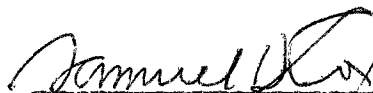
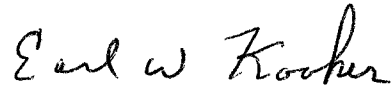


THE RELATIONSHIP BETWEEN THE PERCEPTION OF PARENTAL
LOVING-REJECTING BEHAVIOR AND SCHOLASTIC
APTITUDE IN COLLEGE STUDENTS

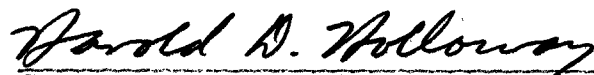
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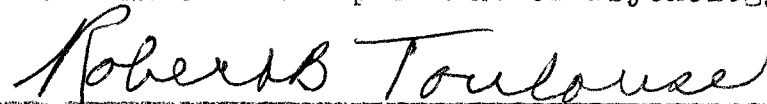
Major Professor



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Chairman of the Department of Psychology



Dean of the Graduate School

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Smith, Jamie M., The Relationship Between the Perception of Parental Loving-Rejecting Behavior and Scholastic Aptitude in College Students. Master of Arts (Clinical Psychology), May, 1973, 20 pp., 17 tables, references, 33 titles.

The purpose of this study was to examine the relationship between the perception of parents as Loving-Rejecting (L-R) on the basis of the Roe-Sieglerman Parent-Child Relations Questionnaire (PCR), scholastic achievement, as measured by the grade point average (GPA), and scholastic aptitude, as measured by the Scholastic Aptitude Test (SAT). It was hypothesized that children who perceive their parents as high on the L-R dimension would have a higher grade point average and a higher SAT score than those children who perceive their parents as in the middle or low group on the L-R dimension.

The PCR questionnaire consists of a mother and father form of 130-items each. The L-R dimension was derived by subtracting the scores on the Neglecting and Rejecting scales from scores on the Loving scale. The PCR was administered to numerous undergraduate psychology classes. Of the original 401 questionnaire pairs, 181 subjects were selected who were White, from an intact family, and had completed both forms of the PCR. Grade point averages and SAT scores were available for 95 subjects in this group. The resulting sample consisted of 45 females and 50 males.

An analysis of covariance was computed to measure the relationship between scholastic achievement (GPA) and the

rating of parents on the L-R dimension, with SAT scores as the constant. An analysis of variance was computed to measure the relationship between SAT scores and perception of parents on the L-R dimension.

Results of the analysis of covariance failed to support the first hypothesis concerning the relationship between perception of parents on the L-R dimension and scholastic achievement. There was no evidence that L-R affected GPA.

Results of the analysis of variance failed to support the second hypothesis concerning the relationship between perception of parents on the L-R dimension and scholastic aptitude. Results indicated that subjects who perceived their parents as either middle or low in the L-R dimension had a significantly higher mean SAT score than subjects who perceived their parents as high on the L-R dimension. These findings were interpreted to suggest that subjects whose parents are loving, but who do not reward unconditionally, will be more motivated to do well in school than those subjects whose parents love them or reject them, no matter what they do.

THE RELATIONSHIP BETWEEN THE PERCEPTION OF PARENTAL
LOVING-REJECTING BEHAVIOR AND SCHOLASTIC
APTITUDE IN COLLEGE STUDENTS

THESIS

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Statement of the Problem and
Review of Research

Researchers have attempted to isolate and define categories of child-rearing parental behavior and study the effects of these behaviors on the development of the child. Sufficient evidence was available to indicate that modes of parent-child interaction during the early years can be crucial to the level and quality of cognitive skills that the child ultimately develops (Freeberg & Payne, 1967; Hurley, 1967; Morrow & Wilson, 1961; Pines, 1971). The majority of research indicated the existence of two, possibly three, dimensions in child-rearing behavior. The first of these dimensions, labeled Loving-Rejecting (L-R) by Roe and Siegleman (1963), was found to be most significant in parent-child relations. The purpose of this study was to examine the relationship of the L-R dimension in child-rearing as measured by the Roe-Siegleman Parent-Child Relations Questionnaire (PCR) and the child's development of aptitude, as measured by the Scholastic Aptitude Test (SAT).

Defined by Roe and Siegleman (1963), parental loving behavior was characterized by

parents who give the child warm and loving attention. They try to help him with projects that are important to him, but they are not intrusive. They are more likely to reason with the child than to punish him, but they will punish him. They give praise, but not indiscriminately. They try specifically to help him through problems in the way best for

him. The child feels able to confide in them and to ask them for help. They invite his friends to the house and try to make things attractive for them. They encourage independence and are willing to let him take chances in order to grow towards it.

The Rejecting pole of the L-R dimension is characterized by parental

rejection of the childishness of the child. They may also reject him as an individual. They are cold and hostile, derogate him and make fun of him and his inadequacies and problems. They may frequently leave him alone and will not permit other children in the house. They have no regard for the child's point of view. The regulations they establish are not for the sake of training the child, but for protecting the parent from his intrusions.

This factor is also characterized by

parents who pay little attention to the child, giving him a minimum of physical care and no affection. They forget promises made to him, forget things for him. . . . They leave him alone, but do not go out of their way to avoid him.

Dimensions analogous to L-R seemed to pervade the literature labeled as Acceptance-Rejection (Baldwin, Kalhorn, & Breese, 1945), Love vs. Hostility (Schaefer, 1959, 1965), Warmth of mother-child relationship (Sears, Maccoby, & Levin, 1957), and Hostility-Rejection (Zuckerman, Ribback, & Monashkin, 1958). However, despite variations in measuring techniques and operational definitions of the independent variable, the findings of these various investigators were compared with each other, because conceptually they are very similar constructs.

Investigators have studied many facets of the effects of parental behavior on child development. The research of interest to this study was focused on the hypothesis concerning

the effect of L-R on the development of scholastic aptitude. Baldwin's Behavior and Development in Childhood (1955) cited two studies concerned with this problem. Both Champney (1941) and Baldwin, Kalhorn, and Breese (1945) came to the conclusions that types of homes showing large gains in IQ were warm, allowed considerable freedom of exploration, and exerted acceleratory pressure from parents. Rejecting homes contained little warmth, were neither especially free nor especially restricting, and offered little acceleratory pressure. It was concluded that rejecting homes did not stimulate maturations.

Ferguson (1970) has made the generalization that intellectual competence is associated with interpersonal maturity and, conversely, that cognitive functioning, hence academic performance, may be impaired in children who are socially immature and unable to function in a self-controlled manner. Parental attitudes expressive of warmth, non-restriction, and positive demands for self-sufficiency have been related to both social maturity and academic success (Bayley & Schaefer, 1964; Mlodnosky, 1962; Rau, Mlodnosky, & Anastasiow, 1964; Winder & Rau, 1962; Winterbottom, 1958).

Ferguson (1970) also cited a study conducted by Baumrind (1967) in which the child-rearing practices of parents of a selected group of preschoolers who were identified as self-reliant, self-controlled, and explorative, and content, were contrasted with those of the parents of

another selected group, characterized as discontent, withdrawn, and distrustful. The parents of the former group were observed to exert "authoritative" control over their children's behavior, combined with warmth and high expectations for maturity. Ferguson (1970, p. 121) reported, "the same patterns of parental behavior that support social maturity and self-confidence also promote a high level of exploratory behavior and competence in dealing with the environment".

Data reported (Morrow & Wilson, 1961) on the family relations of bright high school boys making good grades as compared to those of bright high school boys making mediocre or poor grades yielded the following results. High-achievers, more often than under-achievers, described their families as typically sharing recreation. High-achievers also rated their parents as trusting and encouraging with respect to achievement. They are described as less restrictive and severe. Hypotheses that under-achievers' families were more protective and applied high pressure for achievement were not supported.

Kagan and Freeman (1963) reported data to support earlier findings (Kagan & Moss, 1962) concerning maternal behaviors and IQ development. Their study consisted of 30 boys and 20 girls selected from the longitudinal population of the Fels Research Institute. Measures of maternal restrictiveness and coerciveness were associated with lower IQ scores. However, when the variable of maternal education was controlled, this relationship dropped to non-significant levels.

Maternal justification of discipline was significantly related to higher IQ scores for both boys and girls. The authors interpreted these results as follows

Justification and criticism appear to have a special relation to the child's level of mental development. . . . a mother who attempts to reason with her 4-year-old probably has greater respect for the conceptual capacity of her child than one who punishes arbitrarily. . . . Such a mother probably communicates this faith in her child's ability to comprehend in other ways, and one might assume that this kind of mother would create conditions conducive to confidence in attempting mastery of intellectual tasks (p. 906).

Drews and Teahan (1957) took the opposite viewpoint regarding family atmospheres conducive to achievement motivation. They contended that the lack of restrictions on a child leads to failure to develop, and that parents of high academic achievers will actually be less permissive and accepting in the treatment of their children than the parents of low academic achievers. Their data indicated that mothers of both gifted and average children were rated as more authoritarian and restrictive in the treatment of their children than the mothers of low academic achievers.

Further research conducted by Hurley (1965) studied not only the relationship between parental Acceptance-Rejection (A-R) and IQ development, but possible differences in the importance of paternal vs. maternal A-R and possible differences in a girl's vs. boy's sensitivity to parental A-R. His first hypothesis was confirmed, indicating that parents who use coercive methods in dealing with their children or who threaten withdrawal of love are more likely to inhibit the child's exploration of the environment, hence,

his development of academic skills. It should be noted that Hurley's (1965) measure of parental A-R measured only the rejection pole of the L-R dimension used in this study. There was no measurement of loving behavior.

Hurley's (1967) follow-up study, using a larger sample and an additional measure of rejecting parental behavior, concluded that "malevolent behaviors of both mothers and fathers have a negative association with the child's IQ".

In light of the fact that the majority of research studied concerned questions regarding the relationship between parental L-R and the scholastic development of children, the hypotheses of this study were these:

1. Children who perceived their parents as high on the L-R dimension, in relation to other subjects, would have higher scholastic achievement (GPA).
2. Children who perceived their parents as high on the L-R dimension, in relation to other subjects, would have higher scholastic ability (SAT).

Method

Subjects

One hundred and eighty-one subjects were selected from a group of 401 PCR questionnaire pairs which had been administered to undergraduate psychology classes during the spring of 1972. Only subjects from white families, in which the original parents were still living together, were used so as to make the sample group more homogeneous with regard

to kinds of parental practices used by race, and amount of exposure to natural parents. Both mother and father forms of the questionnaire had to have been completed. Cumulative grade point averages (GPA) and Scholastic Aptitude Test scores (SAT) were obtainable for 95 of the original 181 subjects. The resulting sample consisted of 50 male and 45 female undergraduate college students.

Instrument

The Roe-Siegleman Parent-Child Relations Questionnaire (PCR) (Roe & Siegleman, 1963), used in this study, employs the child-report technique in measuring parental behavior. There is a separate form for the mother and father. Each form consists of 130 items, with six subtests of 15 items each, labeled Loving, Protecting, Demanding, Rejecting, Neglecting, and Casual. Four subtests, Symbolic-Love Reward, Direct-Object Punishment, Direct-Object Reward, and Symbolic-Love Punishment, each consist of 10 items.

A large number of items were taken from the literature and others were constructed to fit the 10 subtests. Each item pertains to a specific behavior, not an attitude, of the parent. Thus, the dimension is described in terms of things the parent actually did. The following are examples. PCR item 48, "My mother talked to me in a warm and affectionate way", characterizes behavior categorized under the subtest labeled Loving. PCR item 73, "My father ridiculed and made fun of me," characterizes behavior categorized under the subtest

label Rejecting. The L-R dimension is an unweighted composite of three PCR scales: Loving minus Rejecting and Neglecting.

Responses were scored on a continuum from "very untrue" (scored one point) to "very true" (scored five points), as shown below (Roe & Siegleman, 1963).

Very True	Tended to be True	Tended to be neither True nor Untrue	Tended to be Untrue	Very Untrue
5	4	3	2	1

Procedure

The mothers and fathers of ninety-five subjects were classified as high, middle, or low on the L-R dimension on the basis of the PCR ratings. Information in Table 1 indicates that more females than males tended to rate both mother and father as higher on L-R.

TABLE 1

Number of Subjects by Three Categories of L-R by Sex

Groups	Perception of Parent as Loving-Rejecting							
	Mothers				Fathers			
	High	Middle	Low	Total	High	Middle	Low	Total
Females	21	14	10	45	20	16	9	45
Males	11	17	22	50	12	15	23	50
Combined	32	31	32	95	32	31	32	95

Means, standard deviations, and reliabilities of the Loving, Rejecting, and Neglecting scales of the PCR were computed and are reported in Table 2.

TABLE 2
Means, Standard Deviations, and Reliabilities
of Three PCR Scales

Group	Loving			Rejecting			Neglecting		
	M	SD	R	M	SD	R	M	SD	R
Mothers									
Females	58.7	9.2	.92	28.6	7.1	.82	27.3	6.9	.85
Males	53.9	10.4	.91	34.4	11.6	.91	31.3	9.7	.87
Fathers									
Females	56.6	9.2	.90	30.2	8.4	.87	29.9	7.9	.85
Males	50.4	10.4	.86	35.2	10.6	.88	33.7	8.8	.81

Females perceived their mothers ($t=2.41$) and fathers ($t=2.03$) as significantly more Loving than did Males. Males perceived their mothers ($t=2.38$) and fathers ($t=2.50$) as significantly more Rejecting and significantly more Neglecting ($t=2.21, 2.29$ for mothers and fathers, respectively) than did females.

Means and standard deviations of the L-R dimension are reported in Table 3.

TABLE 3

Means and Standard Deviations of the L-R
Dimension of the PCR

Group	Mother		Father	
	M	SD	M	SD
Females	2.84	20.70	-3.4	23.82
Males	-11.9	27.80	-18.5	25.32

Computation of the t test revealed that girls perceived both their mothers and fathers as significantly higher (p .01) on the L-R dimension than did males.

An analysis of covariance was computed to measure the relationship between scholastic achievement, in this case grade point average, and rating of parents on the L-R dimension. The SAT score was the covariate, acting to equalize subjects with respect to aptitude. An analysis of variance was computed to measure the relationship between scholastic aptitude, as measured by the Scholastic Aptitude Test (SAT), and perception of parent of the L-R dimension.

Results

Means and Standard deviations of the SAT are reported in Table 4.

TABLE 4

Means and Standard Deviations of the
SAT Scale by Sex Group

Groups	N	SAT-V		SAT-M		SAT-(V M)	
		Mean	SD	Mean	SD	Mean	SD
Females	45	473.9	90.02	454.4	84.3	928.3	148.7
Males	50	459.1	108.3	480.1	88.4	939.3	172.2
Combined	95	466.1	95.7	467.9	87.0	934.1	160.8

As is generally the case, females scored higher on the verbal section of the test than did males, and males scored higher on the mathematics than did females. Combined verbal and mathematic scores indicated that males scored slightly higher on the test as a whole than did females. Computation of the t test revealed that none of these differences were significant.

Grade point average was the criterion in the analysis of covariance. Table 5 presents the means and standard deviations of the GPA. Females had a higher GPA than did males (t 3.31).

TABLE 5

Means and Standard Deviations of the
GPA by Sex Group

Group	N	Mean	Standard Deviation
Females	45	2.51	.608
Males	50	2.03	.769
Combined	95	2.26	.734

The results of the analysis of covariance are reported in Tables 6 through 9. In each case, females scored significantly higher than males ($p < .01$) on GPA. However, there was no evidence that the L-R dimension influenced achievement when ability was held constant.

TABLE 6

Analysis of Covariance: Sex by L-R (Mother)
Using SAT-V as Covariate
and GPA as Criterion

Source	df	MS	F
Sex (A)	1	4.471	9.99**
L-R (B)	2	0.115	0.256
Interaction (A+B)	2	0.074	0.164
Within	88	0.448	

** $p < .01$

TABLE 7

Analysis of Covariance: Sex by L-R (Mother)
Using SAT-M as Covariate
and GPA as Criterion

Source	df	MS	F
Sex (A)	1	6.369	13.38**
L-R (B)	2	0.275	0.579
Interaction (A+B)	2	0.005	0.010
Within	88	0.476	

**p<.01

TABLE 8

Analysis of Covariance: Sex by L-R (Father)
Using SAT-V as Covariate
and GPA as Criterion

Source	df	MS	F
Sex (A)	1	4.883	11.121**
L-R (B)	2	0.310	0.707
Interaction (A+B)	2	0.184	0.420
Within	88	0.439	

**p<.01

TABLE 9

Analysis of Covariance: Sex by L-R (Father)
Using SAT-M as Covariate
and GPA as Criterion

Source	df	MS	F
Sex (A)	1	6.709	14.290**
L-R (B)	1	0.427	0.909
Interaction (A+B)	2	0.120	0.256
Within	88	0.470	

**p .01

The results of the analyses of variance yielded significant results, although not in the hypothesized direction. As indicated in Table 10, there is a significant relationship ($p < .05$) between SAT-V and perception of father on the L-R dimension.

TABLE 10

Analysis of Variance: Sex by L-R (Father)
Using SAT-V as the Criterion

Source	df	MS	F
Sex (A)	1	8205.347	.94360
L-R (B)	2	27457.461	3.1575*
Interaction (A+B)	2	10335.984	1.1886
Within	89	8695.831	

* $p < .05$

Differences between SAT-V means of the low, middle, and high L-R groups presented in Table 11 indicated that females who perceived their fathers as low on the L-R dimension had the highest mean SAT-V scores, followed by middle and high L-R, respectively. Males who perceived their fathers as middle on the L-R dimension had the highest mean SAT-V score, followed by low and high L-R, respectively. The F test for combined male and female SAT-V groups shows a significant difference between L-R groups. Scheffe's Test indicated a significant difference between the middle and high L-R groups.

TABLE 11

SAT-V: Means and Standard Deviations
by Sex and PCR Category

Group	Statistic	Loving-Rejecting Category (Father)			
		Low	Middle	High	Combined
Females	Mean	582.1	496.2	443.3	473.9
	SD	54.7	86.4	76.8	80.0
	N	9	16	28	45
Males	Mean	440.0	506.9	436.2	459.2
	SD	131.2	79.7	72.9	108.3
	N	23	15	12	50
Combined	Mean	457.5	501.4	440.6	466.1
	SD	117.4	82.0	74.2	95.7
	N	32	31	32	90

Information in Table 12 indicates a significant relationship ($p < .05$) between SAT-M and perception of father on the L-R dimension.

TABLE 12

Analysis of Variance: Sex by L-R (Father)
Using SAT-M as the Criterion

Source	df	MS	F
Sex (A)	1	8621.986	1.2332
L-R (B)	2	25313.450	3.6204*
Interaction (A+B)	2	7685.453	1.0992
Within	89	6991.847	

* $p < .05$

Table 13, showing the differences between means of the low, middle, and high L-R groups, indicates that females who perceived their fathers as low L-R had the highest mean SAT-M score, followed by Middle and high L-R, respectively. Males who perceived their fathers as middle on the L-R dimension had the highest mean SAT-M score, followed by low and high, respectively. The F test for combined male and female SAT-M groups shows a significant difference between L-R groups. Scheffe's Test indicated a significant difference between middle and high L-R groups.

TABLE 13

SAT-M: Means and Standard Deviations by
Sex and PCR Categories

Group	Statistic	Loving-Rejecting Category (Father)			
		Low	Middle	High	Combined
Female	Mean	482.9	481.7	419.8	454.4
	SD	71.7	97.3	67.4	84.3
	N	9	16	20	45
Male	Mean	465.3	517.8	461.3	480.1
	SD	100.7	56.7	87.6	88.4
	N	23	15	12	50
Combined	Mean	470.2	499.2	435.4	467.9
	SD	92.7	81.1	77.0	87.0
	N	32	31	32	95

These results indicated that females with the highest SAT scores perceived their fathers as low on the L-R dimension and males with the highest SAT scores perceived their fathers as middle on the L-R dimension.

Table 14 does not indicate a significant relationship between perception of mother on the L-R dimension and SAT-V scores; however, the same trend is apparent.

TABLE 14

Analysis of Variance: Sex by L-R (Mother)
Using SAT-V as the Criterion

Source	df	MS	F
Sex (A)	1	7816.252	.8374
L-R (B)	2	2942.100	.3152
Interaction (A+B)	2	8109.710	.8688
Within	89	9333.989	

As shown in Table 15, females who perceived their mothers as in the middle L-R group had the highest mean SAT-V score, followed by low and high, respectively. Males who perceived their mothers as in the middle L-R group had the highest mean SAT-V score, followed by low and high, respectively.

TABLE 15

SAT-V: Means and Standard Deviations by
Sex and PCR Categories

Group	Statistic	Loving-Rejecting Category (Mother)			
		Low	Middle	High	Combined
Female	Mean	475.8	504.4	452.7	473.9
	SD	47.21	75.09	91.07	80.02
	N	10	14	21	95
Male	Mean	466.9	488.1	461.0	459.2
	SD	117.66	114.27	84.76	108.32
	N	22	17	11	50
Combined	Mean	469.7	473.5	455.5	466.1
	SD	100.22	101.08	87.66	95.75
	N	32	31	32	95

A significant relationship ($p < .05$) between perception of mother on the L-R dimension and SAT-M is indicated in Table 16. The F test for combined male and female SAT-M groups shows a significant difference between L-R groups. Scheffe's Test indicated a significant difference between middle and high L-R groups.

TABLE 16

Analysis of Variance: Sex by L-R (Mother)
Using SAT-M as the Criterion

Source	df	MS	F
Sex (A)	1	7259.010	1.0239
L-R (B)	2	30869.085	4.3542*
Interaction (A+B)	2	2271.048	0.3203
Within	89	7089.480	

* $p < .05$

Differences between means presented in Table 17 once again demonstrate that both male and female subjects who perceived their parents as in the middle L-R group had the highest mean SAT-M scores, followed by low and high, respectively.

TABLE 17

SAT-M: Means and Standard Deviations by
Sex and PCR Categories

Group	Statistic	Loving-Rejecting Category (Mother)			
		Low	Middle	High	Combined
Female	Mean	442.2	496.0	432.6	454.4
	SD	74.3	85.1	81.6	84.3
	N	10	14	21	45
Male	Mean	480.9	505.5	439.3	480.1
	SD	78.7	92.7	93.0	88.4
	N	22	17	11	50
Combined	Mean	468.8	501.2	439.9	467.9
	SD	78.3	88.0	84.3	87.0
	N	32	31	32	95

These data indicate that in no case did subjects who perceived their parents as high on the L-R dimension have the highest SAT scores.

Discussion

That males generally regard their parents as less loving than do females is a proposition widely supported in the literature (Anderson, 1940; Ausebel, Baithazar, Rosenthal, Blackmon, Schpount, & Welkowitz, 1954; Bach, 1946; Droppleman & Schaefer, 1963; Elias, 1952; Gardner, 1947; Sieglerman, 1965). The results of this study were consistent with that proposition and also indicated that males see their parents as significantly more rejecting and neglecting than do females. Females rated both parents as significantly higher on the L-R dimension than did males. This difference in parental behavior toward female and male children was attributed to different cultural expectations for each sex. Females tend to be valued for themselves, apart from their competences and abilities. Males, on the other hand, are expected to strive and compete. Their achievement strivings may be more closely related to needs for mastery than the attainment of approval or disapproval (Crandell, 1963).

The first hypothesis of this study was rejected on the basis of the results of the analyses of covariance. As shown in Tables 6 through 9, females scored significantly higher than males on GPA, but there is no evidence that the L-R

dimension influenced achievement when ability was held constant.

The failure of this study's data to attain a significant relationship between the perception of parents as high on the L-R dimension and scholastic achievement may be due to the fact that the subjects were college students. It was assumed that the majority of the subjects no longer lived at home, or were at least less dependent upon their parents than would be a group of subjects who were younger and still lived with their parents. The more independent a person is, the less likely he is to be strongly influenced by parental behavior.

Another possibility for failure to confirm the first hypothesis may be that the design was not sensitive enough to differences in scholastic achievement. Grade point average may not be a reliable measure of scholastic achievement, due to the fact that courses that are relatively easy to make a good grade in are weighted the same as courses that are hard. Grades themselves, for the same work, may vary from teacher to teacher. Also, the low correlation of SAT with GPA ($r .30$) is not large enough.

The second hypothesis, concerning the relationship between scholastic aptitude and perception of parents on the L-R dimension, was not supported. The results of the analyses of variance, presented in Tables 10 through 17, indicated that subjects who rated their parents as either middle or low

in the L-R dimension had the highest mean SAT verbal and math scores. In no case did the group with the highest mean SAT score rate their parents as high on the L-R dimension. Results of the analysis of variance suggest a non-linear relationship between L-R and SAT.

These results seem to contradict the majority of findings by other researchers in this field (Baldwin, Kalhorn & Breese, 1945; Baumrind, 1967; Champney, 1941; Ferguson, 1970; Hurley, 1965; Kagan & Freeman, 1963; Morrow & Wilson, 1961). It should be noted, however, that many of these studies used more extreme groups. A very small percentage of the subjects in this study rated their parents as severely rejecting. In light of this fact, these results could be interpreted to reflect a hypothesis set forth by Madsen and Madsen (1972). If a child knows that he will be loved no matter what he does, or that he will be rejected no matter what he does, he will not be encouraged to achieve; there are no contingencies on his behavior. It may be that the parents of these subjects who rated their parents as middle or low on the L-R dimension and who had the highest mean SAT score had parents who offered love and support, but not unconditionally. Perhaps the criticisms, the denial of undeserved rewards, and other coercive methods these parents may have used in rearing their children resulted in a lower rating on the L-R dimension, but higher scholastic aptitude in their children.

In Hurley's (1959) review of an article by Drew and

Teahan (1957), in which they concluded "that high achievers appear to come from a family atmosphere where the adult knows what is best for the child, and where the adult standards are not questioned" lead to Hurley's conclusion "that some middle degree of maternal domination has as 'optimal positive impact' upon both the intelligence and the academic success of the child".

Kagan and Freeman (1963) reported that "high mastery girls had mothers who were highly critical of them during early childhood". This criticism is believed to have been more instrumental in encouraging the female child to attain the high level of achievement the mother expects than unconditionally giving love to the child.

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