | | | | | | | | |
| | | | | | FD | | | | ED | | RD | | |
| | All 3 | FD | ED | RD | b | c | d | f | 12 | 0-11 | b | c | d |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **Values and Tastes** | | | | | | | | | | | | | |
| Meaningful work | 122.0* | 3.1* | 27.0* | 23.2* | | | | | -.07 | -.19 | -.04 | -.11 | -.12 |
| Job security | 64.9* | 1.7* | 17.2* | 11.4* | | | | | -.06 | -.12 | -.00 | -.10 | -.06 |
| TV watching | 47.6* | 0.0 | 20.3* | 6.0* | | | | | -.12 | -.15 | | | |
| Fertility norms | 28.0* | 5.9* | 12.8* | 0.0 | | | | | -.04 | -.12 | | | |
| Newspaper reading | 27.7* | 0.0 | 2.8 | 16.1* | | | | | | | -.08 | -.10 | -.15 |
| Work ethic | 22.7* | 0.0 | 10.2* | 9.5* | | | | | -.08 | -.11 | -.11 | -.05 | -.04 |
| Lucrative job | 3.9* | 0.0 | 0.8 | 6.1* | | | | | | | | | |
| Chance to advance | 0.0 | 0.0 | 1.9 | 0.7 | | | | | | | | | |
| **Social Issues** | | | | | | | | | | | | | |
| Intermarriage | 229.9* | 30.1* | 91.7* | 4.3* | -.02 | -.06 | -.05 | -.21 | -.11 | -.34 | | | |
| Women's place | 165.2* | 8.6* | 63.8* | 8.6* | | | | | -.12 | -.28 | | | |
| Gay sex | 131.8* | 21.9* | 43.7* | 3.8* | -.02 | -.08 | -.03 | -.16 | -.14 | -.22 | | | |
| Wives work | 116.5 | 6.8* | 49.2 | 2.5* | | | | | -.11 | -.25 | | | |
| Marijuana | 89.5 | 22.0* | 34.9* | 4.4* | +.01 | -.05 | -.06 | -.16 | -.13 | -.19 | | | |
| Pre-marital | 80.5* | 42.7* | 19.9* | 5.8* | -.05 | -.07 | -.05 | -.28 | -.08 | -.16 | | | |
| Extra-marital | 73.1* | 15.7* | 26.3* | 0.6 | -.02 | -.07 | -.04 | -.15 | -.11 | -.19 | | | |
| Open housing | 25.4* | 3.8* | 17.1* | 0.7 | | | | -.09 | -.14 | | | | |
| Death penalty | 15.9* | 2.7* | 5.5* | 11.2* | | | | | | | +.01 | -.08 | +.06 |
| Ease divorce | 14.6* | 3.0* | 8.5* | 0.0 | | | | | | | | | |
| Courts tough | 1.4* | 0.0 | 5.2* | 2.8* | | | | | | | | | |

\* = Significant at .05 level with N = .6667 of the raw N.

TABLE 11

OCCUPATIONAL STRATUM DIFFERENCES FROM TABLE 10

| Difference | Stratum Comparisons[*] | | | |
|---|---|---|---|---|
| | b v. a | c v. b | d v. c | Total |
| +.05 or more | | 2 | 4 | 6 |
| +.00 to +.094 | 3 | 2 | 3 | 8 |
| -.00 to -.04 | 6 | 5 | 1 | 12 |
| -.05 or more | 8 | 8 | 9 | 25 |
| Total | 17 | 17 | 17 | 51 |
| Number | 14 | 13 | 10 | 37 |
| Median | -.04 | -.04 | -.05 | -.04 |
| Mean | -.05 | -.04 | -.02 | -.04 |

[*]d = Operatives, Service, Labor

c = Crafts

b = Sales, Clerical

a = Professional, technical, managerial