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AUTHOR Gelso, Charles J.; And Others  
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ABSTRACT

This study examined the relationship between college students' perceptions of their parents' attitudes toward them during childhood and adolescence and the subjects' own child rearing attitudes. A total of 188 undergraduates enrolled in an introductory psychology course participated in the study. Forty-two males and 46 females were themselves parents and 50 males and 50 females were not parents. Each subject filled out the Family Relations Inventory (FRI) which measured subjects' perceptions of their parents' attitudes toward them and the Maryland Parent Attitude Survey (MPAS) which measured the subjects' own attitudes toward child rearing. Findings indicated that the parent of the opposite sex is more directly influential in the development of an offspring's later child rearing attitudes than the parent of the same sex, but that overall, parents' child rearing attitudes do not account in any clearcut, linear fashion for a very large proportion of the variance in their offsprings' later child rearing attitudes. (JMB)

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COUNSELING CENTER  
UNIVERSITY OF MARYLAND  
COLLEGE PARK, MARYLAND

INTERGENERATIONAL RELATIONSHIPS IN THE DEVELOPMENT OF  
CHILD REARING ATTITUDES

Charles J. Gelso, Janice M. Birk, and Robert Powers

Research Report # 9-76

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## SUMMARY

This investigation was an extension of Gelsso's (5) exploratory study on the relationship between Ss' attitudes toward child rearing and their perceptions of their own parents' attitudes toward them during childhood and adolescence on three dimensions (acceptance, concentration, avoidance). Subjects were 188 students in introductory psychology. The general question to be studied was, "to what extent do we learn to be parents from our parents?" To an important degree, answers to this question were moderated by subjects' sex and parental status. While multiple correlational procedures, vs. univariate methods, tended to improve prediction, much of the variance in subjects' child rearing attitudes remained unaccounted for by these subjects' perceptions of how their parents treated them. Thus, to only a modest degree do people learn to be parents directly from their parents, and that relationship is a highly complex one.

### A. INTRODUCTION

The common assumption that people learn to be parents from their parents is generally supported by early research (3,6,9,10,14,20). For example, Block (3), using fathers as subjects, concluded that in child rearing, it is a matter of "like father like son." Harria (6) observed the same relationship of mothers to children as of these mothers to their own parents. Such early research, along with commonsense modeling theory, seemed to settle the issue, for the authors were unable to locate any research directly on the topic during the last 15 years until Gelsso's (5) recent work. Notably, Gelsso's study, along with one of the early papers (10), indeed suggests that relationships in this domain are more complex than would be expected from commonsense modeling theory. He found, for example, that grouping subjects by sex and parental status not

only resulted in more and larger significant relationships, but also in relationships in opposite directions (from each other and from predictions based on straightforward modeling theory).

Gelso's (5) study, however, has serious limitations: (a) The sample contained only students in a child psychology course, and was too small to permit certain important analyses; (b) Ss' perceptions of their own parents' attitudes toward them were only analyzed according to whether parents were Ss' mothers, fathers, or both combined, while some theoreticians (16) propose that the dominant parent is most influential in Ss' attitude development; (c) Only simple univariate analyses were performed.

The present investigation sought to extend Gelso's exploratory study, correcting for its limitations noted above. The study attempted to explore two general questions: (a) What is the relationship between Ss' perceptions of their parents' attitudes toward them during childhood and adolescence on three commonly employed dimensions (acceptance, concentration, avoidance) and Ss' own child rearing attitudes? (b) To what extent can four types of current child-rearing attitudes (disciplinarian, indulgent, protective, rejecting) be predicted, using multivariate prediction methods, from Ss' perceptions of their own parents' attitudes toward them?

## B. METHOD

### 1. Subjects

The sample consisted of 188 undergraduates enrolled in eight sections (four held in Fall 1972; four in Spring 1973) of an Introductory Psychology course at the University of Maryland. Forty-two males and 46 females were parents; 50 males and 50 females were not parents. All subjects were volunteers.

The median age of Ss was 22, with a range from 17 to 54. On the Maryland Parent Attitude Survey, means for the entire sample were within plus or minus

one standard deviation of the means for the norm group on all four scales. Thus, as a whole, this appeared to be a rather typical (in terms of child rearing attitudes) sample of well-educated, middle class subjects. Because of the wide variation in age, and because age might confound the relationships of interest, all variables were intercorrelated using both Product-moment and partial correlations. When age was partialled out of each correlation, in no case were partial  $r$ 's found to approach differing significantly from Pearson  $r$ 's. Thus, the remainder of the paper will treat only the Pearson  $r$ 's.

2. Instrumentation

The Family Relations Inventory (FRI), developed by Brunkan and Crites (4) to quantify Roe's parental attitudes orientation, was used to assess subjects' perception of parents' attitudes and behavior toward them. The FRI consists of 202 true-false statements of parental behavior and attitudes toward the subjects during childhood and adolescence, yielding separate scores for six diagnostic categories: father-avoidance, father-acceptance, father-concentration, mother-avoidance, mother-acceptance, and mother-concentration. The three categories of Acceptance, Concentration, and Avoidance each have common sense definitions, with the exception that the definition of Avoidance includes both parental neglect and active rejection. Validity and reliability of the FRI were rated as adequate and impressive respectively (2).

The five item Likert scale (7 point scale per item) developed by Roe and Siegelman (17) was used to assess parental dominance. This scale attempts to determine which parent has the greater influence in decision making in the family.

The Maryland Parent Attitude Survey (MPAS) was employed to evaluate Ss' attitudes toward child rearing. The MPAS was developed by Pumroy (13), and it consists of 90 pairs of items matched for social desirability. Subjects



respond by selecting the item from each pair which most accurately reflects their attitude toward child rearing. The MPAS yields scores on four parent types: Disciplinarian parent who needs and expects fairly strict obedience; Indulgent parent who is child centered and showers warmth and affection on the child; Protective parent who primarily is concerned that the child takes a minimum amount of risks; Rejecting parent who is openly and actively hostile toward the child.

### 3. Procedure and Statistical Analysis

The FRI, parental dominance questionnaire, and MPAS were administered in eight Introductory Psychology classes to volunteers who responded to a request to complete two questionnaires. The two questionnaires were administered a week apart, with the order of presentation randomly determined.

Data analysis was conducted in two steps: (a) Computation of product-moment correlations between scores on the four scales of the MPAS (Disciplinarian, Indulgent, Protective, Rejecting) and perceptions of attitudes toward them during childhood (FRI - Acceptance, Concentration, Avoidance) held by their mothers, fathers, both parents combined, and the dominant parent. These correlations were calculated for all combinations of S sex and parental status. (b) Stepwise regression analyses, with each MPAS score as the criterion and all FRI scores (e.g., mother acceptance, father acceptance, parents' acceptance, dominant parent acceptance, etc., for the concentration and avoidance variables), as predictors.

## C. RESULTS AND DISCUSSION

### 1. Univariate Analysis

Tables 1, 2, and 3 present Pearson correlations between the FRI and MPAS for all subgroups and the various combinations. Inspection of these tables reveals that the magnitude and pattern of correlations are to an important

degree, a function of subgroup classification. For example, although the number of significant FRI-MPAS correlations for the total sample (Table 1) is much greater than would be expected by chance (18), all correlations are low, suggesting limited practical significance. It might be argued that this result is a function of intercorrelating incomparable scales. Such an argument, however, is negated by the fact that equally low correlations exist for the entire sample on FRI-MPAS scales that measure highly similar dimensions, i.e., the  $r$ 's of both FRI Acceptance and Avoidance with MPAS Rejecting.

The pattern of low  $r$ 's maintains itself to some extent in all subgroups. Indeed, no correlations in this phase of the study were high, suggesting that, even with subgroup categorization as presently employed, parents' child rearing attitudes do not account for a very large proportion of the variance in their offsprings' later child rearing attitudes, at least in any clearcut, linear, and univariate fashion. Certain subgroup categorizations, however, did lead to larger correlations, and to differing and often contradictory patterns of associations. The patterns of intercorrelations in Tables 1, 2, and 3, it can be seen, are complex and in some cases most difficult to interpret. Thus, the presentation and discussion in this section will focus on those patterns that appear most readily interpretable and conceptually meaningful.

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Insert Tables 1, 2, and 3 About Here

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Our findings strongly support Gelso's (5) contention that it is important to differentiate parent and nonparent subgroups when studying the transmission of child rearing attitudes (a differentiation usually not made in the early research). Tables 1, 2, and 3 reveal the existence of 23 significant

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FRI-MPAS correlations for the subgroups parent and nonparent (Table 3). Inspection of the significant correlations within each of these three parent-nonparent combinations reveals that in only one of the 23 instances where an FRI-MPAS correlation was significant for one subgroup (e.g., female parent) was it also significant for the other (e.g., female nonparent)...and in that one case the correlations were in opposite directions (Table 3, FRI Concentration with MPAS Dominant).

The phenomenon discussed in the above paragraph may be best exemplified by examining the correlational patterns on the FRI Avoidance and MPAS Rejecting scales, since these scales are obviously comparable. Subjects' perceptions that their parents were avoiding were associated with Ss themselves possessing rejecting child rearing attitudes -- only when the Ss were nonparents (right-hand column in Table 1). This sort of relationship is predictable from a straightforward modeling theory; yet it was not maintained for Ss who were parents, either males or females. Now, inspection of Tables 2 and 3 suggests that even this generalization is somewhat problematic. The generalization that parental avoidance (which includes rejection) stimulates the development of later rejecting child rearing attitudes in the offspring, i.e., rejection spawns rejection, holds up only (a) for female nonparents, and (b) when the predictor was Ss' father, an additive combination of mother and father ( $p = .06$ ) or the dominant parent.

What about the parent Ss? Gelso (5) found that FRI-Avoidance and MPAS-Rejecting were inversely related for that subgroup. He proposed that when people who view their parents as rejecting become parents themselves, they overcompensate for rejecting child rearing attitudes. Yet we found no relationship in this subgroup. The difference between the two studies may be tied to sample differences. Gelso studied students taking a first course in child



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psychology. As he suggested, some of them may have been taking the course partly to work through negative child rearing attitudes. Our sample contained introductory psychology students. Thus, the subject sample appears to be yet another important moderator of a seemingly obvious relationship.

Several additional patterns appear notable. For the male nonparent subgroup (Table 2), none of the 48 FRI-MPAS correlations attained significance, while for the female nonparents (Table 3), five of them did so ( $p < .10$  that five of 48 significant  $f$ 's could occur by chance). It may be hypothesized that females are more attentive to the development of child rearing attitudes and, thus, such attitudes crystallize earlier than for males.

For the total sample, it appeared that the relationship with father was somewhat influential, whereas that with mother was negligible (Table 1). The apparent influence of father seems particularly noteworthy in relation to female offsprings. For example, ratings made by male parents and nonparents, separately and combined, of their fathers on the FRI scales correlated significantly with these Ss' MPAS scores only once (Table 2). The expected modeling effect (like father like son) does not occur. When examining the various combinations of female Ss, however, in terms of the FRI-MPAS correlations for the father (Table 3), six significant correlations emerge ( $p < .01$  that six of 36 occurred by chance). Walters and Stinnett (21) concluded from their review that, while the impact of father is highly significant, "...studies of the father-child relationship are almost invariably concerned with father and sons, and the specific impact of fathers on daughters has virtually been unexplored" (p. 101). The present findings provide some intriguing albeit tentative evidence regarding the father's influence.

Furthermore, some of our evidence supports Gelso's (5) suggestion that mothers have the greater influence on certain child rearing attitudes held by

male offsprings. Some of the strongest relationships in our study occur between the FRI Acceptance and Avoidance scales and the MPAS Protective scale when Ss are males who are parents and when they are rating the attitudes of their mothers (or some combination that includes mother, Table 2).

The discussion in the above two paragraphs lends itself to an unexpected and rather ironic generalization: the opposite sexed parent is the most directly influential in the development of an offspring's later child rearing attitudes. In other words, the statements that seem most supportable by our data are, "like father like daughter" and "like mother like son."

## 2. Multivariate Analysis<sup>1</sup>

In the step-wise regression analysis, the following conservative requirements were employed for the addition of a predictor variable: (a) the overall multiple R must maintain statistical significance when the variable is added, and (b) the added variable must increase the R by at least .02. Multiple Rs were corrected to take into account the shrinkage that would be expected to occur upon cross validation. Lord and Novick's (12) modification of Wherry's (22) original correction for shrinkage was utilized.

The general question we sought to answer in this phase of the analysis was, "to what extent can four types of child rearing attitudes (disciplinarian, indulgent, protective, rejecting) be predicted from Ss, perceptions of their own parents' attitudes toward them during childhood and adolescence?" Additional questions were: (a) Does predictive power vary according to the subgroup classifications used? (b) Do multiple correlation procedures increase the adequacy of prediction. Again, the predictors were the acceptance, concentration, and avoidance scores of Ss' fathers, mothers, both combined additively, and the dominant parent (12 predictors in all).

Some of the findings discussed earlier were further supported by the multivariate procedure. Most notable of these were: (a) predictive power is increased appreciably by certain subgroup classifications (rather than total sample analysis), (b) male nonparents remain an unpredictable subgroup, and (c) criterion variables that are predictable for one subgroup are often not so for another (e.g., males vs. females).

Moreover, the multiple regression analysis did result in somewhat improved predictability. For example, in eight instances (of our 36 comparisons)  $R$  exceeded  $r$  (the best single predictor) by at least .05 correlations points, even when  $R$  was corrected for shrinkage; and in one case (the prediction of the Indulgent scale for female nonparents),  $R$  exceeded  $r$  by .25 points. Thus, taking into account the complex configurations of our predictor variables does allow for improved prediction of child rearing attitudes as determined by persons' perceptions of their own parents' attitudes toward them during childhood. Yet the modest magnitude of the  $R$ 's (only four of the 36  $R$ 's, corrected for shrinkage, exceeded .40) clearly suggests that, even with multiple prediction procedures, and even with fairly refined subgroup classification, we cannot conclude that people learn to be parents directly from their parents to a high degree.

D. CONCLUSIONS

These data provide even more cogency to Gelso's (5) recommendation that the transmission of child rearing attitudes be studied with various populations and subgroups. Relatedly, Walters and Stinnett (21) concluded from their comprehensive review that nearly every generalization about parent child relationships has many contingencies, and that findings which at first appear contradictory are not at all so when viewed in terms of population differences. Such conclusions imply that much prior research has been simplistic, and that

future research on the transmission of child rearing attitudes needs to take into account some of the real complexities and subtleties in this domain, e.g., through incorporating more and subtler moderators. Relatedly, as we wrote and rewrote this paper, it appeared without fail that nearly any straightforward generalization that might be made was subject to several disclaimers. While greater definitiveness might make for more scientific comfort, it seems most likely that the inability to make easy generalizations accurately reflects the "true state of the world" in this research area.

## References

1. Berdie, R. F. Comment. In R. J. Brunkan & J. O. Crites, An inventory to measure the parental attitude variables in Roe's theory of vocational choice. Journal of Counseling Psychology, 1964, 11, 3-12.
2. Block, J. H. Personality characteristics associated with fathers' attitudes toward child rearing. Child Development, 1955, 26, 41-48.
3. Brunkan, R. J. & Crites, J. O. An inventory to measure the parental attitude variables in Roe's theory of vocational choice. Journal of Counseling Psychology, 1964, 11, 3-12.
4. Gelsco, C. J. The transmission of attitudes toward child rearing: An exploratory study. The Journal of Genetic Psychology, 1974, 125, 285-293.
5. Harris, I. D. Moral children and mothers. Glencoe, Illinois: Free Press, 1959.
6. Ingersoll, H. L. A study of the transmission of authority patterns in the family. Genetic Psychology Monographs, 1948, 38, 225-302.
7. Itkin, W. Some relationships between intra-family attitudes and pre-parental attitudes toward children. Journal of Genetic Psychology, 1952, 87, 221-252.
8. Kappelman, J. Who's afraid of the big bad child? Family Health, 1972, 4, 14, 38-39.
9. Lord, F. M. and Novick, M. R. Statistical theories of mental test scores. Reading, Massachusetts: Addison-Wesley, 1968.
10. Pumroy, D. Maryland Parent Attitude Survey: A research instrument with social desirability controlled. Journal of Psychology, 1966, 64, 73-78.



12.

11. Radke, M. J. Relation of parental authority to children's behavior and attitudes. University of Minnesota Institute of Child Welfare Monograph, Minneapolis: University of Minnesota Press, 1946.
12. Roe, A. Early determinates of vocational choice. Journal of Counseling Psychology, 1957, 4, 212-217.
13. Roe, A. & Siegelman, M. The Origin of Interests. Washington, D. C.: American Personnel and Guidance Association, 1964.
14. Sakoda, J. M., Cohen, B. H. & Beall, G. Test of significance for a series of statistical tests. Psychological Bulletin, 1954, 51, 172-175.
15. Spinetta, J. & Rigler, D. The child-abusing parent: A psychological review. Psychological Bulletin, 1972, 77, 296-304.
16. Symonds, P. M. The psychology of parent-child relationships. New York: Appleton-Century-Crofts, 1939.
17. Walters, J. & Stinnet, N. Parent-child relationships: A decade review of research. Journal of Marriage and Family, 1971, 33, 70-111.
18. Wherry, R. J., Appendix A. In W. H. Stead and C. P. Shartle (Eds.), Occupational counseling techniques. New York: American Book Company, 1940, pp. 245 ff.

## Footnotes

<sup>1</sup>Copies of a table containing multiple R's along with the number of correlation points added to the best single predictor by use of multiple regression for each subgroup on each MPAS scale are available gratis from the first author.

Table 1

Family Relations Inventory (FRI) and Maryland Parent Attitude Survey (MPAS) Correlations for the Entire Sample, the Parent Subgroup and the Non Parent Subgroup

FRI Scale	MPAS Scales and Subgroups											
	Dominant			Indulgent			Protective			Rejecting		
	Total	Parents	NPs	Total	Parents	NPs	Total	Parents	NPs	Total	Parents	NPs
<b>Father</b>												
Acceptance	20**	11	25*	-16*	-08	-21*	07	05	08	-13	-13	-13
Concentration	-02	08	-14	06	-02	17	-01	-02	-01	-06	-10	-03
Avoidance	-11	-03	-13	07	07	03	-14*	-14	-13	16*	09	23*
<b>Mother</b>												
Acceptance	08	-06	17	-11	-00	-19*	10	18	01	-06	-13	03
Concentration	-05	-15	-01	00	02	01	07	11	02	05	11	-00
Avoidance	-08	06	-15	05	04	01	-12	-26*	05	10	08	12
<b>Father &amp; Mother</b>												
Acceptance	18*	04	21*	-16	-05	-22*	10	14	06	-11	-16	07
Concentration	-04	-06	-07	-03	00	09	04	06	01	-01	02	-02
Avoidance	-11	02	-16	07	07	03	-15*	-24*	-07	16*	10	22*
<b>Dominant Parent</b>												
Acceptance	20**	06	27**	-16*	-12	-17	04	12	-03	-09	-08	-09
Concentration	03	03	00	01	-01	05	-01	-03	-00	-00	06	-07
Avoidance	-11	02	-16	06	15	-07	-13	-28**	02	15*	03	27**

Note: n's = 188 for entire sample, 88 parents, 100 nonparents; abbreviation: NP = nonparent

\* = p < .05, \*\* = p < .01

Table 2

Family Relations Inventory (FRI) and Maryland Parent Attitude Survey (MPAS) Correlations for Males,  
Male Parents and Male Nonparents

MPAS Scales and Subgroups

FRI Scale	Dominant			Indulgent			Protective			Rejecting		
	Males	M-Par	M-NP	Males	M-Par	M-NP	Males	M-Par	M-NP	Males	M-Par	M-NP
<b>Father</b>												
Acceptance	.08	-.15	-.19	-.15	-.03	-.23	.18	.23	.15	-.12	-.14	-.11
Concentration	-.08	-.22	.00	.10	.05	.16	.05	.17	-.04	-.13	-.17	-.13
Avoidance	-.06	-.03	-.07	.08	.04	.10	-.25*	-.26	-.23	.18	.22	.18
<b>Mother</b>												
Acceptance	.06	-.14	.22	-.08	.06	-.22	.14	.30*	-.00	-.13	-.29	.01
Concentration	-.08	-.22	.01	.11	.17	.09	.04	.04	.02	-.00	.06	-.09
Avoidance	-.05	.17	-.27	.02	-.03	.08	-.23*	-.52**	.09	.19	.26	.16
<b>Father &amp; Mother</b>												
Acceptance	.08	-.17	.23	-.14	.01	-.26	.19	.31*	.10	-.15	-.25	-.07
Concentration	-.09	-.25	.01	.12	.14	.13	.05	.10	-.01	-.06	-.03	-.12
Avoidance	-.07	.08	-.17	.07	.01	.11	-.29**	-.48**	-.13	.22*	.29	.20
<b>Dominant Parent</b>												
Acceptance	.08	-.22	.25	-.17	-.06	-.25	.12	.33*	-.03	-.06	-.12	-.02
Concentration	.03	-.16	.15	.06	.14	.01	-.02	.03	-.08	-.04	-.01	-.10
Avoidance	-.07	.14	-.24	.10	.11	.07	-.25*	-.51**	.00	.15	.16	.21

Note: n's = 92 male, 42 male parents, 50 male nonparents

\* = p < .05, \*\* = p < .01

Table 3

Family Relations Inventory (FRI) and Maryland Parent Attitude Survey (MPAS) Correlations for  
Females, Female Parents and Female Nonparents

FRI Scales	MPAS Scales and Subgroups											
	Dominant			Indulgent			Protective			Rejecting		
	Fem	F-Par	F-NP	Fem	F-Par	F-NP	Fem	F-Par	F-NP	Fem	F-Par	F-NP
<b>Father</b>												
Acceptance	32**	24	33**	-22*	-21	-17	-03	-08	-01	-13	-03	-16
Concentration	02	31*	-30*	06	-07	20	-09	-21	-02	-04	-16	09
Avoidance	-16	-03	-19	03	10	-09	-02	-03	00	18	-01	32*
<b>Mother</b>												
Acceptance	10	-01	10	-14	-10	-13	06	08	02	-00	04	03
Concentration	-03	-06	-07	-11	-18	-03	0	18	01	07	09	09
Avoidance	-10	03	-02	-12	21	-10	-02	-03	01	00	-23	12
<b>Father &amp; Mother</b>												
Acceptance	26**	16	25	-22*	-20	-17	01	-01	01	-09	-00	-09
Concentration	-00	15	-20	-04	-16	08	01	-01	02	02	-04	10
Avoidance	-15	-00	-13	08	18	-11	-02	-04	01	12	-14	27
<b>Dominant Parent</b>												
Acceptance	30**	24	28*	-18	-23	-07	-04	-05	-04	-14	-01	-20
Concentration	02	25	-21	01	-17	16	-01	-13	09	-03	-01	-04
Avoidance	-15	-07	-10	03	23	-21	-01	-03	03	15	-14	35*

Note: n's = 96 females, 46 female parents, 50 female nonparents

\* = p < .05, \*\* = p < .01