Studies done by Roe, Steward, Steimel and Crites, on parental and personal influences on the development of vocational interests in adolescence are briefly explained. It was hypothesized that high father's job satisfaction, high mother evaluation of the father's work, and high son self-esteem would produce the greatest similarity between father and son vocational interests. Subjects were 33 male undergraduates. They completed the Strong Vocational Interest (SVIB) Blank and Biographical Data Form. The SVIB was sent to subjects' fathers, and additional questionnaires to both father and mother. The dependent variable was developed by comparing interest patterns of fathers and sons. The independent variables were ratings from the SVIB and a self-esteem score. The effects of the variables on degree of interest similarity were more complex than hypothesized. A father's satisfaction, mother's satisfaction and son's self esteem did influence high father-son similarity but always in combination with some other variable and never alone. Implications include correlations between the SVIB and identification degree of identification and personality type. (KJ)
John Bollender

Anne Roe (1957) presented a rather specific theory concerning the parental attitudes which precede the development of various vocational choices. Subsequent research has failed to support the specifics of her theory but has added to the body of knowledge and theory indicating that parents do influence the personality and interests of their children.

One of the methodological flaws which marred most of the attempts to verify Roe's theory was the use of the expressed vocational choices of students as a dependent variable. Vocational choices are not reliable response measures, compared with other vocational behaviors, such as measured vocational interests, or actual employment in an occupation for a period of time. While there is a positive correlation between vocational interest measures and expressed vocational choice, vocational interests appear to reflect more stable aspects of personality than do vocational choices.

Steward (1959) investigated the relationship between the son's degree of identification with his mother and the son's vocational interests. Using mother and son Q-sorts to define identification, he found that the closer the identification, as defined by the boy's ideal sort and various mother sorts, the more masculine were the boy's interests on the SVIB. Other results were equivocal or contradictory and indicate a need for replicating the positive results.

Steimel and Susiedelis (1963) hypothesized that parental dominance would influence the pattern of vocational interests. They found that college males

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who saw their mothers as dominant had higher interest scores on SVIB Verbal and Persuasive occupational scales. Students who saw their fathers as dominant had higher interest scores on some occupations in a variety of fields, including Physical Science, Technology, Social Service, and Business. Boys whose fathers were dominant were significantly more likely to have fathers who majored in the exact sciences, worked at a professional level, and had more education than their wives. The authors of this study suggest that the fathers of greater occupational and educational status than average, may indirectly influence his son to be like him by virtue of the respect he commands.

Crites (1962) utilized a large sample of college males to assess the relationship between parental identification and patterns of interest on the SVIB. Identification measures were obtained from the semantic differential ratings of "self", "father", and "mother" by the subjects. Results indicated that degree of identification with father, but not with mother, was related to different patterns of interests. Sons identifying strongly with fathers had business detail interests and sons with slight identification had literary interests. Unfortunately, studies such as this do not consider the type of father being identified with, which is likely an important interactive influence.

It was hypothesized in this study that father masculinity, father's job satisfaction, mother's satisfaction with father's job, son's perception of father's job satisfaction, son's perception of mother's satisfaction with father's job, son's masculinity, and son's self-esteem would influence the degree of similarity between father and son vocational interests. Specifically it was predicted that high father's job satisfaction, high mother evaluation of the father's work, and high son self-esteem would produce greatest interest similarity.
Method

The SVIB and a Biographical Data Form containing additional measures were administered to 43 male undergraduates in an introductory psychology course at Emory University. A SVIB was mailed to the father and additional questionnaires to both father and mother. Six students had parents who were deceased or divorced, two students did not complete the testing, and two sets of parents did not return the questionnaires, leaving 33 Ss with complete data on father, mother, and son.

The dependent variable was developed by comparing interest patterns of fathers and sons. The SVIB's were pattern analyzed, using a modification of Stephenson's objective method (Stephenson, 1961). The occupational groupings suggested in the SVIB manual were used, except that the supplementary scales and single-scale groups were added to the nine multiple-scale groups with which they correlated most highly. Four patterns were used, Primary, Secondary, Indeterminate, and Reject and the similarity between the father and son's pattern on each of the nine groups was assigned a score ranging from 0 to 3. For example, if father and son both had a primary in Group I a score of 3 was assigned whereas if one had a primary and the other a reject a score of 0 would be assigned for maximum dissimilarity.

The independent variables were ratings, of what with the exception of the masculinity scores, taken from the SVIB, and the self-esteem score taken from a scale developed by Rosenbaum and de Charms (1962) and validated against performance in experimental tasks. The 10 self-esteem items refer almost exclusively to social self-esteem factors rather than intellectual or moral self-esteem.
The analyses conducted were analysis of variance for a two factor design with unequal cell n's, as described by Winer ( ). In the majority of the analyses the Ss were divided into equal thirds on the independent variables. Each parent measure was paired with each son measure once and the measures from father and mother were paired to evaluate their influence on father-son similarity of interests.

Results

Twenty ANOVA were attempted but only 18 were computed because two distributions indicated correlation of independent measures upon inspection of the cell frequencies. Seven out of 54 F's computed (13 percent) were significant at the .05 level or better, and 5 additional F's were significant at the .01 level of confidence.

Figures 1, 2, 3 picture the interaction of father SVIB masculinity (MF) with son's self-esteem (SE) (F = 2.56, p < .10), with son's perception of father's job satisfaction (S-FS) (F = 2.41, p < .10), and with son's perception of mother's satisfaction of father's job (S-MS) (F = 3.46, p < .05). High father masculinity appears to produce high interest similarity only under conditions of perceived parental satisfaction, either father or mother satisfaction being sufficient to produce interest similarity. Interestingly, high interest similarity is also produced under conditions of low father masculinity and low perceived parental satisfaction.

The effects of self-esteem are more complex. Self-esteem produces a main effect. The arrangement of the means for the three self-esteem groups indicates a curvilinear relationship with minimal interest similarity for low self-esteem sons and maximal interest similarity for medium self-esteem sons, with high-
self-esteem sons somewhere between on the similarity measure. This relationship must be interpreted very cautiously since there is an interaction of self-esteem with father masculinity (producing minimal similarity with highly masculine fathers and low self-esteem sons).

Self-esteem also interacts with mother distortion. Mother distortion is a discrepancy score which grew out of the observed large discrepancies which occurred between mother's reports of their satisfaction with father's job and the son's perception of his mother's satisfaction. It is, of course, not really possible to say that the mother is doing all of the distorting but it did seem likely that she had more reasons to distort than did the son. In any case, mother distortion did interact with son's self-esteem ($\bar{F} = 3.01, p < .05$) as shown in Figure 4, to produce maximum similarity under conditions of low self-esteem and high distortion as well as under conditions of moderate distortion and self-esteem. Low similarity existed under conditions of low self-esteem and minimal distortion. This finding is not easily understood, in part because of the difficulty of interpreting discrepancy scores. One possible explanation is that the mothers in the high distortion group are defensively distorting their critical feelings regarding the father on the rating scale. In some homes the mothers criticism may also be directed to the son, resulting perhaps in low self-esteem for the son. When the mother is critical of both her husband and her son, it may be that the boy is driven to the father for support and becomes like the father in his efforts to defend against the critical mother. It appears that the identification may grow out of an alliance between father and son, against threat posed by the mother.
This hypothesis receives further support from the results shown in Figure 5. There is an interaction ($F = 4.88, p < .05$) between the mother's report of her satisfaction with her husband's work and the son's perception of his father's work satisfaction. Mothers who report maximum satisfaction with their husband's work, when sons report their father's work satisfaction to be quite low, again produces high interest similarity. If these mothers are distorting critical feelings regarding father and his work then the alliance of sons and fathers against this threat appears to produce interest similarity. Figure 6 has greater stability than Figure 5 due to larger cell n's. Again, high mother distortion combined with low perceived father satisfaction produces high similarity.

Discussion

The effects of these variables on degree of interest similarity was more complex than hypothesized. While a father satisfied with his work, a mother satisfied with her husband's work (and probably satisfied with her husband generally), and a son who esteemed himself did influence high father-son similarity, it was always in combination with some other variable and never along. It is not surprising that father-son similarity is multiply determined. The positive results found, partially support the hypotheses. However data redundancy, the exploratory nature of this study, and the small sample size, with some cell means based on as few as 2 or 3 s's, necessitate replication of these results. Having said that, let me go on to explore with you some possible implications of these results.

The father-son similarity on the SVIB can readily be interpreted as an index of degree of identification. These results indicate a negative relationship between father masculinity and degree of identification in this college
sample, but only for those sons who have an unfavorable view of their fathers' work satisfaction, mothers' satisfaction with fathers' work, or of their own self-esteem. This means that sons who have a negative view of themselves or of their parents' satisfaction are more highly identified with culturally feminine fathers. The masculine fathers also have sons who identify strongly with them but only if the sons perceive them to be satisfied with themselves, or if the mothers are perceived to be satisfied with the fathers' work. It is possible that fathers who fit the cultural stereotype of masculinity may stimulate modeling and identification simply by demonstrating their satisfaction with their role and their ability to please their spouses.

The above results are consistent with, but more complex than, similar results obtained by Helper (1955) who found that father-son similarity scores correlated positively with mother's approval of father as a model for the son. Other findings indicate the importance of father masculinity as a moderating variable in identification research and interest development (Heilburn, In Press).

If identification is viewed as the result or product of development, rather than as the process, it is very reasonable to utilize interest tests as a measure of identification. My own research interests go beyond degree of identification to the type of personality which develops, and here too interest measures are reasonable measures. It seems quite likely that variables (such as parent sex role, parent nurturance, and spouse approval), found to be important in identification research, will also be important influences on degree of interest similarity between parent and child. Given knowledge about degree of similarity, type of interests developed by sons may be predictable from father's interest patterns.
References


Figure 1. Interaction of father masculinity (FMF) and son's self-esteem (SE) on SVIB similarity ($F = 2.56, p<10$).
Figure 2. Interaction of father masculinity (FMF) and son's perception of father's work satisfaction (S-FS) on SVIB similarity (F = 2.41, p < .10).
Figure 3. Interaction of father masculinity (FMM) and son's perception of mother's satisfaction with father's work (S-MS) on SVIB similarity ($F = 3.46$, p<.05).
Figure 4. Interaction of mother distortion (MD) and son's self-esteem (SE) on SVIB similarity ($F = 3.01, p < 0.05$).
Figure 5. Interaction of mother's report of satisfaction with father's work (MS) and son's perception of father's work satisfaction (S-FS) on SVIB similarity (F = 4.88, p < .05).
Figure 6. Interaction of mother distortion (MD) and son's perception of father's work satisfaction (S-FS) on SVIB similarity ($F = 2.60, p \leq .10$).