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ABSTRACT

This research report presents the results of a study to determine the influence of significant others upon adolescent levels of aspiration. High school sophomores in a central Wisconsin community responded to an instrument testing ego, ego's perception of significant others' expectations, and occupational aspiration. The two hypotheses under study included the relative influence of significant others on levels of aspiration and an individual ego's perceptions of significant others' influence as a better predictor of levels of aspiration than actual expectations by significant others. The findings indicate that the more influence one is subjected to, the higher the correspondence between aspirationally-relevant content of that influence and one's own aspirations. A summary of the findings for the second hypothesis indicates that perceptions of informational inputs are comparatively better predictors of levels of aspiration. The implication of this study is that the "total picture" of interpersonal influence on status aspirations is incomplete and more research is needed. (Author/DE)

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PREDICTING LEVELS OF ASPIRATION: A COMPARISON OF PERCEIVED AND ACTUAL INFORMATIONAL INPUTS FROM SIGNIFICANT OTHERS*

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Significant others have long been thought to be reference points in the development of self-concept as well as important sources of interpersonal influence (Mead, 1934; Sullivan, 1940). With the introduction of the Blau-Duncan (1967) model of status attainment, previous research on parental and peer influences became more focused. The Wisconsin model of status attainment utilized several social psychological variables, levels of educational and occupational aspiration and significant other influence, to examine the ways in which family background is translated into educational and occupational attainments (Sewell, Haller, and Portes, 1969; Sewell, Haller, and Ohlendorf, 1970).

Some of these efforts have researched such diverse aspects of significant other influence as peer pairs (Alexander and Cambell, 1964; Haller and Butterworth, 1960; Duncan, Haller, and Portes, 1968), role categorical significant others (parents, teachers, and peers) (Sewell and Shah, 1968a; 1968b) and ego's perception of significant others' encouragements, plans, and expectations (Krauss, 1964; Coleman, et al., 1966, Kandel and Lesser, 1969, Sewell, Haller, and Ohlendorf, 1970). Other studies have focused on actual and perceived parental educational goals for adolescents (Kerckhoff, 1973) as well as initial attempts at inclusively assessing significant other influence (Haller and Woelfel with Fink, 1968; Woelfel and Haller, 1971; Haller and Woelfel, 1972).

Although these studies taken as a whole have not produced a set of inconsistent findings, comprehensive models of status attainment processes, including social psychological variables, are contingent on a systematic

and inclusive examination of the interrelationships between these variables in light of social psychological theories.

In this diversity of focus several inadequacies in the conceptualization and measurement of significant other influence have been perpetuated, oftentimes simply due to data limitations, and only recently have some of the shortcomings received attention. These inadequacies include: (1) a priori assumption and operationalization of who significant others are and how they exert influence; (2) an almost invariant use of perception of influence, with minimal treatment of levels of influence as measured from the influence source, (3) partial conceptions and operationalizations of modes of interpersonal influence; and (4) the time ordering of social-psychological variables in status attainment research has been a perplexing problem, often not treated and rarely handled in light of a theoretical perspective. Until recently there has been a general absence of the use of theory to organize and order the social psychological nexus of status attainment. A number of these inadequacies were documented and discussed in a recent research effort, The Wisconsin Significant Other Battery (Haller and Woelfel with Fink, 1968). This paper is directed at furthering their initial work. Each of these points of inadequacy is developed briefly below.

(1) A number of studies of occupational and educational attainment have assumed, a priori, that a given set of role-categorical significant others are important. Peers, or parents, peers and teachers have most often been the assumed influential role types for adolescents (Haller and Butterworth, 1960, Sewell and Shah, 1968a, 1968b, Duncan, et al., 1968, Sewell, et al., 1969, 1970). Other research shows that a rather

substantial portion of significant other influence goes undetected using the current measurement technique. The Wisconsin Significant Other Battery (Haller and Woelfel with Fink, 1968) has introduced into the research literature an efficient and effective means for identifying and measuring the influence of person-specific significant others.

(2) Several models of status attainment which include social psychological variables, with the exception of Woelfel and Haller's (1971), operationalize significant other influence by using a person's perception of others' encouragements, plans and expectations (Sewell, et al., 1969; 1970; Sewell and Hauser, 1972; Hauser, 1972). This position suggests that influence as measured from the source has little or no effect on aspirations or attainments over and above the effect attributable to the perception of influence. Woelfel and Haller's (1971) model, using a direct measure of significant other expectations, explained more variance in educational and occupational aspiration than had been previously reported. It may also be the case that the importance of significant other inputs, as measured by perceptions, varies through adolescence. Kerckhoff and Huff's (1973) research illustrates this phenomenon. When perceived parental goals are used as a measure of influence, their effect on son's goals is much more "influential" in the ninth grade than in the twelfth grade. When actual parental goals are used in place of perceptions, the same patterns of relationship are maintained, but the influence of parental goals on son's goal is decreased. In other words, the amount of influence when measured by perceptions gives us a different picture of amount of goal transmission than does the measurement of influence directly from the source. This is not to

suggest perceptions are inadequate indicators of interpersonal influence, but rather that our conceptualization and measurement have not permitted us to examine the alternatives. For example, if actual significant other expectations affect aspirations independent of perceived others' expectations, then our present models of status attainment have specification errors, which may severely affect the values of the coefficients obtained.

(3) Present research has to a large extent treated the modal influence pattern through the high school years as one of parents and teachers exerting influence by communicating encouragements and expectations and peers exerting influence primarily through the aspirations they hold for themselves (i.e. college plans) (Sewell and Shah, 1968a; 1968b, Kandel and Lesser, 1969; Krauss, 1964). Haller and Woelfel with Fink (1968) have suggested a very broad distinction among types of interpersonal influence between others who hold expectations for ego and those serving as models for ego's behavior, the former termed "definers" and the latter "models".[1] Table 1 presents a crude paradigm for significant other influence by juxtaposing the dimensions of specificity of significant others (person-specific, role-categorical), proximity of influence to ego (perceived, actual), and mode of interpersonal influence (definer, model). In the respective cells can be found the corresponding measures of interpersonal influence.

Table 2 locates a good portion of previous research in approximately one half of the cells of Table 1. As suggested by Tables 1 and 2, the conceptual and research arena of significant other influence is a complex one and attempts to research it are far from complete, let alone relating such research to status attainment processes.

(4) Woelfel and Haller (1971) argue that some of the unsatisfactory aspects of studies using a measure of significant other influence may be attributable to the lack of theoretical concerns in the measurement and conceptualization of significant other influence. A fruitful theoretical perspective could provide hypotheses concerning which variables should be important, how they should be important, and in what time ordering they are important. Also required are panel data, collected at several points in time. Such data, with the necessary social psychological instrumentation, are not yet available. The remainder of this paper is directed to examining some of these issues in light of attribution theory in social psychology (Kelley, 1967). Specifically, Kelley's formulation will be used to explore several areas: (1) the relationship between inputs from significant others (expectations from definers and attainments from models) and levels of aspiration held by ego, and (2) the relationship between actual and perceived expectation levels and levels of aspiration across modes of influence.

THEORY

Attribution theory (Kelley, 1967), a type of information-processing theory based on social perception, provides a general predictive model for hypothesized relationships between the social psychological variables identified in status attainment research. Kelley (1967) has postulated an "entity-effect covariations model" as the minimum data pattern on which inferences or attributions are made. Analogous to the logic inherent in an n-way analysis of variance, an individual observes covariations across: (1) entities (objects: occupation, education), (2) persons

(significant others), (3) time, and (4) modes of interaction with the entity (educational and occupational attainments of models, levels of educational and occupational expectation of definers). In one sense these phenomena represent informational inputs, for as Kelley states:

> The attribution to the external thing rather than to the self requires that I respond differentially to the thing, that I respond consistently, over time and over modality, and that I respond in agreement with a consensus of other persons' responses to it.... We might say that the subjective criteria for the possession of valid knowledge about the external world are distinctiveness of response coupled with consistency and consensus. (emphasis in original, Kelley, 1967:194,196)

To the extent that incoming information is defined as highly distinctive, highly consistent and consensual, the state of the information of the individual is highly differentiated and highly stable. Attributions which are both stable and differentiated are contingent on these criteria.

Likewise, to the degree that the informational independence required to make an attribution (distinctiveness, consensus, and consistency) is not present, the individual will be in a position of informational dependence and thus more susceptible to social influence. Propositionally, attribution stability is inversely related to susceptibility to social influence and to informational dependence. There are several restrictions on the occurrence of stable attributions, (Kelley, 1967:200, Kelley, 1969:15-27) for a person with (1) little social support, (2) poor or ambiguous prior information, (3) problems beyond capacities, (4) disconfirmed views due to inappropriateness or non-veridicality, and (5) experiences engendering low self confidence.

Levels of aspiration in recent research have been viewed as cog-

nitive orientational aspects of goal directed behavior (Haller, 1968, Haller, et al., 1974). In attributional terms, an educational or occupational aspiration is an attribution or inference about self.[2] As borne out by previous research, levels of aspiration are in part, a function of effects mediated by informational inputs from significant others (Haller and Butterworth, 1960, Sewell, Haller and Strauss, 1957, Krauss, 1964, Kandel and Lesser, 1969; Woelfel and Haller, 1971). Following Kelley (1967) it is hypothesized that the stability of one's attributions are a positive function of the amount or level of information an individual has with regard to a given object. Here, stability will be treated operationally as the predictability of aspirations. The level or amount of information an individual has will be operationalized as the amount of significant other influence on an individual specific to a given object area (education, occupation).[3] A brief explication of the issue of validity for this measure can be found in footnote 3 and Table 3. Kelley's (1967) formulation is addressed to the relationship of social perceptual inputs to attributional outputs. Not dealt with is how or in what way an individual handles incoming information. In testing six information processing models, Webster, Roberts, and Sobieszek (1972) conclude a simple additive model is the best predictor of how an individual will combine informational inputs from significant others. The simple additive model held across all experimental conditions, varying the consistency of the input and the credibility of the informational source. The additive model will be used in obtaining expected levels of aspiration.

Significant other influence (SOI) is trichotomized, with highs being

approximately one standard deviation or more above the mean on SOI (for occupation or education), mediums being approximately plus or minus one standard deviation around the mean, and lows being more than one standard deviation below the mean. Expected level of aspiration is calculated four times, once using actual significant other expectations and attainments as inputs and the other using ego's perception of significant other expectations and attainments, for education and occupation. The following formulae and notation are used:

LOA = observed level of occupational aspiration.

ELOA = expected level of occupational aspiration, based on measures of expectations and attainments from the influence source.

$$= \frac{\sum_{i=1}^{N} LOX_i + \sum_{j=1}^{K} LOS_j}{N + K}$$

where:

LOX_i = actual level of occupational expectation held by significant other i toward ego.

LOS_j = actual occupational attainment of significant other j, who serves as a model for ego.

N = number of occupational significant others holding expectations for ego.

K = number of occupational significant others serving as models for ego.

$ELOA_p$ = expected level of occupational aspiration, based on ego's perception of significant other expectations and attainments.

$$= \frac{\sum_{i=1}^{N} LOX_{pi} + \sum_{j=1}^{K} LOS_{pj}}{N + K}$$

where:

LOX_{pi} = ego's perception of level of occupational expectation held by significant other i toward ego.

LOS_{pj} = ego's perception of the occupational attainment of significant other j, who serves as a model for ego.

N = number of occupational significant others holding expectations for ego.

K = number of occupational significant others serving as models for ego.

LEA = observed level of educational aspiration.

ELEA = expected level of educational aspiration based on measures of expectations and attainments from the influence source.

$$= \frac{\sum_{i=1}^{N} LEX_i + \sum_{j=1}^{K} LES_j}{N + K}$$

where:

LEX_i = actual level of educational expectation held by significant other i toward ego.

LES_j = actual educational attainment of significant other j, who serves as a model for ego.

N = number of educational significant others holding expectations for ego.

K = number of educational significant others serving as models for ego.

$ELEA_p$ = expected level of educational aspiration, based on ego's perception of significant other expectations and attainments.

$$= \frac{\sum_{i=1}^{N} LEX_{pi} + \sum_{j=1}^{K} LES_{pj}}{N + K}$$

where:

LEX_{pi} = ego's perception of level of educational expectation held by significant other i toward ego.

LES_{pj} = ego's perception of the educational attainment of significant other j, who serves as a model for ego.

N = number of educational significant others holding expectations for ego.

K = number of educational significant others serving as models for ego.

DATA AND INSTRUMENTS

The data were obtained from 191 high school sophomores in a central Wsiconsin community of approximately 15,000. Person-specific significant others were elicited by instruments from the Wisconsin Significant Other Battery. Construction, validation, and reliability tests of these instruments can be found elsewhere (Haller and Woelfel with Fink, 1968, Haller and Woelfel, 1972). For approximately one-half of the respondents, information was obtained for ego and ego's perceptions of significant others' expectations and attainments as well as information from the

significant others on their educational and occupational attainments and their educational and occupational expectations for ego. Levels of occupational expectation and aspiration are measured by the Occupational Aspiration Scale (Haller and Miller, 1971) as adapted for use with the Wisconsin Significant Other Battery. Occupational attainments were coded in the Siegel (1971) extensions of the NORC prestige ratings. Levels of educational expectation and aspiration are measured by the Educational Aspiration Scale (Haller and Woelfel with Fink, 1968).

HYPOTHESES

Given that individuals combine informational inputs from significant others (examples and expectations) in a simple additive fashion, based on the formulation of attribution theory reviewed here, it is hypothesized:

H_1: The more the significant other influence on an individual, the greater the correspondence between informational inputs from SOs and levels of aspiration.

Restated, the zero-order correlation coefficient between expected and observed levels of aspiration will vary as a positive function of the level of significant other influence.

Another interesting comparison, for which data are available, concerns the use of perceptions of influence compared to influence measured from the source.

H_2: Current literature using significant other influence, posits that ego's <u>perceptions</u> of significant others'

> expectations and attainments are better predictors of levels of aspiration than actual expectations and attainments as measured from the influence source. Restated, the additive weighted sums based on perceptions should correlate more highly with levels of aspiration than the weighted sums based on actual inputs.

While a tight theoretical framework for this latter prediction is lacking, such a comparison merits examination for more intuitive reasons. From an accuracy-of-measurement point of view, the exclusive use of perceptions may or may not be warranted. The accuracy of the respective predictions can be examined here. Second, from the perspective of the completeness of social psychological models of status attainment, actual informational inputs from significant others can be looked at to see whether they affect aspirations over and above perceived inputs. If this is the case, then a number of the existing models of status attainment are misspecified.

RESULTS

Table 4 depicts the results of the weighted sums for predicting levels of aspiration, when actual informational inputs are used in comparison with perceived informational inputs. Several observations regarding the hypotheses and the general predictive efficiency of the two types of weighted sums, are immediate.

First, the attribution theory prediction as formalized in hypothesis 1 is supported for three of the four weighted sums. In both models for educational aspirations (actual and perceived) and in the perceived weighted

sum for occupational aspirations, the correlations between expected and observed levels of aspiration are a positive function of the amount of significant other influence. In the actual weighted sum for occupational aspirations those in a medium range of significant other influence have a slightly higher (.686 vs. .671) correspondence between informational inputs from SOs and their aspiration levels than do those in the high range of significant other influence. In this weighted sum, based on actual expectations and attainments, if high and medium levels of significant other influence were dichotomized against those low on SOI, the predicted pattern begins to emerge. Nonetheless, the findings would seem to suggest the more influence one is subjected to, the higher the correspondence between the aspirationally-relevant content of that influence and ones own aspirations. In Kelley's terms, the stability of an educational or occupational attribution to self is a positive function of the amount of information one has concerning those spheres.

The second hypothesis concerning the completeness or accuracy of perceptions of influence compared to actual influence can be assessed by examining the overall correlation for each of the weighted sums. In terms of accuracy of prediction, the perceived weighted sum fares better than the actual weighted sum. For education, the zero-order correlation between expected and observed level of aspiration is higher for the weighted sum based on perceptions ($r = .434$) than for the one based on actual informational inputs ($r = .245$). The same pattern holds for occupational aspiration (.607 vs. .559). This is not to suggest actual informational inputs are poor predictors of or have no effect on levels of aspiration. Rather, a more warranted summary would be that perceptions

of informational inputs are comparatively better predictors of levels of aspiration.

One possible alternate explanation for this set of findings suggests a general intellectual capacity supercedes level of significant other influence in explaining the correspondence between predicted and observed aspirations. One might argue that the predictability of level of aspiration obtained is a function of better students with high intelligence having more significant others, and being more capable of handling incoming information and molding it into a consistent and realistic aspiration level. Conversely, poorer students with lower intelligence are not so capable. Should such an explanation hold, the regressions of educational and occupational aspirations on measures of interpersonal influence should weight low, while intelligence and grade point average should weight high. Table 7 depicts the standardized regression coefficients used to examine this alternate hypothesis. This hypothesis is clearly discredited, as in all of the regressions carried out, for both educational and occupational aspirations, the coefficients for measures of significant other expectations and attainments do not reduce to zero. Concommitantly, the coefficients for intelligence and grade point average are substantially lower than those for SO inputs. Several unexpected negative coefficients were obtained for intelligence, grade point average and significant other attainments. Only three such coefficients exceeded twice their standard errors and are probably more indicative of problems of multicolinearity in the attainment measures, or a specification error, rather than suggesting unexpected patterns in the data. The safest interpretation in these cases was the negative

coefficients being statistically "forced" due to high colinearity ($r_{\overline{LOS},\overline{LOS}_p}$ =.84, $r_{\overline{LES},\overline{LES}_p}$ = .47) between perceived and actual significant other attainments.

Dimensions of family socioeconomic background are not considered an alternate explanation at this point, as previous research has demonstrated: (1) that significant other expectations and attainments mediate the effects of socioeconomic background as well as exerting an independent effect (Woelfel and Haller, 1972; Sewell and Hauser, 1972; Haller and Portes, 1973); and, (2) the effects of parental goals on son's goals, for example, is by no means entirely spurious due to a common socioeconomic background (Kerckhoff, 1973).

Finally, to further explicate the comparative effects of actual and perceived expectations on levels of aspiration, path models to depict this process were constructed. Only the three social psychological variables are included here. The specifications in Table 7 and other regressions not reported here show the size of the effects to be reduced slightly (.03-.06) but still statistically significant and the pattern of effects remains in tact. Similar models for the effects of actual and perceived significant other attainments are not fruitful in this context for several reasons: (1) the use of two measures of attainments in this situation would be a measurement model, not interpretable along similar dimensions; and, (2) while such an excursion would be substantively interesting and important, the problems of colinearity require complex solutions beyond the realm of this effort.

Figures 1 and 2 show path diagrams for education and occupation. Several observations for the perceived-actual-measures issue are present.

First, in both models, the effect of respondent's perception of significant other expectations on aspiration levels is more than twice the affect of actual expectations on aspirations. Second, the indirect effect of actual expectations on aspirations, as mediated through perceived expectations exceeds the direct effect of actual expectations in the case of educational aspirations, and for occupational aspirations, is approximately equal to the direct effect of actual expectations. Third, in both models, although moreso for occupation, the direct effect of actual expectations on aspirations is small-to-moderate.

The major implications of these findings for status attainment research are twofold. First, the use of perceived measures of interpersonal influence is more an accurate representation than an inaccurate representation. Second, and more important, the possibility of specification error,with respect to actual SO expectations, is raised. (see Hauser, 1972) These results suggest the incompleteness afforded us by sole usage of such measures. The "total picture" of interpersonal influence vis-a-vis status aspirations is perhaps, according to the estimates presented here, three-fourths to four-fifths "complete". Undoubtedly these figures (3/4 to 4/5) are lower, due to restricted variances for this body of data.

Two other relationships, supportive of the results presented thusfar, are shown in the standardized regression coefficients in Table 7. First, expectation variables ($\overline{LOX}$, $\overline{LEX}$, $\overline{LOX}_p$, $\overline{LEX}_p$) are in most cases more than twice as important as attainment variables ($\overline{LOS}$, $\overline{LOS}_p$, $\overline{LES}$, $\overline{LES}_p$) in the regressions for educational and occupational aspirations. Understandably so, the expectations of significant

others, whether they be actual or perceived, have far stronger effects on aspirations than do the educational and occupational attainments of significant others. Second, also as one would predict, perceived expectations have more of an effect on aspirations than do actual expectations.

DISCUSSION

Several implications and further lines of development for ongoing research would seem to have been made salient by the analyses presented here.

While perceptions of significant other expectations and attainments were shown to be reasonably good predictors of levels of educational and occupational aspirations, the independent effect shown for actual expectation levels warrants further investigation in the other status attainment arenas (income aspirations, occupational, educational and income attainments). The pervasive use of perceptions in existing literature, while supported in part by this research, cannot be considered inclusive indicators of the effects of interpersonal influence on status aspirations. Rather, evidence was presented raising the strong possibility that actual significant other expectations for both educational and occupational aspirations, may be "left-out" variables in most social psychological representations of status attainment. Of note is the recent claim of two researchers (Wilson and Portes, 1973), based on a national replication of the Wisconsin model, that significant other influence (their measure includes one cell of Table 1) is a less important dimension of the status attainment process than initially thought.

Our results suggest that their analysis greatly underestimates the effects of significant others' expectations. Rather it may be the case that current conceptualization and measurement do not allow any other conclusion.

The use of Kelley's (1967) formulation of attribution theory was clearly supported for both the perceived and actual weighted sums of educational aspirations and for the perceived weighted sums of occupational aspirations. This points to the potential fruitfulness of conceptualizing aspirational variables in an attributionsl framework. While corroboration was found for the attribution theory predictions, they are clearly subject to further research scrutiny, expecially in an experimental setting, and should be viewed as one attempt to look at the implications of current social psychological theory for status attainment processes. The need for other similar efforts would seem obvious. Further lines of inquiry in terms of attribution theory might include: (1) conceptualization and measurement further delineating level of significant other influence as an indicator of the amount of information an individual has with regard to: a) educational and occupational attainment as a general process, and b) particular educational and occupational alternatives; and, (2) researching the factors mitigating stable attributions (little social support, feelings of low self-confidence, etc.) and their relation to status aspirations and attainments.

Finally, further work needs to be done on the temporal location of the aspiration formation process during the secondary and high school years. Closely related are questions of reliability and validity

(i.e. the effects of using single-item role-categorical measures vs. more elaborate person-specific measures of interpersonal influence). Perhaps the most important of all, these issues need attention in the near future.

Continued explication of the social psychological nexus of status attainment is contingent on inquiry along these lines.

Footnotes

[1]The definitions for the terms "model" (exemplifier) and "definer" and for other related terms and abbreviations can be found in the terminological keys for Tables 1 and 5.

[2]It could be argued that every stage in the significant other expectation-aspiration-attainment process is a complex set of attributions, of which this researcher has chosen one small area upon which to focus. Admittedly, such is the case, for even those significant others identified in the elicitation of person-specific others could be viewed as a complex of attributions to other and to self. The large majority of research on attribution theory has to date, been experimental. This allows the experimenter to closely control the number and type of attributions by subjects as well as controlling for extraneous sources of variation. Such is not the case here, in the use of cross sectional data. Although this introduces problems into the testing of the theory and interpretation of the findings, it is believed this research arena to be of sufficient importance and the present lines of inquiry to be of enough potential merit to proceed cautiously.

[3]The amount of significant other influence on an individual for occupation is obtained by summing the importance of each of the individual's significant others (SO), where importance is based on the number of ways a significant other influences ego. The maximum influence of any given SO for occupation is four (4) (model for self, model for object, definer for self, definer for object) and the minimum is one (1) (model for self or model for object or definer for self or definer for object). SOIO

is simply this measure, for each ego, summed across all his/her significant others. For a further discussion of this measure see Haller and Woelfel with Fink (1968). Use of significant other influence in this fashion raises the question of the validity and reliability of the measure being utilized. While these questions cannot be answered with finality here, some evidence is available to establish minimal validity and reliability.

Construct validity can be approached by examining the zero-order correlations between the given and other criterion variables for hypothesized relationships. Correlations were obtained from a sample (n=109) used in the validation of the Wisconsin Significant Other Battery. Criterion variables used were: (1) an index of interaction with significant others, (2) propensity toward interaction, (3) dogmatism, (4) personality adjustment, (5) mean number of significant others, and (6) minimum involvement with significant others. Theoretical and measurement issues involving these variables can be found in Haller and Woelfel (1972:604-607). Predicted and obtained relationships between significant other influence for occupation and the criterion variables can be found in Table 3. As can be seen, all of the relationships are of predicted direction and size except the zero-order correlation between dogmatism and significant other influence for occupation. Similar results, in terms of size and direction were obtained for significant other influence for education. Minimally, this would suggest that significant other influence as an indicator of level of information vis-a-vis one's significant others is of credible validity.

The test-retest reliability for the significant other elicitor for occupation, based on the rank-ordering of the importance of significant others, over a six-week time interval is moderately high (r_{tt}=.51, n=5942).

[4]Tests of significance are not used or reported, as they are inappropriate, and potentially misleading, in the absence of some type of probability sampling, random or otherwise.

REFERENCES

Alexander, C. Norman, and Ernest Q. Cambell

1964 "Peer influences on adolescent educational aspirations and attainments." American Sociological Review 29:568-575.

Blau, Peter M., and Otis Dudley Duncan

1967 The American Occupational Structure. New York: Wiley.

Coleman, James, et al.

1966 Equality of Educational Opportunity. Washington, D.C.: United States Government Printing Office.

Duncan, Otis Dudley, Archibald O. Haller and Alejandro Portes

1968 "Peer influences on aspirations: a reinterpretation." American Journal of Sociology 74:119-137.

Haller, A.O., and C.E. Butterworth

1960 "Peer influences on levels of occupational and educational aspiration." Social Forces 38:289-295.

Haller, Archibald O.

1968 "On the concept of aspiration." Rural Sociology 33:484-487.

Haller, A.O., and J. Woelfel with Edward L. Fink

1968 The Wisconsin Significant Other Battery. Project No. 5-1170. Office of Education, Bureau of Research, U.S. Department of Health, Education, and Welfare.

Haller, A.O., and I.W. Miller

1971 The Occupational Aspiration Scale. New York: Schenkman.

Haller, Archibald O., and Joseph Woelfel

1972 "Significant others and their expectations: concepts and instruments to measure interpersonal influence on status aspirations." Rural Sociology 37:591-622.

Haller, Archibald and Alejandro Portes

1973 "Status attainment processes." Sociology of Education 46:51-91.

Haller, Archibald O., Luther B. Otto, Robert F. Meier and George W. Ohlendorf

1974 "Level of occupational aspiration: an empirical analysis." American Sociological Review 39:113-121.

Hauser, Robert M.

1972 "Disaggregating a social psychological model of educational attainment." Social Science Research 1:159-188.

Kandel, Denise B. and Gerald S. Lesser

1969 "Parental and peer influences on educational plans of adolescents." American Sociological Review 34:213-223.

Kerckhoff, Alan C. and Judith L. Huff

1973 "Parental influence on educational goals." Paper presented to the American Sociological Association, August, 1973, New York.

Kelley, Harold H.

1967 "Attribution theory in social psychology." Pp. 192-240 in D. Levine (ed.), Nebraska Symposium on Motivation, Lincoln: University of Nebraska Press.

Kelley, Harold H.

1969 "Group problem-solving." Pp. 1-105 in G. Lindzey and E. Aronson (eds.), Handbook of Social Psychology, Vol. IV. Cambridge: Addison-Wesley.

Krauss, Irving

1964 "Sources of educational aspirations among working-class youth." American Sociological Review 29:867-879.

Mead, G.H.

1934 Mind, Self and Society. Charles H. Morris (ed.). Chicago: University of Chicago Press.

Reissman, Leonard

1953 "Levels of aspiration and social class." American Sociological Review 18:233-242.

Sewell, William and Vimal Shah

1968a "Social class, parental encouragement and educational aspirations." American Journal of Sociology 73:559-572.

1968b "Parents' education and children's educational aspirations and achievements." American Sociological Review 33: 191-209.

Sewell, William H., Archibald O. Haller, and Alejandro Portes

1969 "The educational and early occupational attainment process." American Sociological Review 34:82-92.

Sewell, William H., Archibald O. Haller, and George Ohlendorf

1970 "The educational and early occupational attainment process: replications and revisions." American Sociological Review 35:1014-1027.

Sewell, William and Robert Hauser

1972 "Causes and consequences of higher education: models of the status-attainment process." American Journal of Agricultural Economics 54:851-861.

Siegel, Paul

1971 Prestige in the American Occupational Structure. Unpublished Ph.D. dissertation. University of Chicago.

Sullivan, Harry Stack

1940 Conceptions of Modern Psychiatry. Washington, D.C.: W.A. White Psychiatric Foundation.

Webster, Murray, Lynne Roberts, and Barbara Sobieszek

1972 "Accepting significant others: six models." American Journal of Sociology 78:576-598.

Woelfel, Joseph, and Archibald O. Haller

1971 "Significant others, the self-reflexive act and the attitude formation process." American Sociological Review 36:74-87.

Wilson, Kenneth and Alejandro Portes

1973 "The educational attainment process: replication on a national sample." Unpublished manuscript.

TABLE 1 - PARADIGM FOR SIGNIFICANT OTHER INFLUENCE

		PROXIMITY			
		ACTUAL		PERCEIVED	
SPECIFICITY	Definer functions	Model functions: EXEMPLIFIER	NON-EXEMPLIFIER	EXEMPLIFIER	NON-EXEMPLIFIER
PERSON-SPECIFIC	DEFINER	ACTUAL-P. SPECIFIC DEFINER-EXEMPLIFIER SO's actual ed., occ. attainments SO's LEX,LOX SO's LEA,LOA (1)	ACTUAL-P. SPECIFIC NON-EXEMPLIFIER-DEFINER SO's LEX,LOX SO's LEA,LOA (2)	PERCEIVED-P. SPECIFIC EXEMPLIFIER-DEFINER Ego's perception of SO's ed., occ. attainments SO's perceived LEX,LOX SO's perceived LEA,LOA (3)	PERCEIVED-P. SPECIFIC NON-EXEMPLIFIER-DEFINER SO's perceived LEX,LOX SO's perceived LEA,LOA (4)
	NON-DEFINER	ACTUAL-P. SPECIFIC EXEMPLIFIER-NON-DEFINER SO's actual ed., occ. attainments SO's LEA,LOA (5)	ACTUAL-P. SPECIFIC-NON-EXEMPLIFIER-NON-DEFINER SO's LEA,LOA (6)	PERCEIVED-P. SPECIFIC EXEMPLIFIER-NON-DEFINER Ego's perception of SO's ed., occ. attainments SO's perceived LEA,LOA (7)	PERCEIVED-P. SPECIFIC-NON-EXEMPLIFIER-NON-DEFINER SO's perceived LEA,LOA (8)
ROLE-CATEGORICAL peers, parents, teachers	DEFINER	ACTUAL-ROLE-CATEGORICAL DEFINER-EXEMPLIFIER LOA,LEA,LEX,LOX of best friend, acquaintance,etc. Father-mother's LEX,LOX; ed., occ., attainments by self-report; self-role aspiration levels. Teacher's LEX,LOX, ed., occ., attainments; self-role aspiration level by self-report. (9)	ACTUAL-ROLE-CATEGORICAL NON-EXEMPLIFIER-DEFINER LEX,LOX,LEA,LOA of best friend, acquaintance,etc. Father-mother's LEX,LOX; self-role aspirations by self-report. Teacher's LEX,LOX; self-role aspirations by self-report (10)	PERCEIVED-ROLE-CATEGOR-ICAL-DEFINER-EXEMPLIFIER LEA,LOA,LOX,LEX of best friend, acquaintance as perceived by ego. Father-mother's LEX,LOX; ed., occ. attainments; self-role aspiration levels as perceived by ego. Teacher's LOX,LEX; status attainment; self-role aspiration level as perceived by ego. (11)	PERCEIVED-ROLE-CATEGORICAL NON-EXEMPLIFIER-DEFINER LEX,LOX,LOA,LEA of best friend, acquaintance as perceived by ego. Father-mother's LEX,LOX; self-role aspiration level as perceived by ego. Teacher's LEX,LOX; self-role aspiration level as perceived by ego. (12)
	NON-DEFINER	ACTUAL-ROLE-CATEGORICAL EXEMPLIFIER-NON-DEFINER LOA,LEA of best friend, acquaintance by self-report. Father-mother's ed.,occ. attainments; self-role asp. levels by self-rep. Teacher's ed.,occ. att.; self-role asp. levels by self-report. (13)	ACTUAL-ROLE-CATEGORICAL NON-EXEMPLIFIER-NON-DEF. LOA,LEA of best friend, acquaintance by self-report. Father-mother's self-role aspirations by self-report. Teacher's self-role asp. level by self-report. (14)	PERCEIVED-ROLE-CATEGOR-ICAL-NON-DEF.-EXEMPLIF. LOA,LEA of best friend, acquaintance as perc. by ego. Father-mother's ed.,occ. att.; self-role asp.level as perceived by ego. Teacher's ed., occ. attainments; self-role aspiration level as perceived by ego. (15)	PERCEIVED-ROLE-CATEGORICAL NON-EXEM.-NON-DEFINER LOA,LEA of best friend, acquaintance as perceived by ego. Father-mother's self-role aspiration level as perceived by ego. Teacher's self-role aspiration level as perceived by ego. (16)

TERMINOLOGICAL KEY FOR TABLE 1

ACTUAL---measure of influence obtained from SO.
PERCEIVED---measure of influence obtained from ego.
PERSON-SPECIFIC---SO's elicited from ego by name.
ROLE-CATEGORICAL---SO's elicited by role category (peers, parents, teachers, etc.).
EXEMPLIFIER---role encumbents whose statuses are known to ego.
NON-EXEMPLIFIER(non-status exemplifier, aspiration exemplifier)---role aspirants whose level(s) of educational and/or occupational aspiration are known to ego.
NOTE: This is a minimum criterion for inclusion of a significant other in the paradigm, thus all levels (of roles) and all cells include this measure. When the role-categorical source of influence is a student, the measure of model influence (exemplifier) is the level of educational and/or occupational aspiration.
DEFINER---SO's who hold expectations for ego.
NON-DEFINER---SO's who do not hold expectations for ego.
LEA---level of educational aspiration.
LOA---level of occupational aspiration.
LEX---level of educational expectation (held by SO for ego).
LOX---level of occupational expectation (held by SO for ego).

A further distinction subdividing model and definer influence can be made between influence for self or influence for object (Haller and Woelfel, 1972:594). A definer for self or a definer for object provides information which is influential to ego's conception of himself or herself in relation to educational or occupational roles. A model or definer for object provides information which influences ego's conception of a given object. Thus a significant other can exert influence in any one or combination of four ways: model for object, model for self, definer for object, definer for self.

TABLE 2 - MEASURES OF SIGNIFICANT OTHER INFLUENCE IN STATUS ATTAINMENT RESEARCH

Study		Cell in Table 1	Proximity of influence to ego	Specificity of significant others	Modes of Influence: Definers only	Models only	Definer-Model	Non-definer, non-model
Krauss, (1964)		15	Perceived	Role-categ.		X		
Alexander and Campbell, (1964)		14	Actual	Role-categ.				X
Haller and Butterworth, (1960)		14	Actual	Role-categ.				X
Coleman, et al., (1966)		16	Perceived	Role-categ,				X
Sewell and Shah, (1968a)	*	11	Perceived	Role-categ.			X	
Sewell and Shah, (1968b)	*	11	Perceived	Role-categ.			X	
Duncan, et al., (1968)		14	Actual	Role-categ.				X
Sewell et al., (1969)		*12,15	Perceived	Role-categ.			X	
Kandel and Lesser, (1969)		10	Actual	Role-categ.	X			
Sewell et al., (1970)		*12,15	Perceived	Role-categ.			X	
Woelfel and Haller, (1971)		2	Actual	Person-spec.	X			
Sewell and Hauser, (1972)		*12,15	Perceived	Role-categ.			X	
Hauser, (1972)		*12,15	Perceived	Role-categ.			X	
Kerckhoff and Huff, (1973)		9,11	Act./Perc.	Role-categ.			X	
Wilson and Portes, (1973)		11	Perceived	Role-categ.	X			

*Some studies listed as examining both definer and model indluence, examined definer influence only for parents and teachers, and model influence only for peers.

TABLE 3 - HYPOTHESIZED AND OBTAINED RELATIONSHIPS FOR CONSTRUCT VALIDITY OF SIGNIFICANT OTHER INFLUENCE FOR OCCUPATION.*

	Index of Interaction	Propensity toward Interaction	Dogmatism	Personality Adjustment	Number of Significant Others	Involvement with Significant Others
Predicted	Moderate Positive	Positive	Negative	Positive	Strong Positive	Near Zero
Actual	.235	.127	.178	.382	.870	.057

*Data for this analysis are taken from Haller and Woelfel with Fink (1968).

TABLE 4 - RESULTS OF ADDITIVE MODELS BASED ON PERCEIVED AND ACTUAL INFORMATIONAL INPUTS FROM SIGNIFICANT OTHERS FOR EDUCATION AND OCCUPATION· zero-order correlations between expected and observed levels of aspiration

Significant Other Influence	EDUCATION		OCCUPATION	
	ACTUAL	PERCEIVED	ACTUAL	PERCEIVED
High	.336 N=30	.545 N=60	.671 N=25	.658 N=51
Medium	.223 N=30	.404 N=89	.686 N=36	.584 N=93
Low	.137 N=10	.366 N=33	.125 N=15	.566 N=47
Overall Correlation	.245 N=70	.434 N=182	.559 N=76	.607 N=191

TABLE 5 - MEANS AND STANDARD DEVIATIONS OF SELECTED VARIABLES*

VARIABLE	MEAN	STANDARD DEVIATION
(1) Level of occupational aspiration (LOA) Occupational Aspiration Scale Score	37.54	11.68
(2) Intelligence (IQ) Henmon-Nelson Test	111.01	12.92
(3) Academic achievement (GPA) Centile rank	85.30	7.39
(4) Number of significant others (NSO)	11.31	7.22
(5) Significant other influence - total for education and occupation (SOIT) See footnote 3	20.82	12.34
(6) Significant other influence - occupation (SOIO)	4.05	2.40
(7) Significant other influence - education (SOIE) See footnote 3	5.52	1.96
(8) Mean of ego's perceptions of significant others' levels of occupational expectation ($\overline{LOX}_p$) Occupational Aspiration Scale Score	39.82	11.40
(9) Mean of ego's perceptions of significant others' occupational attainments ($\overline{LOS}_p$) Siegel prestige ratings	47.05	12.45
(10) Mean significant other occupational attainment ($\overline{LOS}$) Siegel prestige ratings	45.76	15.68
(11) Mean significant other level of occupational expectation ($\overline{LOX}$) Occupational Aspiration Scale Scores	43.21	10.86
(12) Level of educational aspiration (LEA) Number of years beyond high school that respondent plans to get	2.24	1.92
(13) Mean of ego's perceptions of significant others' level of educational expectation ($\overline{LEX}_p$) Five ordinal categories where: 0 = quit school 1 = finish high school 2 = attend vocational school 3 = college attendence 4 = get an advanced degree	2.23	.94

VARIABLE	MEAN	STANDARD DEVIATION
(14) Mean of ego's perceptions of significant others' educational attainments ($\overline{LES}_p$) Six ordinal categories where: 0 = less than 8 years 1 = 8 years 2 = 9-11 years 3 = 12 years 4 = some college 5 = college degree 6 = advanced degree	3.10	.99
(15) Mean significant other educational attainment ($\overline{LES}$) Same as $\overline{LES}_p$	3.39	1.25
(16) Mean significant other level of educational expectation ($\overline{LEX}$) Same as $\overline{LEX}_p$	2.09	.98

*The effective N for all measures except $\overline{LOX}$, $\overline{LEX}$, $\overline{LOS}$, $\overline{LES}$, is N = 191. For the four actual measures the effective N was approximately 79. Means and standard deviations for those egos for whom information was available for only perceptions of SO expectations and attainments do not differ appreciably from those for which all information was collected. The data were initially collected for another study, thus the lack of actual measures for over one-half of the egos' SO's was by design and not by non-response.

TABLE 6 - ZERO-ORDER CORRELATION MATRIX FOR SELECTED VARIABLES*

Variable name	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
(1) LOA		180	191	191	191	191	191	191	191	177	63	77	191	190	76	78
(2) LEA	.47		182	182	182	182	182	182	182	168	61	75	182	181	74	76
(3) IQ	.33	.14		193	193	193	193	193	193	178	64	78	193	192	77	79
(4) GPA	.25	.06	.27		193	193	193	193	193	178	64	78	193	192	77	79
(5) SOIT	.22	.07	.26	.00		193	193	193	193	178	64	78	193	192	77	79
(6) SOIO	.16	.09	.19	.14	.67		193	193	193	178	64	78	193	192	77	79
(7) SOIE	.25	.07	-.01	.25	.52	.40		193	193	178	64	78	193	192	77	79
(8) NSO	.14	.02	.39	-.28	.80	.38	.19		193	178	64	78	193	192	77	79
(9) $\overline{LOX}_p$	.67	.37	.23	.18	.19	.19	.24	.09		.78	64	78	193	192	77	79
(10) $\overline{LOS}_p$	.22	.15	.21	.19	.14	.19	.06	.11	.23		55	67	178	178	67	68
(11) $\overline{LOS}$	.11	.11	.22	.12	.08	.25	.00	.03	.26	.84		64	64	64	64	64
(12) $\overline{LOX}$	.50	.31	.42	.34	.32	.25	.35	.19	.42	.37	.23		78	78	77	79
(13) $\overline{LEX}_p$	.54	.50	.30	.29	.26	.24	.28	.16	.51	.39	.40	.56		192	77	79
(14) $\overline{LES}_p$	.19	.14	.17	.16	.14	.11	.17	.08	.12	.31	.33	.47	.28		77	79
(15) $\overline{LES}$	.11	.06	.03	.02	-.03	.05	-.12	-.07	.24	.58	.76	.23	.43	.47		77
(16) $\overline{LEX}$	.48	.38	.48	.31	.29	.22	.22	.18	.48	.45	.38	.81	.62	.46	.35	

*Variable descriptions, means, and standard deviations can be found in Table 6. The zero-order correlation coefficients are listed below the diagonal with the respective N's above the diagonal.

TABLE 7 - STANDARDIZED REGRESSION COEFFICIENTS FOR REGRESSIONS OF EDUCATIONAL AND OCCUPATIONAL ASPIRATIONS ON INTELLIGENCE, ACADEMIC ACHIEVEMENT AND SELECTED MEASURES OF SIGNIFICANT OTHER INFLUENCE (N=191)**

INDEPENDENT VARIABLES	DEPENDENT VARIABLES	
	Level of occupational aspiration	
IQ	.118*	.103*
GPA	.055	.054
$\overline{LOS}$	-.122*	***
$\overline{LOX}$	.219*	.214*
$\overline{LOX}_p$	.573*	.551*
$\overline{LOS}_p$	***	-.017
R	.730	.721
R^2	.533	.519
	Level of educational aspiration	
IQ	-.078	-.043
GPA	-.135*	-.106
$\overline{LES}$	-.239	***
$\overline{LEX}$	.212*	.176
$\overline{LEX}_p$	.534*	.446*
$\overline{LES}_p$	***	-.042
R	.560	.521
R^2	.314	.272

*Coefficients greater than twice the standard error.

**Variable names and descriptions can be found in Table 5.

***Respective variables were not entered in the regression equation.

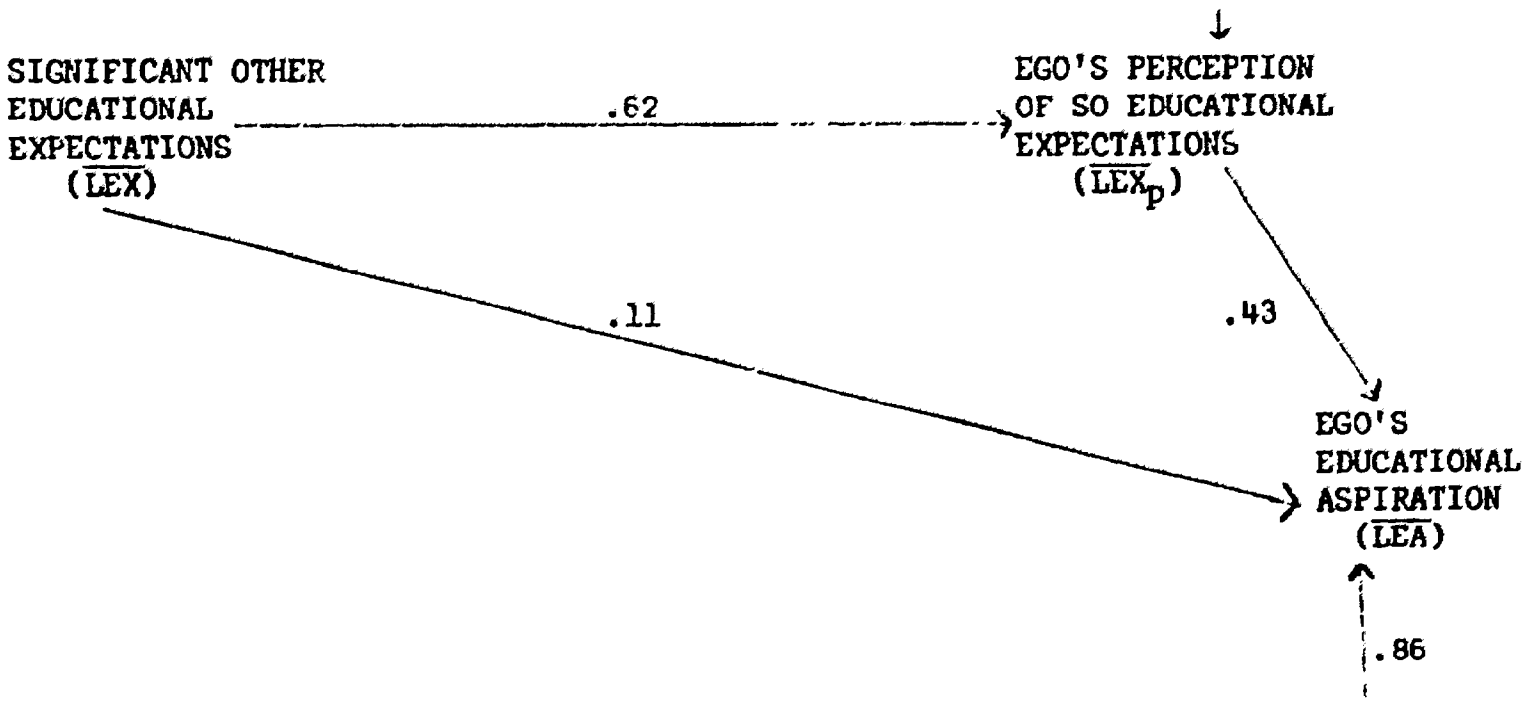
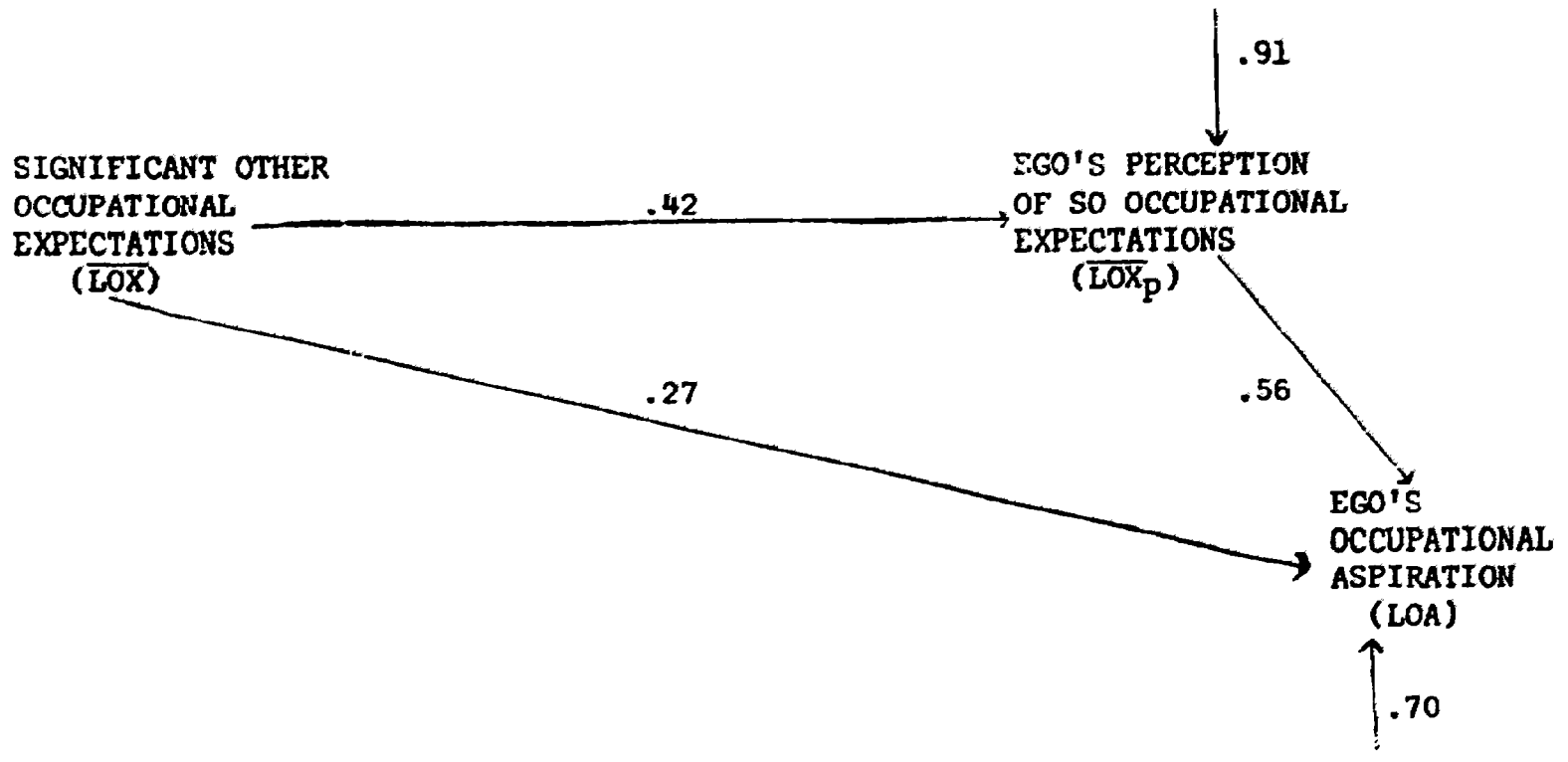


FIGURE 1 - PATH DIAGRAM FOR INTERPERSONAL INFLUENCES ON EDUCATIONAL ASPIRATION*



FIGUPE 2 - PATH DIAGRAM FOR INTERPERSONAL INFLUENCES ON OCCUPATIONAL ASPIRATION*

*Coefficients shown are path coefficients (i.e. standardized regression coefficients).