



1980

## Effects of Feedback of Psychological Results on Parental Attitudes Toward Their Child Referred for a Psychological Evaluation

Deidra Genelle Roberson  
*Loyola University Chicago*

Follow this and additional works at: [https://ecommons.luc.edu/luc\\_diss](https://ecommons.luc.edu/luc_diss)

 Part of the [Education Commons](#)

---

### Recommended Citation

Roberson, Deidra Genelle, "Effects of Feedback of Psychological Results on Parental Attitudes Toward Their Child Referred for a Psychological Evaluation" (1980). *Dissertations*. 2028.  
[https://ecommons.luc.edu/luc\\_diss/2028](https://ecommons.luc.edu/luc_diss/2028)

This Dissertation is brought to you for free and open access by the Theses and Dissertations at Loyola eCommons. It has been accepted for inclusion in Dissertations by an authorized administrator of Loyola eCommons. For more information, please contact [ecommons@luc.edu](mailto:ecommons@luc.edu).



This work is licensed under a [Creative Commons Attribution-Noncommercial-No Derivative Works 3.0 License](#).  
Copyright © 1980 Deidra Genelle Roberson

210  
EFFECTS OF FEEDBACK OF PSYCHOLOGICAL RESULTS ON  
PARENTAL ATTITUDES TOWARD THEIR CHILD REFERRED FOR  
A PSYCHOLOGICAL EVALUATION

by

Deidra G. Roberson

A Dissertation Submitted to the Faculty of the Graduate School  
of Loyola University of Chicago in Partial Fulfillment  
of the Requirements for the Degree of  
Doctor of Education

October

1980

Deidra G. Roberson

Loyola University of Chicago

THE EFFECTS OF FEEDBACK ON PARENTAL ATTITUDES TOWARD  
THEIR CHILD REFERRED FOR A PSYCHOLOGICAL EVALUATION

The purpose of this study was to examine the effects of informative feedback of results of a psychological evaluation on parental attitudes regarding a child referred for such an evaluation. Parents were identified as having an internal or external locus of control, and the differences of attitudinal responses of fathers and mothers toward their sons and daughters were also investigated.

One hundred and sixty parents of elementary school-age children participated in this study. These parents were pre-tested and post-tested on the Parents' Judgment Regarding a Particular Child questionnaire. Investigators (eight certified school psychologists) used the Timed Behavioral Checklist for performance anxiety to rate each parent after the intake interview and after the feedback sessions. Parents also completed Rotter's I-E Scale. For the purposes of the present study, feedback of psychological results was regarded on a continuum from very positive, to very negative, indicated that a change in educational program was recommended for the child. The variables of interest were the type of feedback, the sex of the parent, the sex of the child, and the locus of control of the parent. These variables were analyzed using a 3-way factorial analysis of variance (feedback, sex of parent, sex of child, locus of control) for the parental judgment questionnaire data and the behavioral observation of anxiety data. Significant findings from factorial analysis of variance were further analyzed via

a repeated measures design. Of the four variables analyzed, feedback was found to be the most important variable. The sex of the parent was also found to be an important variable to be considered in the discussions of the school psychologist and the parent in that the female parents tended to exhibit more overtly anxious behavior than did male parents. It was also found that parents who had varying loci of control were differentially affected by the nature of the feedback. Generally, parents had less positive perceptions of their child when feedback was negative and more positive perceptions when feedback was positive.

All things considered, the school psychologist appears to play an important role in affecting changes in parental attitudes toward their children referred for a psychological evaluation.

## TABLE OF CONTENTS

	Page
ACKNOWLEDGMENTS. . . . .	ii
LIFE . . . . .	iii
LIST OF TABLES . . . . .	iv
LIST OF FIGURES. . . . .	vi
CONTENTS OF APPENDICES . . . . .	vii
Chapter	
I. INTRODUCTION. . . . .	1
II. REVIEW OF LITERATURE. . . . .	6
The Concept of Feedback. . . . .	8
Examination of the Concept of Attitudes and Parental Reactions to Feedback . . . . .	19
Locus of Control . . . . .	43
Recapitulation . . . . .	50
III. METHOD. . . . .	55
Hypotheses . . . . .	55
Subjects . . . . .	56
Investigators. . . . .	60
Instrumentation. . . . .	60
Procedure. . . . .	64
IV. RESULTS . . . . .	70
Results Related to Hypotheses One, Two and Three . . . . .	71
Results Related to Hypotheses Four, Five and Six . . . . .	81
Results Related to Hypothesis Seven. . . . .	87
Results Related to Hypothesis Eight. . . . .	104
V. DISCUSSION. . . . .	110
Discussion Related to Hypotheses One, Two and Three . . . . .	112
Discussion Related to Hypotheses Four, Five and Six. . . . .	114
Discussion Related to Hypothesis Seven . . . . .	116
Discussion Related to Hypothesis Eight . . . . .	117
Suggestions for Future Research. . . . .	118

	Page
VI. SUMMARY . . . . .	.121
REFERENCES . . . . .	.123
APPENDIX A . . . . .	.134
APPENDIX B . . . . .	.136
APPENDIX C . . . . .	.138
APPENDIX D . . . . .	.140
APPENDIX E . . . . .	.146
APPENDIX F . . . . .	.148

## ACKNOWLEDGMENTS

The author wishes to thank her family and friends whose assistance and patience were invaluable.

The author wishes to express sincere appreciation to her advisor, Dr. Ronald R. Morgan for his guidance and encouragement. Special thanks is also extended to Dr. Jack A. Kavanagh and Dr. John M. Wozniak who served on her committee.

Dr. David Studdick is thanked for his untiring support and constructive suggestions. Without his advice this study would not have been possible.

The opportunity is also taken to thank the staff of the participating school districts and to the parents who cooperated in this venture.

## VITA

The author, Deidra Genelle Roberson, is the daughter of Isadore Roberson and Catherine (Jones) Roberson. She was born July 1, 1950, in Chicago, Illinois.

Her elementary education was obtained at Saint Edmund's Elementary School, where she was graduated in June, 1964. In June, 1968, she was graduated from Luther High School South.

In September, 1968, she entered Bradley University, Peoria, Illinois. While attending Bradley University, she was elected to the Mortar Board Honor Society. In May, 1972, she received the degree of Bachelor of Science with a major in Psychology. She was awarded a fellowship to attend Illinois Institute of Technology and earned a Master of Science degree, majoring in Psychology in May, 1974.

She completed an Internship in School Psychology in the Wheaton School System, after which she began her career as a School Psychologist in the Chicago Public School System, where she is presently employed.

In September, 1976, she began her doctoral studies at Loyola University of Chicago, majoring in Educational Psychology.



## LIST OF TABLES

Table	Page
1. Numerical Descriptive Information of Participants in the Study. . . . .	59
2. Descriptive Summary of Procedures Employed in this Study . .	65
3. Feedback of Psychological Results. . . . .	69
4. Central Tendency and Dispersion of Pre-Test Scores Obtained on the Parental Attitude Questionnaire for the Feedback Conditions, by Sex of Parent and by Sex of Child. .	72
5. Three Dimensional ANOVA for Pre-Test Parental Judgment Questionnaire Scores . . . . .	73
6. Description of Groups of Parents Analyzed by Data Obtained From the Parental Judgment Questionnaire Instrument. . . . .	75
7. Repeated Measures Summary Table for the Pre- and Post-Test Scores Obtained on the Parental Judgment Questionnaire Instrument . . . . .	78
8. Group Cell Mean Scores for the Parental Attitude Questionnaire. . . . .	79
9. Paired Comparisons of Pre- and Post-Test Means for the Parental Judgment Questionnaire by the Tukey HSD (Honestly Significant Difference) Test . . . . .	80
10. Three-Way ANOVA for the Pre-test Behavioral Observation of Anxiety Checklist Scores . . . . .	83
11. Three-Way ANOVA for the Post-Test Behavioral Observation of Anxiety Checklist Scores . . . . .	84
12. Description of the Central Tendency and Dispersion of Post-Test Mean Scores Obtained on the Behavioral Observation of Anxiety Checklist. . . . .	85
13. Scheffe' Comparisons for all Mean Differences of the Behavioral Observation of Anxiety Checklist Post-Test Scores . . . . .	86
14. Description of the Central Tendency and Dispersion of Scores Obtained on the Parental Judgment Questionnaire by Locus of Control Groups . . . . .	88

Table	Page
15. ANOVA of Parental Judgment Questionnaire for Locus of Control Group and Feedback Conditions. . . . .	89
16. Simple Effects ANOVA for the Feedback Conditions for Introverts . . . . .	91
17. Scheffe' Comparisons for All Mean Differences of Introverts for Feedback Conditions. . . . .	92
18. Simple Effects of ANOVA of Feedback Conditions for Both Introverts and Extroverts. . . . .	93
19. Scheffe' Comparisons for All Mean Differences of Both Introvert and Extrovert Groups for the Feedback Conditions .	94
20. Simple Effects ANOVA of Feedback Conditions for Extroverts .	95
21. Scheffe' Comparisons for All Mean Differences for the Extrovert Group for the Feedback Conditions. . . . .	96
22. Simple Effects ANOVA of Negative Feedback Condition for Parent Groups of Varying Loci of Control . . . . .	98
23. Scheffe' Comparisons for All Mean Differences of the Negative Feedback Condition for the Introvert, Both, and Extrovert Groups . . . . .	99
24. Simple Effects ANOVA of the Positive Feedback Condition for Parent-Groups of Varying Loci Control. . . . .	100
25. Scheffe' Comparisons for All Mean Differences of the Positive Feedback Condition for the Introvert, Both, and Extrovert Groups . . . . .	102
26. Simple Effects ANOVA of the Very Positive Feedback Condition for Parent Groups of Varying Loci of Control . . . . .	103
27. Description of the Central Tendency and Dispersion of Scores Obtained on the Behavioral Observation of Anxiety Checklist by Locus of Control Groups . . . . .	105
28. ANOVA of the Behavioral Observation of Anxiety Checklist for Locus of Control Groups and Feedback Conditions. . . . .	106
29. Description of Main Effects for Locus of Control Groups. . .	107
30. Scheffe' Comparisons for All Mean Differences for the Locus of Control Groups. . . . .	108

LIST OF FIGURES

Figure	Page
1. Interaction Graphing of Feedback, Sex of Parent and Sex of Child for the Pre-Test Data Obtained on the Parental Attitude Questionnaire . . . . .	76

## CONTENTS OF APPENDICES

	Page
APPENDIX A <u>Descriptive Statistics Obtained on the Parents' Judgment Regarding a Particular Child Instrument: Frequency Distribution of Pre- and Post-Test Results</u>	.135
APPENDIX B <u>Descriptive Statistics Obtained Using the Timed Behavioral Checklist Instrument: Frequency Distribution of Pre- and Post-Test Results</u>	.137
APPENDIX C <u>Descriptive Statistics Obtained on the Rotter I-E Scale: Frequency Distribution of Results</u>	.139
APPENDIX D <u>Parents' Judgment Regarding a Particular Child Questionnaire</u>	.141
APPENDIX E <u>Timed Behavioral Checklist for Performance Ability</u>	.147
APPENDIX F <u>The I-E Scale</u>	.149

## CHAPTER I

### INTRODUCTION

A major responsibility of an educational system is to ensure to the maximum extent possible, that every child has an equal opportunity to realize his or her potential. Crucial in the educational process is the role of the school psychologist who plays a significant part in providing an understanding of the psychodynamics of the child which the school and the child's parents utilize in developing individual educational plans. While the school psychologist does not render professional services to all children in the school, school psychologists are charged with the responsibility of providing information to the evaluative school psychological process to the child's parents for those children referred for a psychological evaluation. The school psychologist, as well as other professionals in the school system, should be aware of the psychological dynamics of the interaction with parents and of how these dynamics vary. Some of these factors which interplay in this relationship have been documented in the literature and are frequently attended to when the school psychologist directly interacts with the parent and child.

For the most part, basic to all social interaction is informative feedback, for it provides the motivation for a person to continue or alter their behavior (Cronbach, 1977; Gill and Martins, 1975; Ammon, 1956). Ruch and Zimbardo (1971) have indicated that feedback serves three distinguishable functions: it provides

information about the results and about the characteristics of the response; feedback also provides positive or negative reinforcement and the motivation to continue or discontinue a task.

The role of reinforcement, reward, or gratification is generally recognized as a crucial one in the acquisition and performance of skills and knowledge. However, an event regarded by some people as a reward or reinforcement may be differently perceived or reacted to by others. One of the determinants of this differential reaction is the degree to which an individual perceives that the reward follows from, or is contingent upon, one's own behavior or attributes versus the degree to which one feels the reward is controlled by forces outside of one's self and may occur independently of one's own actions (Rotter, 1966). When reinforcement is perceived by the person as following some action but not being entirely contingent upon their action, then, in our culture, it is typically perceived as the result of luck, chance, fate. That is to say that rewards are viewed as being under the control of powerful others, or as unpredictable because of the complexity of the forces surrounding them. Rotter (1966) has labeled this belief when interpreted in this way by an individual as a belief in external control. On the other hand, if the person perceives that the behavioral consequence is contingent upon their own behavior or their own relatively permanent characteristics, Rotter termed this a belief in internal control (1966).

It is also important to note that parental attitudes toward their children have been found to be important influences upon child-parent relationships (Anthony and Benedek, 1970; Barron, 1972). It

is generally accepted that parents who have positive expectations concerning their children, create a warmer social-emotional mood in the home environment (Rosenthal, 1973). While many investigators have sought the origins for differences in home environment (Gewitz and Baer, 1968), it has been noted that parental attitudes may be a contributing factor to the child's ultimate acceptance of self (Lane and Singer, 1959). Moreover, knowing a person's fixed self-esteem allows for prediction of behavior (Gewitz, 1969). With increasing and well-founded concern regarding the education of economically and socially disadvantaged children and children from culturally diversified backgrounds, particular attention has been focused upon parental expectations of their children's intellectual and academic performance (Anthony and Benedek, 1970). This concern may have resulted in part from the findings of the controversial Coleman report (1966) which suggested that for many lower socio-economic minority groups, a sense of environmental control, more than any other variable, accounted for academic achievement.

It would appear from this brief introduction, that motivation and reinforcement in the form of informative feedback, as well as locus of control must be considered when examining the interaction of the school psychologist with the parent and child. These factors, however, are not the only dimensions to consider when the child has difficulty achieving and participating at expected levels in the school setting. It has been noted that, for example, when the child is diagnosed as mentally retarded, fathers tend to be more removed, less emotional and more objective than mothers (Baum, 1962; Bonham

and Addison, 1978). Fathers have been found to be more affected emotionally by a mentally retarded son than by a mentally retarded daughter (Levine, 1962), but the trend for mothers of mentally retarded sons versus daughters needs further study before generalizations can be drawn (Levine, 1966).

As noted by the Group for the Advancement of Psychiatry (1973), psychologists now know much more about the forces that motivate people, particularly about those forces that operate from the past, but little is known about the expectations that lead people. This knowledge is particularly important when one considers that parents' attitudes toward their children can be influenced by the feedback he or she receives concerning a child while the child is in school. While parents are becoming increasingly wary of school officials, it is true that many parents are frightened and intimidated by the feedback provided by psychologists and educators concerning their child's performance and ability (Pryzwansky and Bersoff, 1978).

The present exploratory study was undertaken to document the perceptions and behavior of parents to positive or negative feedback from the school psychologist. Hopefully these documented perceptions and behavioral observations will assist the school psychologist when interacting with parents and children to enhance the likelihood that the prescriptive psychological recommendations are not based upon only the best psychometric data, but are also based upon an understanding of the holistic dynamics of the child's own environment.

Specifically, this study systematically examined the effects, both positive and negative, of informative feedback by the school



psychologist presented to the parents of the child referred for a psychological evaluation. An assessment was made of the observable signs of anxiety noted by the school psychologist when the parent was initially interviewed and later when the results from the psychological evaluations were presented to the parent. In addition, parents were identified as having either an internal or external locus of control and the differences of attitudinal responses of fathers and mothers toward their child were investigated. It was hypothesized that those parents who had an external (i.e., other directed), as opposed to an internal (i.e., inner directed) locus of control, would demonstrate greater changes in attitude than internally directed parents as a result of informative feedback.

Differences in parental attitudes between mothers and fathers and parental attitudes toward male and female children were expected. It was assumed that many parents would demonstrate signs of anxiety as a result of the informative feedback provided, and that differences would exist among male versus female parents of male and female children. Differential changes in attitudes by parents toward the child referred and changes in behavioral signs of anxiety demonstrated by parents who had varying loci of control (i.e., internal, external) were also expected in the present investigation.

## CHAPTER II

### REVIEW OF LITERATURE

The overall focus of this review of the literature centers upon the concept of feedback and upon the use of feedback to effect parental attitudes toward their children. The information that one obtains about the usefulness, or effectiveness, or appropriateness of their response is called knowledge of results or informative feedback. There are two different types of feedback; intrinsic or internal feedback and externally augmented feedback (knowledge of results). Informative feedback falls into the general class of events known in the literature as reinforcement, because it provides an information guide concerning how the response should be modified. How a person reacts to feedback is often determined by its nature. The effects of positive and negative feedback can arouse different states in an individual depending largely on one's self-concept and his or her attitudinal response to the feedback.

Personality and intellectual skills developed by a child originate in the home, and the home remains an important force during the school years. To the school psychologist, the most important aspect of a home is not necessarily the parents' wealth or educational level, but rather the emotional atmosphere that the parents establish. Since stimulating, supportive homes can be found at every level of society, each home must be viewed individually, neither totally good nor totally bad. Parents and home environments differ

in many respects; however, it has been noted that the warmth of the home is evidently one of the most important factors in promoting the child's adjustment. Attitudes that parents have toward their child can effect parent-child relationships. When parental attitudes towards a child are positive, studies indicate that children perceive themselves as more valued by the parent (Karnes and Merle, 1961). Negative attitudes toward a child by parents lead to self-doubt and fear (Dollard and Miller, 1950).

Some attempt has been made recently to develop a theory of how information has an impact on the development of attitudes. There are many hundreds of studies on the effectiveness of communications in producing attitude changes (Berscheid and Walster, 1969), and it is noted that there are various personality traits that characterize persuadable people. The belief by some individuals that they are the whims of fortune, and that luck or fate controls their destiny has been labelled by Rotter (1966) as externality (i.e., having an external versus and internal locus of control).

The selective review of literature presented here is divided into three subsections. The first concept that is examined is that of feedback. The concept of attitude is then defined and parental reactions to feedback are examined. Lastly, the locus of control literature is presented to address the question of why informative feedback communications are differentially effective in changing attitudes.

## An Examination of The Concept of Feedback

To examine the relationship between the attitudes of parents toward their child as examined by a psychologist and the effects of the positive or negative feedback of psychological results on these parental attitudes, it is necessary to first examine the general area of feedback theory. It is acknowledged that if a person were to perform but never knew about the quality of his or her performance, there would be no basis for improving the performance. Information about the nature and consequences of one's act, is referred to in the literature as feedback (Brown, 1949).

Any ongoing activity requires informative feedback for the activity to be pursued successfully, even when no learning occurs. Consequences include the learner's direct understanding of what he or she is doing, the observable effects that are produced and the comments of others regarding the act. Knowledge of results may be provided in many different ways and under many different conditions. The distinction between concurrent feedback, where the learner is provided continuous feedback as the task is undertaken, and terminal feedback, where the learner is told the extent to which his or her performance has been adequate and the errors that should be corrected on the next trial, is cited in the literature (Travers, 1977). There are obvious advantages of concurrent feedback over terminal feedback. The person receiving information about his or her performance while in action, can take immediate steps to remedy deficiencies, whereas when terminal feedback is given, one must wait until the next trial before the performance can be corrected, and the lapse of time may cause

forgetting of what there was to correct.

Feedback may also be categorized as abstract or specific, as positive, negative, or corrective; and as task related or task unrelated (Walter and Lainberg, 1976). Holding (1965) has provided a very elaborate classification of the different conditions under which feedback may be given. He makes the distinction between intrinsic and artificial feedback. Intrinsic feedback or intrinsic knowledge of results is exemplified when a person learns to solve a problem and arrives at a solution, the feedback is his or her knowledge that the problem has been solved. This intrinsic feedback is to be contrasted with artificial feedback, as would occur when a person is given a grade for performance or is given a prize if he or she has performed well.

Van Wagenen and Murdock (1966) provided an example of the use of artificial feedback in their description of a device designed to train children to stop bedwetting. The essential feature of this device is a buzzer that sounds as soon as the first drop of urine comes into contact with the diaper. The buzzer would appear to serve the purpose of drawing the child's attention to how his or her body feels when urination is about to occur. If he or she is sleeping at the time, then the buzzer wakes them and permits them to attend to what is happening. Learning to recognize the cues that precede and accompany urination takes place rapidly with the use of such a device in the case of normal children who have passed the age when bladder control ordinarily occurs.

Similarly, Ruch and Zimbardo (1971) classify feedback into two

general types: intrinsic and externally augmented. Intrinsic feedback was exemplified by kinesthetic cues which provide information which guides the rate of movement and the location of limbs in a running exercise. A verbal explanation by an observer is an example of externally augmented feedback.

The positive effects of augmented feedback in improving performance has been demonstrated convincingly in an experiment where two groups of subjects had to keep an erratically waving needle centered on a dial. The experimenter told one group the length of time when they were on target (normal feedback). For the other group, augmented feedback was introduced by a counter on which they could immediately see how their score was accumulating. Augmented feedback resulted in remarkably superior performance (Singer, 1973).

The use of augmented feedback in the conditioning of heart rate, brain waves, and other responses previously assumed not to be controllable was an even more dramatic example of the effectiveness of such feedback. It has been shown that operant conditioning of autonomic nervous system functions was possible when a technique was devised for providing knowledge and reinforcement following very slight changes in responding in the desired direction (Breckenridge, 1973).

Experimental psychologists have indicated that of the factors that influence learning, knowledge or results of feedback has relevance for both verbal learning and motor skills (Brown, 1949). Regarding the importance of feedback, Bilodeau (1961) stated:

...Feedback or knowledge of results...(is) the strongest, most

important variable controlling performance and learning (of motor skill)...It has been shown repeatedly that there is no improvement without knowledge of results, progressive improvement with it, and deterioration after its withdrawal (p. 263).

To study the importance of informative feedback and the variables that influence its functioning, researchers have found a way to disrupt it (Ruch and Zimbardo, 1971). Information coming in through auditory and visual channels has proven easy to disrupt under controlled laboratory conditions.

The study of delayed visual feedback started during World War II when it became apparent that there was a delay between the movements of the sighting control of an anti-aircraft cannon and the correlated movements of the gun, which made accurate firing difficult (Newman, 1973). Subsequent research has been concerned with the basic issue of the importance of the coordination of motor tracking of an object and visual feedback received from the movement (Singh, Thakur, and Kuman, 1974).

The effects of auditory feedback have also been studied by delaying the interval between uttering a sound and hearing it. Rather than hearing the words one has just spoken through air conduction, as one normally would, the subject hears them over a set of earphones with delay interposed (Newman, 1973). The consequences of such delay were measured in terms of changes in the subject's speaking intensity, duration of phrase, intelligibility, articulation and emotional stress (Alba, 1973).

Until recently, the assumption was commonly made that informative feedback, such as saying "right" or "wrong" would be reinforcing under

most conditions, however, Nuttin and Greenwald (1968) have found that they are effective as reinforcers only when certain conditions exist. They refer to these kinds of reinforcing events as rewards and punishments, as did Thorndike (1932), but the modern trend would be to use the term informative feedback. Nuttin and Greenwald have undertaken experiments to show that this kind of informative feedback is most effective in what they call open tasks and that it is quite ineffective on closed tasks. When a person undertakes a task knowing that the responses learned will have to be used later, the task is called open. A closed task, on the other hand, is a one-time task, undertaken by a person on a particular occasion and with the knowledge that this task or similar tasks will not have to be performed in the future. The person views the open task as a part of an ongoing activity that extends into the future. This is related to the notion, long stressed by educators, that learning will take place most effectively when it is related to the goals and needs of a child. The findings of Nuttin and Greenwald have been confirmed by research undertaken by Longstreth (1970), who points out that it supports a belief by educators that a learner's intentions are crucial in determining how much is learned. Repetition, without expectation that the material will have future utility, produces little learning.

Experimental psychologists have widely studied a phenomenon which requires that the quality of reinforcement be related in some way to performance (Skinner, 1938). More recently, this phenomenon has been examined within a program of experimental studies by Logan (1960) who has conducted his research with rats in a maze-learning



situation. The limited data related to this problem and the fact that studies have been restricted to a single species--the rat--means that few generalizations can be made that apply to the human learner. However, a potential advantage can be pointed out. This type of correlated reinforcement provides the learner with considerably more information than can be supplied through reinforcement that does not vary in magnitude. If the learner is provided with correlated reinforcement, he or she finds out not only that the response emitted is generally in the right direction, but also the degree to which it is in the right direction. The reinforcer has more information embedded in it when it is correlated with performance than when it is not so correlated.

Focusing on feedback as a necessary condition for establishing goals to affect performance, it was predicted that feedback and goals would be interactively related to performance. This prediction complemented the findings by Erez et.al. (1976) that knowledge alone is not a sufficient condition for effective performance. It was also suggested that the interaction of feedback, environmental attribute, self goals, and individual characteristics be thought of in terms of an individual-environmental model. In that sense, it was hypothesized that feedback would facilitate the display of individual differences if self-set goals were significantly higher in the feedback group than in the no feedback group, and if it was in the feedback condition that the relationship between goals and performance was significantly higher than in the no feedback group.

The literature further indicates that how one reacts to feedback

is directly communicated to the client and is influenced by the kind of feedback, the conditions under which feedback is presented, and the variety of relevant subject variables. Honest feedback has led to a variety of positive effects in both research studies and clinical examples (Dana and Graham, 1976).

Blue (1976) in a direct attempt to determine the effects of positive and negative feedback on anxiety arousal, found that subjects exposed to threat of failure experienced increases in self-reported anxiety and changes in heart rates. Morris and Fulmer (1976) replicated this study and, made distinctions between cognitive (conscious) concern, negative expectation, fear of consequences) and emotional (physiological-affective, autonomic arousal) components of test anxiety. They found that negative feedback aroused worry (the cognitive component) but did not effect pulse rate or emotionality (the emotional component).

Studies have shown consistently that pre-examination worry scores vary as an inverse function of performance expectancy (Shrauger and Sorman, 1977) and that worry changes from pre-examination to post examination as an inverse function of expectancy changes. Emotionality scores were unrelated to these variables, decreasing gradually and systemtically from pre-examination to post-examination (Shrauger and Lund, 1975) regardless of expectancy changes. Shrauger explained this notion by pointing out that emotionality is a classically conditioned autonomic reaction to the cues associated with the initiation of the testing period and thus dissipates as attention is turned to the test itself. On the contrary, changes in worry seem to be dependent on

feedback about one's performance on the test. Thus, worry remains high on the post-test and even two days later, before tests are returned (McDonald, 1973).

Morris and Fulmer (1976) explored the variables of anxiety arousal (in the light of the worry-emotionality distinction) resulting from a combination of the psychological stress factors of feedback and test importance. Feedback was not designed to be either positive or negative but an accurate reflection of the student's performance, and test importance was varied as to the positive or negative (or no) effect of the test on course grades. It was expected that worry would vary as a function of both feedback and test importance, and that emotionality would remain constant across these conditions. Specifically, it was hypothesized that both worry scores and performance expectancy change more markedly in the feedback than in the no feedback condition. It was found that negative feedback produces increments in anxiety primarily under high-test importance conditions, but the effects of positive feedback in producing decrements in worry were not dependent on this condition (Morris and Fulmer, 1976).

In evaluating the effects of feedback on worry, it was concluded that the effect was not mediated entirely by expectancy changes resulting from feedback. It was noted that two people may have equally high (or low) expectancies, but attach different degrees of certainty to their judgments, and thus experience differing amounts of worry about the situation. Epstein (1967) has concluded that heavy emphasis placed on uncertainty always results in reduced

anxiety. In experiments where feedback is not accurate, subjects may place more confidence (certainty) in their own evaluation of their performance, or the discrepant information (from self and experimenter) may produce a lack of confidence (uncertainty) in both.

In a verbal conditioning experiment where a group received either informative feedback, which provided knowledge about correctness and incorrectness, or affective feedback which provided approval or disapproval, Weisenberg (1973) obtained results which indicated that both informative and affective feedback led to conditioning verbal behavior; however, slightly higher levels of verbal conditioning was indicated after affective feedback was given to the group.

The importance of the informational aspects of feedback to what is learned was stressed by McKeachie (1976). It was emphasized that learning depends upon feedback and that the more feedback given, the more learning results. McKeachie cited three conditions under which feedback is effective. First, feedback is effective when it is understood. McKeachie supported this belief by citing a study by Centra (1973) where students rating feedback did not produce changes when ratings were not discrepant from the teacher's expectations, but did produce changes in those cases where there were marked discrepancies between ratings by students and teacher expectations. McKeachie noted that motivation by the learner to improve is the second condition for improvement following feedback. It had been assumed by theorists such as Thorndike, that the feedback itself would provide the motivation. It is now acknowledged that not all learners are motivated to change, and that the feedback may act to reduce motivation or to

strengthen competing motives, even in those learners who have some motivation. It is important to note that motivation should be highest when expectations of success are moderate (Atkinson, 1964, theory of achievement motivation). High or low probabilities of success are, therefore, less motivating and less informative. McKeachie deduced that feedback for subjects with a low probability for success in an achievement situation would become more anxious and depressed, resulting in psychological avoidance of the teaching situation rather than to demonstrate improvement. A third condition for improvement following informative feedback, as cited by McKeachie, is that the learner has better alternatives to try. It was noted that depression and anxiety are likely to be greater if the learner receives negative feedback and does not know how to change.

It was concluded by McKeachie (1976) that feedback in the form of student ratings with motivational support and suggestions for improvement, produces more change than the printed feedback alone.

Gehlbach (1979), as did Kulhavy (1977), concluded that the most important aspect of feedback is the correction function. Feedback following wrong responses has potentially a greater positive effect.

This brief review of the literature on the concept of feedback has revealed various classifications of feedback. The term refers generally to information about the nature and consequences of one's act. Feedback, when categorized as concurrent, refers to a situation where the learner is provided with continuous feedback as he or she undertakes a task. This is contrasted with terminal feedback, where

the learner is evaluated to the extent to which his or her performance has been adequate. Intrinsic feedback is exemplified when a person learns to solve a problem and arrives at a solution and the knowledge that the problem has been solved acts as the feedback. Artificial feedback, on the other hand, may be a grade for performance or a reward given if the task was performed satisfactory. The latter categories of feedback (i.e., intrinsic and artificial) are similar to classifications of Ruch and Zimbardo (1971) who contrasted intrinsic and externally augmented feedback. Nuttin and Greenwald (1968) have concluded from research conducted, that informative feedback which acts as rewards and punishment (reinforcing events) is most effective on what they call open task versus closed tasks. Correlated reinforcement provides the learner with more information than can be supplied through reinforcement that does not vary in magnitude.

Overall, the literature indicates that how one reacts to feedback is influenced by the kinds of feedback (i.e., concurrent, terminal, intrinsic, extrinsic, artificial or informative), the conditions under which the feedback is presented (i.e., for example, high-test-importance situations), and the variety of relevant subject variables (i.e., sex of subject, influencibility level). In evaluating the effects of feedback on worry, it was concluded that the effect was not mediated entirely by expectancy changes resulting from feedback. Epstein (1967) concluded that heavy emphasis placed on uncertainty always results in reduced anxiety. When the learner receives negative feedback and does not know how to change, depression and anxiety are likely to be great (McKeachie, 1976). The corrective function of feedback is presently

regarded as its most important aspect (Gehlbach, 1979).

All in all, how a person reacts to feedback is often determined by its nature. A general examination of the concept of attitude and a specific review of the literature regarding parental reactions to feedback will hopefully provide information related to the effects of informative feedback provided by the school psychologist to parents of students referred for psychological evaluations.

### An Examination of the Concept of Attitudes and Parental Reactions to Feedback

The school psychologist through the process of the psychological evaluation, provides feedback of results to parents which often produces positive or negative attitudes of the parent toward the child evaluated. The formation of attitudes and their importance has received a great deal of attention in the literature. An attitude has been defined as the interpretation a person makes toward an object or concept regarding its value for various purposes (Shaw and Wright, 1967). Attitudes form systems of meanings that have emotional and intellectual components. An attitude developed in one situation generates to a class of similar situations (Cronbach, 1977).

It has been demonstrated that an attitude that develops out of experience with one object is likely to generalize to similar objects (Watson and Watson, 1920). It has also been demonstrated, however, that negative experiences and reactions can be overcome through application of desensitization methods (Bandura, 1969).

Educators and psychologists often affect attitudes that parents have developed about their child through various methods, although the

attitudes that parents have are often established through a variety of parenthood experiences. Many of the attitudes that parents have toward children are often established through a variety of parenthood experiences and many of these attitudes are conscious. Most people, if asked what they feel about parenthood, can elaborate in detail. At the same time, many parents are partially or completely unconscious of the attitudes that shape their behavior and expectations (Robinson, 1976).

Parents' practices and goals are shaped by the way in which they regard the problems of their child. The welfare of the child depends in a large measure upon the well-being of the parents; the emotional reactions of the parents lead to the child's own adjustment or maladjustment (Love, 1972).

There are various characteristic emotional reactions of parents of a handicapped child. The first emotional reaction comes with the awareness that the child is not normal. Love (1972) reported that after the proper diagnosis has been made and the professional person has told the parents of the handicap, the reaction of refusal acts as a defense mechanism for the stress situation. He theorized that the main reason for this reaction is the hope that the child might have been found normal or that a specific remedial cause will be discovered and corrected. The refusal is not one in which the parents close their eyes to the problems, but one in which they avoid the reality of the situation. The denial of the problems is an unconscious defense reaction which is brought on by the stress situation. The parents, seemingly, are unable to control this reaction. It is possible that



the parent does not perceive to some extent that there is something wrong with the child and is unable to recognize or admit the child's exceptionality. For example, when the child begins to have difficulty in school the parent usually accounts for the poor academic performance with certain physical disabilities such as poor vision, poor hearing or sickness. If the child is placed in a class for handicapped children, the parents will usually see this class as essentially a tutorial or remedial class where the child receives instruction so as to quickly bring him or her to the academic level of their peers (Love, 1972).

Guilt and shame play a basic role in the parents' reaction to their handicapped child because most parents see the child as an extension of themselves. The parents may have ambivalent feelings toward the child; loving and hating the child at the same time. This conflict between these two opposing feelings is a further guilt reaction in regard to the child, and the parents are often unaware of the guilt. As the guilt remains unconscious, it gives way to manifest reactions to rejection, overdependency, or too much pressure on the child to achieve beyond his or her level of ability. Often the child's behavior is characterized by disorderliness, disorganization and low frustration tolerance (Baum, 1962). As a result, he or she responds poorly to mothering. This causes the mother to feel inadequate as a mother because she cannot meet the child's needs.

In an examination of the research concerned with certain aspects of parents concerning mental retardation, it was found that one of the greatest obstacles to parental acceptance of the mentally retarded

child is the psychological threat to the parent (Waterman, 1957). Frequently, parents of retarded children adopt a martyr complex. The parent may verbally accept the mental deficiency and not hesitate to talk about it, but may ascribe it to an act of God. "Since it is God's will that the defective child has been placed with them they feel that he has chosen them to do as much as possible for the child."

Baum (1962), in a report on family adjustment to the handicapped child in the family, enumerates the stages of parental reaction as parental grief, denial of abnormality, parental hostilities, feelings of guilt and shame, and withdrawal.

Most parents develop an understanding of their child's problems in a gradual and painful manner. Many spend a great deal of time, energy and money in a search for some more acceptable diagnosis or for an elusive cure. The process of acceptance seems to follow a rather regular pattern, whether it covers a period of years or is telescoped into a single interview. Parents who have more or less accepted their child's mental retardation apparently pass through about five successive stages in the process. Robinson and Robinson's (1965) description of these stages is as follows:

The first state is characterized by an awareness that a serious problem exists; the second by recognition of the retardation for what it is; the third, by a search for a solution; the fourth, by a search for a solution; and the fifth, by acceptance of the problem, a goal which is seldom fully attained. (p. 506)

In an article by Leo Kanner (1953), it is pointed out that some parents take the attitude that there is absolutely nothing wrong with their mentally retarded child. Those who are anxious about the child's development are merely pessimistic spreaders of gloom. These

parents will declare that some children walk sooner than others and some will just take their time. Kanner found that this is "often the reaction especially of fathers who have no knowledge of children and do not wish to be bothered about them" (1953). These fathers were reportedly away at work most of the day and see the child under selected circumstances.

Hersh, as quoted by Baum (1962), reported that in casework with parents of retarded children it has been found that fathers are more removed, less emotionally involved, more objective and less expressive of their feelings. He believes mothers suffer the more intense feelings, in general. He further notes that fathers tend to ignore the present problems which are concerned with the long-term economic and social dependency of their retarded children.

Fathers are more affected by a mentally retarded son than by a mentally retarded daughter. Reportedly, it is difficult for the father to identify with the male retarded child (Levine, 1966).

Levine also stated:

The large majority of effort in regard to the counseling of parents and the study of parental attitudes have been directed toward the mother. It would appear as though a major effort to include fathers in such ventures be undertaken, particularly if the child is a male. Further, the findings of the present study suggest the necessity for studying the nature of communication between mothers and fathers of retarded children based on the sex of the child (p. 911).

In further examining the differences in mothers' and fathers' reactions toward their children diagnosed as having special problems, Price-Bonham and Addison (1978) reported that, mothers, upon learning that their child was mentally handicapped, exhibit more emotional reactions

than do fathers. This is attributed to mothers having a clearer perception of the time involved in caring for the child, the emotional strain and problems in maintaining family harmony and integration.

Fathers, however, exhibit more knowledge relative to mental retardation, are more objective, less emotionally involved with the mentally retarded child, and tend to show more concern over future problems (economic and social dependency of the child) (Hersh, 1970; Love, 1973). Fathers are better able to express their feelings about the mentally retarded child, and there is evidence that they set the pattern for acceptance or rejection of the child in the home (Peck and Stephens, 1960).

If the mentally retarded child is a boy, fathers tend to react in extremes of total involvement or total withdrawal (Chigier, 1972). They are generally more accepting of a mentally retarded daughter than a mentally retarded son (Grossman, 1972). Fathers are often less skillful in coping with the mentally retarded child and are more affected by attributes (physical appearance) which stigmatize the families' social and community image. Mentally retarded boys do not meet fathers' aspirations; therefore, these fathers are deprived of the satisfaction of their son's achievement (Tallman, 1965). Fathers are more often concerned about the mentally retarded child in roles outside the family (i.e., being a "leader," a "winner," and to "stand up for himself") (Gumz and Gubrium, 1972). Therefore, a mentally retarded son appears to have a greater emotional impact on the father than does a mentally retarded daughter and as the family life cycle progresses, the retarded boy often provides more difficult role problems than a retarded girl.

The father's acceptance of a mentally retarded child may be reflected in his participation in caring for the child. However, few authors have addressed this issue, possibly because it is assumed that the mother is the primary caretaker. This same trend was found in Johnson's (1958) studies of Black and white families--the mother was viewed as the major caretaker of the child with only limited assistance from the father.

Peck and Stephens (1960) studied the family relationships of ten mentally retarded children with "A Rating Scale for Child Concept," by Worchell (1955). They attempted to secure a measure of the acceptance-rejection pattern present in the parents of mentally defective children. Each parent was given a copy of the instrument and was asked to rate their child. It was assumed that the more negatively the parent rated the mentally defective child, the greater was the rejection, and if the mentally defective child received ratings which were lower than the ratings given the "normal," "ideal," or "other" child, the parents' acceptance of the mentally defective child was less. The findings of this study indicated that the retarded child was less favorably rated on personality than was the normal or "ideal" child. There was also a high correlation (.83) between the father's acceptance or rejection of his mentally defective child and the amount of acceptance or rejection recorded in the home situation. In contrast, the correlation between the mother's acceptance and the amount of acceptance found in the home situation was .09 and was not significant. The authors offer two possible explanations of this finding: (1) the father's acceptance or rejection of his mentally defective

child, and not the mother's, set the pattern for the acceptance or rejection found in the home; or, (2) the father was better able to express his real feelings subjectively, whereas the mother tended to conceal either consciously or unconsciously, her feeling of rejection (Peck and Stephens, 1960).

Wadsworth and Wadsworth (1971) noted that some parents of mentally retarded children have a distorted picture of their function. They reported that in a study, while parents indicated that their child was handicapped, over 50% did not believe their child to be mentally retarded. Fathers estimated their child's IQ to be higher than did mothers, and the majority of the fathers studied, predicted their child would graduate from high school. However, Wikler (1979) reported that in a similar study, parental perceptions of IQ indicated remarkable accuracy on the part of the parents in estimating their handicapped child's capacity.

It has been found that parents of mentally retarded children manifest a greater rejection and that this rejection has a pronounced effect on the adjustment of the child. Ramsey (1967) in a review of group methods with parents or mentally retarded children, reported that:

The data support such desired group outcomes as providing catharsis for parents; helping them accept the diagnosis of mental retardation, assisting them to shift from short-term goals to long-term goals; helping them realize others were sympathetic; and providing them with greater optimism regarding the child's future. It can be said that genuine improvement was made in such areas as attitudes toward the child, child rearing practices, ability to handle the child, and the general level of the mother's communication of her concern and problems (p. 859).

A number of confirmatory studies report consistently that a

substantial majority of the mentally handicapped live in the lower socioeconomic and cultural areas of the community. It has also been reported that the majority of mentally handicapped children come from lower socioeconomic homes where the education of the parents is somewhat less than the average and the health standards not always sufficiently high (Johnson, 1958).

Love (1967-68) conducted a study to discover some of the characteristics relating to positive and negative attitudes of parents towards mentally retarded children. The characteristics examined in this study were: knowledge of mental retardation, level of education, number of children in the family, socioeconomic level and sex of the parent. The subjects were administered two instruments: Schofer's Test of Knowledge of Mental Retardation and Parent Attitudes Toward Mentally Retarded Children Scale. Parents having mentally retarded children scored significantly higher than parents not having mentally retarded children in regard to the Attitude Scale. Parents not having mentally retarded children scored significantly higher than parents having mentally retarded children in regard to the test of knowledge, level of education and socioeconomic level.

Parental attitudes toward the gifted child differs from those attitudes of parents of the mentally handicapped child. In examining this attitude, several pertinent aspects should be brought to the fore before parental influences can be discussed as they pertain to the adjustment of the exceptionally able child. First, the concept of giftedness should be defined.

In reviewing the literature, it becomes apparent that there is

no one accepted authority for a definition of giftedness. An identification of the gifted child seems also to be a definition of what or who he or she is.

Giftedness is a comparatively new area in the field of education and research. Therefore, there are differing points of view on many aspects of this area. Some of the points of difference are demarcation lines between the giftedness, and definitions of giftedness (Love, 1972).

The American Association for Gifted Children has adopted the following definition of giftedness: Gifted children are those whose performance, in a potentially valuable line of human activity, is consistently remarkable (Freehill, 1962).

Drew regarded an individual intelligence scale in the hands of a competent psychologist as the most important single tool for the identification of the gifted (1961).

Most parents seem aware of spectacular talents rather than high intelligence in their children. They may also cling to the older notion that a gifted child is doomed to become neurotic and a failure. Parents seldom are the best judges of their children's aptitudes and talents in comparison with other children because they are not sufficiently acquainted with the range of abilities in the age-group population of their children (Hildreth, 1966).

Research and classroom observation indicates that devaluation of education is widespread among children from economically disadvantaged and culturally different environments. Poor study habits and motivations appear to be a common result of these environmental



circumstances. Gifted pupils from this segment of the population tend to display an aspiration that is lower than their academic potential. Werblo (1966) reports that these pupils also tend to achieve at a level lower than gifted pupils from the upper socioeconomical stratum.

The concept of multiple exceptionalities has been developed recently by educators, and pertains to the many children having two or more exceptionalities. Specific learning disabilities can be defined as a dysfunction attributed to damaged parts of the brain that regulate the way a person "sees" things after the senses have presented the facts to him (Bush, 1976). This child is usually deficient in one or more of the processes of speech, language, reading, writing, arithmetic or spelling. Many educators and psychologists refer to this condition as minimal brain dysfunction. The minimally brain-damaged child with superior intellect has baffled parents for years. The child is often referred to by teachers as immature, undisciplined or emotionally maladjusted. Parents consider him or her as lazy, hard to control, scatterbrained or simply high strung. Although this child scores above average on an individual intelligence test, the behavioral patterns most frequently seen are impulsiveness, hyperactivity, distractibility, short attention span and oversensitivity to stimuli (Reinert, 1976).

One of the dilemmas, precipitated by parents, which continues to command the attention of educators concerns the pressuring for maximum academic performance of children classified as underachievers. In the case of intellectually gifted children, many investigated have concluded that adequate adjustment is positively correlated with high

achievements. With appropriate instruments to identify creative children, Hobbs (1975) investigated the creative child who is an underachiever. It was concluded that on the assumption that intelligent, creative children who are doing less well than their peers in school achievement may be considered to be in anxiety provoking situations. The results suggested that underachieving, intelligent, creative children were no better or less well adjusted than achieving, intelligent, creative children. This indicated that in spite of their being subjected to criticism by parents and teachers for not performing as well as they might, there was no evidence of personal dissatisfaction or depressed self-concept, as demonstrated by the self-rating scale, and no loss of status or acceptance by peers, as demonstrated on the peer-rating scale.

There is considerable overlap between social and emotional maladjustment, although they are not necessarily synonymous. When the child presents problems sufficiently severe that some responsible adult, whether parents or teacher, takes action to do something about him he becomes the socially or emotionally disturbed child. Today there is an increased awareness of the problems, early discovery and prevention of the socially and emotionally maladjusted. More is being done about the children when their personal and social difficulties first develop (Moos, 1979).

Parents of the emotionally disturbed child occupy an unique position among parents of exceptional children in that society often holds the parent partially or totally responsible for their emotionally disturbed child's condition (Ross, 1964).

The following statements reflect some of the attempts to describe the emotionally disturbed child. The definition given by Rose (1964) describes the emotionally disturbed child in terms of action:

A child is emotionally disturbed to a degree that he concerns some responsible person or persons (parent, school administrators, social workers, law enforcement workers) sufficiently that a form of social action is taken about him (p. 274).

This writer, when referring to an emotionally disturbed child, is speaking of a child who has emotional problems that are serious enough to adversely affect his or her relationship to some aspect of their environment--their self concept and their interaction with their family, peers, school situation and community life.

Love (1972) concludes by stating that because individuals are usually at least at the adolescent age when becoming mentally ill or seriously disturbed, parents tend to put the blame on other people or agencies. Seldom does the parent attribute the illness to the home environment, and seldom does the parent think in positive terms concerning what can be done for the child. Often, however, consciously or unconsciously the parents worry about "what will other people think?" Even when the child becomes disturbed at the age of seven or eight the parents tend to place the blame on the school and teachers. Parents also tend to use primitive defense mechanisms when a young child becomes disturbed emotionally and in essence conclude, unconsciously, "if we ignore it, it will go away."

It is asked, in view of the many problems that may arise in parenthood, if parents actually enjoy the process of child rearing.


Robinson (1976) asked a group of Parents Anonymous members if they found child rearing satisfying and enjoyable. An analysis of the results lead the researcher to conclude that the resulting two groups differed on a number of their self-reported attitudes toward child rearing. As predicted, the Parents Anonymous group rated parenthood as much more stressful and far less satisfying than the comparison group. They were also more likely to report that parenthood had a negative impact on their lives, and that if they had it to do over again, they might choose to remain childless. As a group, the Parent Anonymous mothers felt upset with more of their children's behavior, and reported a greater desire for personnel and parental-done services. Self-description, relationships with parents, marital relationship, gynecological history, traumatic childhood experiences, feelings of loneliness, and certain problems of the children appeared to be particularly important in distinguishing between the two groups.

An in depth study of parental attitudes toward their children and the educational process, generally show that parental aspirations for their children are inflated and that many parents are not as realistic as children in accepting the children's academic achievement. The lack of parental realism may cause children's anxiety in taking tests, making mistakes, and feeling angry about experiencing difficulties in learning. DuCette (1972) reported that, although low socioeconomic Black parents may be more vulnerable to similar feelings and attitudes because of years of deprivation and discrimination, recent gains in civil rights and opportunities, and rising expectations for education, employment and upward mobility; these Black parents have

demonstrated interest in and concern about helping their children.

The literature indicated that patterns that emerge from parents surveyed suggest that parents are concerned about their children's academic progress. In a survey by Bell (1979) 20 percent of parents felt their children were not learning enough in school; 33 percent of Black parents felt this way. Fourteen percent of the parents believed their children needed special help, either remedial or advanced, that was not available in their children's school; 28 percent of Black parents felt this way. Black parents had higher educational aspirations for their children than did white parents and parents, in general had higher aspirations for boys than they did for girls. Many parents in this study were unwilling to accept their children's level of academic achievement.

In an attempt to investigate the effect of external positive feedback on an adult's response toward a child, Grebow (1971) investigated the relationship between self-evaluation and punitiveness within the context of an adult-child interaction. Subjects in this study were asked to teach a task to a child and evaluate the effectiveness of each of their responses. A pseudo-interactional experimental situation was designed to investigate the effect of child behavior and external feedback on changing two aspects of an adult's response: (1) self-evaluation, (2) reinforcement of a child. The results suggested that external positive feedback, designed to produce changes in an adult's self-evaluation, also produced changes in the adult's overt responses to a child; with the child's behavior kept constant. Conversely, feedback designed to produce changes in an adult's overt responses to a



child, also produced changes in the adult's self-evaluation. The results indicated that: (1) a high rate of positive, but non-contingent feedback, which gave the individual little specific information to be used in the evaluation of self or other, resulted in a significant decrease in positive self-evaluation and a significant increase in punitiveness; (2) treatment designed specifically to decrease punitive responses tended to have the expected effect of depressing punitiveness, but also resulted in a significant decrease in positive self-evaluation and a return to a level of punitiveness not significantly different than pre-treatment when the child's behavior improved; (3) treatment which gave the individual positive feedback contingent on positive self-evaluation has the most desirable and lasting effect, reflected in both a significant increase in positive self-evaluation and no significant increase in punitiveness.

There have been few empirical investigations on the effects of feedback of intellectual results upon achievement and self-estimations of ability probably because of the dated controversy over the question of whether to provide intelligence test scores to parents and children. Over the years many psychologists and educators have been reluctant to provide such information because of the claim that such feedback of scores would not be comprehended by many parents and children, because of the mechanical complexities and the interpretation of test scores. Moreover, it was assumed that by providing intellectual test results, motivation to learn would be decreased, and there would be a detrimental effect on achievement of children due to a change in the

attitudes of parents and children.

Goode (1972) conducted a study which investigated the effects of providing information about intelligence test results on the achievement and self-estimates of sixth grade children. The null hypothesis was that children who received feedback of intelligence test results would not improve their performance in the academic subjects of reading and mathematics. Additionally, those children who received feedback would not change their self-estimates of ability in the direction of the results of intelligence tests. Statistical analysis of the data obtained lead to the conclusion that feedback of intelligence test results had no effect on later achievement under the experimental conditions of the study. The data also indicated that self-estimates of ability do not change with feedback of intelligence test scores. Goode thus concluded, that prior affective feedback led to conditioning. It was noted, however, that affective feedback (which provided approval or disapproval) was not as effective as informative feedback (which provided knowledge about correctness and incorrectness) in yielding a high performance level. No differences were obtained between positive and negative feedback.

The relationship between self-concept and the perception of positive and negative feedback was explored by Jeffreys (1974). The following research hypotheses were tested: (1) there is no positive relationship between self-concept and the perception of feedback; (2) there is no negative relationship between changes in self-concept and the perception of feedback. The null hypotheses were retained. Llewellyn (1974), in a similar study, reported positive feedback data scores were

correlated with higher post group self-concept scores than were the results of negative feedback scores on self-concept scores.

Concerns which had been reported in the literature regarding the possible harmful effects of knowledge of intelligence test results upon later academic achievement, appeared to be without foundation. Similarly, changes in self-estimate generally did not occur in sixth graders with feedback of their intelligence test scores. In examining the factors associated with underachievement and overachievement of intellectually gifted children, it was hypothesized that high achieving academically gifted pupils compared to low achieving academically gifted pupils received the benefits of more favorable parental attitudes. The pupils perceived themselves as more accepted and more intrinsically valued by their parents, were more creative, more socially mature, and more realistic in their self-concepts (Karnes and Merle, 1961).

When parents must face disappointments and trauma related to a child due to the child's inability to consistently achieve, or persistent disordered behavior as reported by a teacher in school, parents react in different ways. Disbelief, depression, anger, denial and the phenomenon of parental mourning for the child who might have been, are not uncommon reactions (Lieberman, 1971).

Parents often question their part in the problem of the child. Meyerowitz and Feldman (1966) noted that parents ask: Are they unfit parents? Was it due to genetic or familial deficiency? Was prenatal care inadequate? Is there another specialist who should be seen?

The positive or negative perceptions that parents have of a child often influence their expectations of that child. The importance



of expectations and the influence of successes and failures have been explored repeatedly. Cronbach (1977) reported a study by Jucknat (1938) where a child was asked to tell how rapidly he or she thought they would complete the next puzzle in a series. It was found that the successful group raised their aspiration on the next trial, confident that they could complete the next puzzle even faster. Failing children rarely raised their aspiration. Cronbach noted that how a person feels about his or her successes affects motivational levels.

Robert Rosenthal (1968) offers logical support to the notion that students live up or down to their researcher's expectations of them. In 1973, he proposed a four-factor "theory" of the influences that produce expectations and noted that people who have been led to expect good things from their students, children, clients, or "what-have-you" appear to:

create a warmer socio-emotional mood around their "special" students (climate); give more feedback to these students about their performance (feedback); teach more material and more difficult material to their special students (input); and give their special students more opportunities to respond and question (input) (p. 60).

The literature further cites the importance of one's expectations of a child's intellectual performance on that child's performance.

Wortman (1975) stated: "If our expectation is that a child of a given intelligence will not respond creatively to a task which confronts him, and especially when we make this expectation known to the child, the probability that he will respond creatively is very much reduced" (p. 286).

These findings point to the importance that expectations have on

behavior of others. Parents who have positive attitudes toward their child have high expectations for that child's academic success and overall performance in school (Pelc and Midlarsky, 1977). Negative parental attitudes also lead to expectations; however, these expectations support academic failure, behavior disturbances and general hopelessness (Rosenthal, Bruce, Dunn, Ladd, 1976).

Pelc and Midlarsky (1977) predicted that subjects who had been told that children had performed successfully on a task were asked to estimate children's future performance on a similar task. Findings indicated that the parents who had received positive evaluative feedback had slightly high expectations of future success of the children.

In a similar study conducted with teachers and students, Blue (1976) found that negative written and oral evaluative feedback given to selected teachers regarding certain student's performance in a task effected the predicted expectations of these students future performance on the same task.

Up to this point, a rather brief exploration of the concepts of feedback, attitudes and parental reactions to feedback has been undertaken. This review has highlighted the varied classifications of feedback, and has emphasized the importance of informative feedback and its effect in arousing different states in parents and their attitudinal response to the feedback. It is noted that parental attitudes toward their children is often varied, and parents respond positively or negatively when they are given informative feedback communications from experts about their child. The question of why informative feedback communications are effective in changing attitudes, however,

has not yet been specifically addressed.

Some attempt has recently been made to develop a theory of how information has an impact on attitude. New pieces of information are constantly acquired related to existing attitudes. Some of the information strengthens positions that were previously accepted and some runs counter to previously accepted positions and supports alternative positions. Considerable work has been undertaken on the impact of attitude change. Anderson (1973) calls this body of knowledge the information integration theory. It proposes that a piece of information received by a person is assigned both a weight and a position on a scale with respect to a particular attitude. (An individual behaves as if he or she assigned a scale value and weight to each item of information. It is strictly an 'as if' theory and does not mean that the individual deliberately and consciously behaves in this way.)

It is interesting to note that in the Anderson theory, as each piece of information is received, it has an attitude value assigned to it and this attitude value becomes integrated immediately into the attitude. The information may then be forgotten, but it has already had its impact on attitude. The attitude is not dependent on verbal memory.

There are many hundreds of studies cited in the literature on the effectiveness of communication in producing attitude changes. A review by Berscheid and Walster (1969) divides the problem into several components: the characteristics of an effective communicator, the characteristics of an effective communication, and the characteristics of the receiver of communication are examined.

The most completely explored of the characteristics of an effective communicator are expertness and trustworthiness. The sources of some communications represent a higher level of expertness than do others. The more expert or credible the source of communication, the greater is the immediate effect on attitudes.

Inquires into the ability and personality traits that characterize persuadable people have long been investigated, but the problem has shown itself to be much more complex than earlier research workers had expected it to be.

The nature of a message is highly important in determining whether it does or does not attract attention and hence permit the possibility of having impact. Psychologists have long been attracted to the hypothesis that the individuals will readily listen to messages to which they agree, but may turn away to other things when confronted with a message with which they do not agree (Abelson, 1969). A basis for this trend in behavior is still not properly understood. One simple plausible explanation is found in cognitive consistency theory, which in its simplest form, states that individuals will assimilate information consistent with the information that they have already stored and will have a tendency to reject information that is inconsistent.

Not all individuals can have their attitudes changed with equal readiness. Most experiments in this area show very large individual differences in this respect and some individuals are highly resistant to all efforts to change their attitudes (Berscheid and Walster, 1969).

One of the most influential sources of individual differences in

influenceability as cited in the literature is sex. A long history of research in this area concludes that women's attitudes are more readily influenced than are those of men. McGuire (1969) offers support to the proposition that this effect is largely due to the fact that women are better listeners than men. The essence of the theory of greater influenceability of women is that women are likely to absorb more of messages designed to influence their attitudes than are men, they are also more likely to have their attitudes influenced.

Another variable that offers some promise as a correlate of persuasibility is vaguely defined as self-esteem. A number of experiments have been conducted in which a deliberate effort has been made to lower or raise self-esteem by administering a test to the subjects and then telling some subjects, regardless of how they performed, that they did very poorly and telling others, also regardless of how they performed, that they had done well. Such an experience of being told that one has done poorly, or well, does have the effect of changing a person's behavior during at least the few hours that follow the experience. Whatever is changed by such a procedure is referred to as self-esteem (McGuire, 1969).

Another technique used to attempt to define the concept of self-esteem is to administer a questionnaire that attempts to measure self-esteem. This technique could be regarded as one that attempts to explore the individual's self-concept by finding out what individuals say to themselves about themselves.

Berscheid and Walster (1969) concluded that attempts to raise or lower self-esteem indicate that when it is lowered, there tends to be

increased influenceability, but when self-esteem is directly measured by means of a questionnaire, no such simple effect is found. McGuire (1968) suggests that a high degree of modifiability of attitudes is associated with either a very high or a very low level of self-esteem. Those who are in the middle range on this variable are most unchangeable.

Research on the characteristics of dogmatic or authoritarian people has been offered as one attempt to address the issue of the self-esteem of the receiver of communications. In a review of related studies, Miller and Rokeach (1968) have found that the high-dogmatism individual to be psychologically immature in addition to being stereotyped in his or her thinking. Such an individual also has been shown to be intolerant, impulsive, and poorly adjusted. On the other hand, the low-dogmatism individual has been found to be enterprising, calm, mature, forceful, and efficient. It might be speculated that high-dogmatism individuals would also be those whose attitudes would be most difficult to change.

This subsection of the review of the literature focused upon an examination of the concept of attitudes and parental reactions to feedback. It was noted that attitudes form systems of meanings that have emotional and intellectual components and that an attitude developed in one situation generates to a class of similar situations. Educators and psychologists often affect attitudes that parents have developed about their child. Importantly, the positive or negative perceptions that parents have of a child often influence their expectations of that child. Studies indicated that the parents who receive positive

evaluative feedback have slightly higher expectation of future success of their children. In addressing the question of why informative feedback communications are effective in changing attitudes, it was found that not all individuals can have their attitudes changed with equal readiness.

Presented in what follows is a different but insightful approach to addressing the issues of defining the characteristics of the receiver of the communication in terms of self-esteem (i.e., examine the research related to so-called externally or internally directed people). Rotter (1966) introduced the concept that behavior is influenced by whether the individual perceived him or herself to be in control of the reinforcements provided by the environment or whether they are outside of his or her control. This has become known as the problem of locus of control.

#### An Examination of the Concept of Locus of Control

The effects of reward or reinforcement on preceding behavior depends in part on whether the person perceives the reward as contingent on his or her own behavior or independent of it. Acquisition and performance differ in situations as perceived outcomes as determined by skill versus chance. People may also differ in generalized expectancies for internal versus external control of reinforcement (Rotter, 1966).

The role of reinforcement, reward, or gratification is generally recognized as a crucial one in the acquisition and performance of skills and knowledge. However, an event regarded by some people as a reward or reinforcement may be differently perceived or reacted to by

others. One of the determinants of this reaction is the degree to which the individual perceives that the reward follows from, or is contingent upon his or her own behavior or attributes versus the degree to which they feel the reward is controlled by forces outside of themselves and may occur independently of their own actions (Rotter, 1966). When a reinforcement is perceived by the person as following some action but not being entirely contingent upon his or her action, then, in our culture, it is typically perceived as the result of luck, chance, fate, as under the control of powerful others, or as unpredictable because of the great complexity of the forces surrounding them. Rotter (1966) has labeled this belief, when interpreted in this way by an individual, a belief in external control. If the person perceives that the extent is contingent upon one's own behavior or one's own relatively permanent characteristics, Rotter termed this a belief in internal control (1966).

A comprehensive review of the work on the development, validity, and reliability of the scale which measures attitudes of internal-external control has been reported by Rotter (1966). Since that review, Joe (1971) reported the reliability measures reported for the Internal-External (I-E) Control Scale have been consistent.

Several investigators have explored the parent-child relationships which foster either an internal or an external attitude. With a sample of 68, Tolor and Jalowiec (1968) reported a significant relationship between an external attitude and both authoritarian control and hostility-rejection of the Parental Attitudes Research Inventory; that is, externally oriented subjects perceived their mothers as being



highly authoritarian and possessing hostile-rejecting tendencies, suggesting that mothers with these traits may contribute to the development of an external attitude.

Similarly, several studies Crandall (1965); Good (1972); Davis and Phares (1969) have reported that parents who are warm, supportive, permissive, flexible, approving, consistent in discipline, and who expect early independent behaviors from their child is more likely to encourage their child's belief in internal control than are parents who are rejecting, punitive, dominating, and critical. In addition, the behaviors of fathers might be more influential in fostering a child's belief in internal control than the behaviors of the mothers (Davis and Phares, 1969). MacDonald (1970) reported that internally scoring subjects described their mothers as being more nurturant, having more predictable standards for their children's behavior, and using more achievement pressure while fathers were described as nurturant and using more physical punishment. Additionally, externally scoring subjects described their mothers as overprotective, and more inclined to use affective punishment and deprivation of privileges.

In contrast with the above findings that internality is related to parental warmth, DuCette (1972) reported that maternal protectiveness (for adult normal males) was associated with the belief in external control.

It might be expected that parents who attempt to exert a great deal of control over their child's behavior and who are directing and restricting would tend to develop in the child a belief that he or she does not control the occurrence of important outcomes. On the other

hand, the child who is allowed relative autonomy within the family setting would have the opportunity to test and experience the consequences of his or her own behavior and thus develop a belief that he or she can exert some control over events. Some support for this hypothesis is found in a study by Strodtbeck (1958) in which fathers who dominated decision making in the family tended to have sons with low feelings of mastery.

Parents' own internal or external orientation may be an important antecedent of the child's expectancy that he or she is in control of reinforcement. It might be anticipated that parents who have an internal orientation themselves would provide a model for the child's acquisition of an internal belief. This may be mediated by direct instruction concerning the nature of the behavior-reinforcement sequence, or through reinforcement of the child's verbal responses regarding this belief. Externality might be acquired through a similar process (Davis and Phares, 1969).

Several studies have shown a significant relationship between various measures of anxiety and the I-E scale. Butterfield (1964) with a sample of 47, found that external control was positively related (.57,  $p < .01$ ) to intropunitive responses to frustration. Butterfield also found that external control was positively related (.61,  $p < .01$ ) to debilitating anxiety and negatively related to facilitating anxiety (-.82,  $p < .01$ ).

To ascertain the possibility of an anxiety factor within the I-E Scale, Ray and Katahn (1968) administered the I-E Scale, MAS, and the Mandler Test Anxiety Questionnaire (TAS), which measures fear of

failure in achievement situations, to two samples ( $N = 323$ ,  $N = 303$ ) of college students. They found that the I-E Scale and MAS were significantly related in both samples though in a limited way (.22, .21,  $p < .01$ ).

Although Rotter (1966) stated that sex differences on the I-E Scale among college students appear to be minimal, subsequent studies by Feather (1968) showed that females earned significantly higher external scores than males at the University of England. This latter finding is consistent with the one case in which sex differences on the I-E Scale were noted by Rotter.

One of the most salient factors in the effectiveness of our present society is the willingness of one or more individuals in a social unit to trust others. The efficiency, adjustment, and even survival of any social group depends upon the presence or absence of such trust (Rotter, 1967).

Interpersonal trust is defined here as an expectancy held by an individual or a group that the word, promise, verbal or written statement of another individual or group can be relied upon. This definition by Rotter departs significantly from Erikson's (1953) broad use of the concept of basic trust which Erikson describes as a central ingredient in "the healthy personality".

Various writers have indicated that a high expectancy that others can be relied upon is an important variable in the development of adequate family relationships and of healthy personalities in children (Rotter, 1967). The failure to trust others, particularly representatives of society, such as parents, teachers, and powerful community

leaders, has frequently been cited as an important determinant in delinquency (Redl and Wineman, 1951). Difficulties in race relationships and in minority group-majority group relationships have, likewise, been frequently related to expectancies of one group that the verbal statements of the others cannot be accepted. Many psychotherapists believe interpersonal trust is a major determinant in the success of psychotherapy. In fact, an expectancy that others can be believed must be an important variable in human learning in general. Much of the formal and informal learning that human beings acquire is based on the verbal and written statements of others, and what they learn must be significantly affected by the degree to which they believe their informants without independent evidence (Rotter, 1967).

The locus-of-control research literature has suggested that the tendency to attribute responsibility of behavior to oneself instead of the environment predicts consistencies in behavior. One's attribution may affect the direction of one's behavior (McKeachie, 1976). The literature recently suggests that external ascriptions by females and low SES Black people are largely related to attempts by both groups at environmental change (Wittrock, 1978). The controversial Coleman report (1966) suggested that for many minority groups, a sense of environmental control, more than any other variable, accounted for academic achievement.

Wittrock (1978) reported that perceptions to internal causes increases emotional responses. Attribution of failure to lack of effort, rather than to luck or to lack of ability, leads to the supposition that effort should be increased to attain success.

Rotter (1966) introduced the concept that behavior is influenced by whether the individual perceives himself or herself to be in control of the reinforcements provided by the environment or whether they are outside their control. Acquisition and performance differ in situations as the individual perceive outcomes as determined by skill versus chance. People may also differ in generalized expectancies for internal versus external control of reinforcement.

This subsection of the review of literature dealt briefly with a discussion of the concept of locus of control. Rotter (1966) introduced the concept that behavior is influenced by whether individuals perceive themselves to be in control of the reinforcements provided by the environment or whether individuals perceive reinforcements to be outside their own control. The locus-of-control literature has suggested that the tendency to attribute responsibility of behavior to oneself instead of the environment predicts consistencies in behavior. One's attribution may affect the direction of one's behavior. The literature further indicates that external ascriptions by females and low SES Black people are largely an attempt by both groups at environmental change.

Personality variables such as the locus of control variable, could be related to the influence of an informative feedback communication from a expert on effecting a change in attitudes of individuals. It is conceivable that those persons who are externally directed would demonstrate a measurable change in attitude as a result of feedback; whereas internally directed persons, would demonstrate a negligible change in attitude.

## Recapitulation

This selective review of the literature supports the overall importance of feedback as a source of information regarding the results of a response. Findings by Locke et.al. (1977) suggest that knowledge alone is not a sufficient condition for effective performance, but that the interaction of feedback, environmental attribution and self-goals also influence behavior. How one reacts to feedback is influenced by the kind of feedback, the conditions under which feedback is presented, and the variety of relevant subject variables (Dana and Graham, 1970). Blue (1976), in a direct attempt to determine the effects of positive and negative feedback on anxiety arousal, found that subjects exposed to the threat of failure experienced increases in self-reported anxiety. Morris and Fulmer (1976) found that negative feedback aroused worry (the cognitive component). Epstein (1972) found in experiments where feedback is not accurate, subjects may place more confidence (certainty) in their own evaluation of their performance. Epstein further reported that discrepant information (from self and experimenter) may produce a lack of confidence (uncertainty) in both.

The purpose of evaluating a child referred to a school psychologist is to gather useful information which can be transmitted to an appropriate source so that the child referred can be assisted. The school psychologist, through this transmission process, provides feedback of results to parents which often produces positive or negative attitudes of the parent toward the child evaluated. The literature emphasizes the importance of attitude formation. It has been

demonstrated that an attitude that develops out of experience in one situation generates to a class of similar situations (Cronbach, 1977). Educators and psychologists often effect attitudes that parents have developed about their children. Therefore, feedback of evaluative information about a child's performance appears to have either positive or negative effects on the attitudes of parents toward their child.

There are many hundreds of studies cited in the literature on the effectiveness of communication in producing attitude change. Expertness and trustworthiness are found to be the characteristics of an effective communicator; however, the nature of the message has been shown to be highly important in determining whether it does or does not receive attention and hence permit the possibility of having an impact. Not all individuals can have their attitudes changed with equal readiness. Most experiments in this area show very large individual differences in this respect, and it has been noted that some individuals are highly resistant to all efforts to change their attitudes (Berscheid and Walster, 1969). The locus of control literature may be offered as an attempt to address the issue of defining self-esteem.

A number of investigators have reported a wide range of individual differences in the degree to which persons believe that they, rather than someone or something else, control and are responsible for the events which occur in their lives. This psychological variable has been called "internal versus external control of reinforcement." Research with both adults and children has demonstrated the

utility of this concept in predicting a variety of behaviors (Lefcourt, 1966).

Some important relationships in locus of control have been found between several parental behaviors and attitudes and the child's ability to accept personal responsibility for what happens to him. Boys whose parents are positive, warm, and approving toward them are more likely to accept such responsibility. Parental acceptance provides the boy with the kind of security that permits him to assume responsibility for his successes and his failures. A similar relationship, but less pronounced, exists for girls (Davis and Phares, 1969).

Parents' own internal or external orientation may be an important antecedent of the child's expectancy that he or she is in control of reinforcement. It might be anticipated that parents who have an internal orientation themselves would provide a model for the child's acquisition of an internal belief (Davis and Phares, 1969).

Several studies have shown a significant relationship between various measures of anxiety and the I-E Scale. It was found by Butterfield (1964) for example, that external control was positively related to debilitating anxiety and negatively related to facilitating anxiety.

One of the most salient factors in the effectiveness of our present society appears to be the willingness of one or more individuals in a social unit to trust others. Various writers have indicated that a high expectancy that others can be relied upon is an important variable in the development of adequate family relationships



and of healthy personalities in children (Rotter, 1967). Many psychotherapists believe interpersonal trust is a major determinant in the success of psychotherapy. In fact, an expectancy that others can be believed must be an important variable in human learning in general. Much of the formal and informal learning that people acquire is based on the verbal and written statements of others, and what they learn must be significantly affected by the degree to which they believe their informants without independent evidence (Rotter, 1967).

When a child is referred to a school psychologist for evaluation, the major purpose of such evaluation is to gather useful information which can then be transmitted to an appropriate source so that the child can be assisted. This transmission process involves the discussion of the results of the psychological evaluation with the parents of the child evaluated.

Recent findings (Grobe, Myatt and Wheeler, 1979) clearly show that parental aspirations, in many cases, are inflated and that many parents are not as realistic as children in accepting the children's academic achievement. The lack of parental realism may cause children anxiety in test taking, making mistakes, and feeling angry about experiencing difficulties in learning. Lower socioeconomic Black families may be more vulnerable to these feelings and attitudes because of years of deprivation and discrimination, recent gains in civil rights and opportunities, and rising expectations for education, employment, and upward mobility. Their parents have, however, demonstrated interest in and concern about helping their children.

Parental attitudes upon feedback of results of a mentally

retarded child range from resignation to rejection to overcompensation. The difficulties which parents encounter in raising a retarded child have an inevitable influence upon their attitudes towards the child himself. The school psychologist is often an indispensable person in helping parents to treat the handicap realistically and in ordering the child to cope with behavioral and emotional demands of society (Cox, 1970).

School psychologists should be aware that they represent a powerful force for some parents. School psychologists, because of their title and degree, may influence parental attitudes (Pryzwansky and Bersoff, 1978). (See Rosen, 1977 for a study related to an analogous issue.)

The nature of the informative feedback of psychological results (i.e., whether feedback is positive or negative) may result in a change of parental attitude toward their child who is evaluated. It is also suggested that parents who have an external, as opposed to an internal locus of control, may tend to demonstrate a greater change in attitude as a result of receiving informative feedback by school psychologists.

In a study by Baum (1962) it was found that male parents are more removed, less-emotionally involved, and more objective when relating to their child diagnosed as mentally retarded. Levine (1966) reported that male parents are more affected by a mentally retarded daughter. Therefore, it can be predicted that fathers and mothers differ in their attitudes toward their children, and that fathers and mothers' attitudes would be expected to differ for their sons and daughters. That is to say that the sex of the parent is an important variable.

## CHAPTER III

### METHOD

#### Hypotheses

This study investigated the following null hypotheses:

1. There is no significant difference in the mean scores obtained on a parental attitude questionnaire between parents who receive positive versus negative feedback of results.

2. There is no significant difference in the mean scores obtained on a parental attitude questionnaire between male versus female parents.

3. There is no significant difference in the mean scores obtained on a parental attitude questionnaire between parents of male versus female students.

4. There is no significant difference in the mean scores obtained on a behavioral observation of anxiety checklist between parents who receive positive versus negative feedback of results.

5. There is no significant difference in the mean scores obtained on a behavioral observation of anxiety checklist between male versus female parents.

6. There is no significant difference in the mean scores obtained on a behavioral observation of anxiety checklist between parents of male versus female students.

7. There is no significant difference in the mean scores obtained on a parental attitude questionnaire between internally

versus externally controlled parents (as assessed by Rotter's I-E Scale) when they have received positive versus negative feedback of results.

8. There is no significant difference in the mean scores obtained on a behavioral observation of anxiety checklist between internally versus externally controlled parents (as assessed by Rotter's I-E Scale) when they have received positive versus negative feedback of results.

### Subjects

One hundred and sixty parents of elementary school-age children who attend schools in two school districts in Chicago, Illinois participated in this research study. Of the one hundred and sixty parents, one hundred and twelve mothers and forty-eight fathers were included in the sample. All subjects participating in the study were Black, lower socio-economic parents all of whom were recipients of public assistance.

The two school districts from which subjects were selected were comprised of fifteen and sixteen schools each. The population of the schools was comprised of one hundred percent Black, low socio-economic status children. Schools in the districts were provided with Elementary and Secondary Act programs (i.e., government funded programs) designed for children who could benefit from small-sized classrooms because of learning problems. All schools had at least special education classes for educable mentally handicapped. In addition, many of the schools had low incident handicapped programs for the trainable mentally handicapped student, and the severely

learning disabled student.

Many students in these two school districts had problems of adjustment in the classroom because of their failure to achieve and participate at expected grade level, inappropriate classroom behavior (i.e., acting out behavior, withdrawn behavior), a superior rate of learning, and specific learning problems (i.e., suspected perceptual handicapped, inconsistent learning patterns), were referred for psychological evaluations. The individual child study performed by the school psychologist provided some indication of intellectual level, psychological functioning, and an aspect of adaptive behavior of the referred child.

The subjects were parents of those children who were referred for case studies by the screening committee (i.e., the classroom teacher, principal, parents, and auxiliary staff members) and who were then referred for a psychological evaluation. These parents accompanied the child and conferred with the psychologist for an intake interview. All parents who came to the district school psychologists in an eight week period of time were asked to participate in this study. Table 1 presents a numerical description concerning the participating parents. The age range of the one hundred and sixteen mothers was from 24 to 34 years of age with a mean age of 28 years; while the age range of the fathers was from 26 to 35 years of age, with a mean age of 29 years. Mothers comprised 62.5% of the sample; while fathers comprised a total of 37.5% of the sample.

Of the one hundred and sixty students evaluated, 50% were male students and 49.4% were female students. The students evaluated were

Table 1

A Comparative Numerical Description of the Participants in the Study

	Parents	N	% of Sample	Age of Parent	S
Sex	Male	44	37.5	29	1.9
	Female	116	62.5	28.14	2.01

from the third, fourth and fifth grades, respectively, and had a mean age of 8.9 years. Of the students, 85.6% were referred for the first time and 14.4% were referred for a follow-up evaluation. Many of these students were found through the psychological evaluation to be eligible for special education programs. Out of a total of one hundred and sixty students, four were found eligible for a program for gifted students; eighty-one were found eligible for an educable mentally handicapped program; a learning disabilities program, or a behavior disordered program; and thirty-one students were found eligible for a trainable mentally handicapped program or a program for the seriously socially or emotionally maladjusted student. There were, however, forty-one students out of the sample who were not eligible for a special education class and who were recommended to remain in the regular graded program (i.e., those children who were progressing at an adequate rate academically and intellectually).

#### Investigators

All data was systematically collected over an eight week time period by eight Black certified school psychologists regularly assigned to the two school districts. Five of the school psychologists were female, while three of the school psychologists were male. The mean age of these investigators was 38.4 years and each investigator had been employed by the Chicago Board of Education as a school psychologist for at least five years. Each school psychologist was assigned to a minimum of four district schools and had a case load of four to six evaluations per week. Each investigator was asked to keep a log of the data collected (See Figure 1). Generally, this

log included a detailed description of the data that was obtained from the time the parents came to the site for the intake interview, until they returned to the site for the final feedback of psychological results. Each investigator denoted M or F for the sex of the participating parent, M or F for the sex of the student evaluated, and plus or minus to denote feedback of psychological results.

### Instrumentation

Parents' Judgment Regarding a Particular Child: The parents who participated in this study were pre-tested and post-tested on the Parents' Judgment Regarding a Particular Child scale, an instrument developed by Itkin (1952) (See Appendix D). It was designed to assess the qualities in children which satisfy and dissatisfy their parents.

There are 35 items in the scale. Eighteen are typical Likert items, five are multiple-choice items, and twelve are ratings of the degree to which specified traits are possessed by the child.

Item discriminability of the scale was estimated by the graphic method suggested by Guilford (1941).

The response mode varies from item to item. Parents respond to item 1 through 18 by underlining one of the following alternatives: Strongly agree, agree, uncertain, disagree, or strongly disagree. Items 19 through 23 call for checking one to five choices, and items 24 through 35 require the parent to draw a line through the description which most nearly describes the child.

For items 1 through 18, a weight of 5 is assigned to "strongly agree" for positive (favorable) statements and to "strongly disagree" for negative statements. The weight assigned to each response for



the remaining items is indicated below or beside each alternative given. The attitude score is computed by summing item scores. The possible range of scores is therefore from 35 to 175. A high score indicates a favorable attitude toward the child.

Split-half reliability was found to .949, based upon the response of the sample used in the original study (Itkin, 1955). In a validation study conducted to determine whether there was a relationship between scores obtained on the attitudes scales and score obtained on a self-rating scales, a correlation score of .623 was obtained (Itkin, 1952).

The original study by Itkin (1952) employed subjects in Chicago, Illinois. Both male and female subjects were used. The mean age of the parents was 26.2.

This scale was selected for use in the present study because it reflects parents' judgmental attitudes regarding a child.

Items in the scale are clearly written and the scale itself is reasonably short and easy to complete and has been found appropriate for use for parents to elementary age school children (Itkin, 1955).

Parents were given the following instructions by the experimenters for the completion of the scale:

"We are hoping to discover the qualities in children which both satisfy and dissatisfy their parents. We realize that some parents may dislike answering some of these questions, and if we did not believe that the study was an important one, we would not ask them. This information is being used for a scientific study only, and will be held strictly confidential. The questionnaire is easy to complete and will take about five minutes to finish. Thank you for your cooperation."

Specific instructions for items 1 to 18, items 19 to 23 and items 24 to 35 appear on the questionnaire form and were read to

each parent by the investigator.

Timed Behavioral Checklist: Investigators used the Timed Behavioral Checklist for performance anxiety to rate each parent after the intake interview and after the feedback sessions (See Appendix E). Paul (1966) developed this instrument as a pre- and post stress-condition measure originally used in a study to investigate performance anxiety after subjects had received psychotherapy. The instruments list 20 observable manifestations of anxiety, the presence or absence of which was recorded by four trained observers during successive 30-second time periods of 4 minutes of a speech presentation. The 20 behaviors recorded on the Behavioral Checklist were derived from those compiled by Clevenger and King (1961), and from observable clinical manifestations.

The reliability of the Timed Behavioral Checklist was documented by Paul (1966). The reliability of total score over observers, as calculated by analysis of variance (alpha), exceeding .93 for the pre-treatment test as reported, (N = 74), and .96 for the post-treatment test as reported, (N = 67). This instrument was shown to be not only objective but also very reliable when highly trained observers were used (Paul, 1966).

Rotter's I-E Scale: During the intake sessions, the parents were asked to complete Rotter's I-E Scale (1966) (See Appendix F). It was designed to assess individual differences in generalized expectancy for internal-external control.

The Rotter Scale is a forced-choice 29 item scale which includes 6 filler items. Item analysis and factor analysis show reasonably

high internal consistency for an additive scale. Test-retest reliability is satisfactory, and the scale correlates satisfactorily with other methods of assessing the same variable such as a questionnaire, Likert scale interview assessments, and ratings from a story-completion technique. Discriminant validity was indicated by low relationships found with such variables as intelligence and social desirability.

### Instructions

Parents were given the following instructions by the investigators for the completion of the scale:

"The following scale investigates the way which certain important events in our society affects different people. Each item consists of a pair of alternative lettered A or B (and only one) which you strongly believe to be the case as far as you're concerned. Be sure to select the one you actually believe to be more true, rather than the one you think you should choose, or the one you would like to be true. This is a measure of personal belief; obviously there are no right or wrong answers.

Please answer these items carefully, but do not spend too much time on any one item. Also try to respond to each item independently when making your choice; do not be influenced by your previous choices. Simply underline your choice of item A or B for each of the numbered statements."

### Procedure

Table 2 presents a descriptive summary of the procedures employed in this study.

To assure uniform procedures, all investigators were asked to participate in a mini-workshop prior to the study. There they were asked to rate several "parent-models" using the Behavior Observation of Anxiety form as they would during the intake and feedback sessions with the parent. For example, the "parent-model" was asked to play the role of a parent coming in to the evaluation site for the intake interview. As an investigator interviewed the parent, each of the

Table 2

A Descriptive Summary of Procedures Employed in this Study

---

I. Intake Interview:

- A. Investigator informed parent of reason the student was referred and obtained identifying and relevant information about the student.
- B. Investigator flipped coin to determine whether mother or father would be asked to participate in the study if both parents came to the site.
- C. The participating parent was asked to participate in the study and to sign the Parental Consent form.
- D. Parent was asked to complete the Parents' Judgment Regarding A Particular Child instrument, and the Rotter's I-E Scale.
- E. Parent was observed during the interview. Investigator completed the Timed Behavior Checklist.

II. Student's Evaluation:

- A. Student was given standard psychological evaluation by Investigator.
- B. The report of psychological findings were written.

III. Feedback Interview:

- A. Parent returned to the site and was given feedback of psychological results.
  - B. Parent was asked to complete the Parents' Judgment Regarding A Particular Child instrument for the second time.
  - C. Parent was observed during the interview. Investigator completed the Timed Behavior Checklist.
-

remaining investigators observed the parent and simply checked the listed behaviors on the Timed Behavioral Checklist that were emitted by the parent during the practice interview. After each practice observation period, the ratings of the investigators were compared and discussed by the group. The purpose of the workshop was to ascertain inter-rater reliability and the competent use of the behavior observation instrument by all of the investigators.

The Intake Interview: When parents came to the investigator for the intake interview, the following standard instructions were given:

"A study, designed to measure parents' attitudes toward their children, is being conducted by one of our district psychologists. The purpose of the study is to determine how parents feel about their child that is referred for a psychological evaluation. I am asking that you take five minutes to fill out two questionnaire forms now, and then we will discuss the reasons your child was referred and the specific aspects about your child's behavior and performance in school that concern you."

If both the mother and father came to the site for the intake interview, the investigator was asked to flip a coin to determine whether a male or female parent would be asked to participate in the study. This parent was asked to sign a consent form (See Figure 2) and then asked to complete the Parents' Judgment Regarding a Particular Child Questionnaire form. Afterwhich, the participating parent completed the Rotter's I-E Scale. Immediately after the interview, the investigator completed the Behavior Observation of Anxiety form, noting the parent's behavior during the session. After the student was evaluated by the investigator in the standard manner, parents returned to the site for feedback of psychological results. The participating parent was then asked to complete the Parents'

Judgment Regarding a Particular Child questionnaire form. After the session, the investigator completed the Behavior Observation of Anxiety form.

The Student's Evaluation: The referred student was evaluated in the standard manner; an appropriate battery of psychological tests was administered to the child and the standard Child Study Report of psychological findings were written.

Feedback Interview: When the parents returned to the investigator for feedback information regarding the findings of the psychological evaluation, the investigator appraised the parent of the student's overall strengths and weaknesses and stated the recommended change, if any, in the student's educational program.

For the purpose of the present study, feedback of psychological results were regarded on a continuum from very positive (++), to very negative (--) indicating that a change in educational program is recommended or that intervention by an ancillary staff members, such as the school social worker or guidance counselor or referral to an outside agency is advised (See Table 3).

Positive Feedback: Feedback of results was considered positive when parents were told that:

1. (++) The child is identified as academically gifted. (The child possesses talents, abilities and accomplishments that allow him to excel consistently and who required qualitatively differentiated educational programs and services.)

2. (+) The child is an overachiever. (The child is assessed as being capable of functioning intellectually in the average range,

but is achieving academically above his or her present grade level.);  
or

The child is functioning academically according to assessed mental ability and that a change in regular grade placement is not needed. (There were no measurable signs of mental retardation, emotional disturbance, or learning disability.)

Negative Feedback: Feedback of results was considered negative when parents are told that:

1. (--) The child is eligible for a special education program such as: trainable mentally handicapped or for the seriously socially maladjusted or emotionally handicapped.

2. (-) The child is eligible for a special education program such as: educable mentally handicapped or for the emotionally handicapped.

The investigator then asked the parent to complete the Parents' Judgment Regarding a Particular Scale.

The following standard instructions were given:

"Because of the nature of the study to assess parents' attitudes, the district psychologist has asked that each parent who completed the questionnaire during the intake interview, complete the same questionnaire during this session. It is necessary that the same parent complete the scale twice so that we will have two measures to compare. Your patient is appreciated."

The parents were given feedback of psychological evaluation by the investigators. A description of the categories of feedback and their frequency is shown in Table 3. Examination of Table 3 shows a greater proportion of negative feedback given, as compared to very positive, positive, and very negative feedback to this sample of subjects.

Table 3  
Feedback of Psychological Results

---

	++	+	-	--
n	4	41	81	31
Relative Frequency	4.4	25.6	50.6	19.4

---

Mean = 2.150

Standard Deviation = 0.779



To test the eight null hypotheses of this investigation, analysis of variance and factorial analysis of variance were employed. In addition, a repeated measures randomized block design was used. The Scheffe' (1959) procedure was used to determine which differences in pairs of means were associated when overall statistically significant findings were obtained.

## CHAPTER IV

### RESULTS

Generally, the eight null hypotheses were sequentially examined via an overall factorial experimental design. To enhance clarity, null hypotheses one, two, and three were examined concurrently, as were null hypotheses four, five, and six. Null hypotheses seven and eight were examined independently.

Data obtained on the pretest and posttest by parents on an assessment of parental attitudes toward their children, was employed as the dependent variable in the first three research hypotheses where the independent variables examined were feedback, sex of the parent and sex of the children, respectively. A 3-way analysis of variance model was used to examine the pre-test data and statistically significant 3-way interaction was found ( $p < 0.05$ ). A repeated measures randomized block design was then employed. Interaction was graphed and the Tukey HSD test was used to investigate all possible comparisons among the means.

Data obtained on the pre- and post-test by parents on an assessment of behavioral observations of anxiety was the dependent variable employed in hypotheses four, five and six where the variables of feedback, sex of parent and sex of child were the independent measures. Data obtained on the checklist pretest was analyzed by a 3-way analysis of variance model. Since none of the interaction or main effects/terms was statistically significant ( $p < 0.05$ ), the post-test data

was examined via a 3-way analysis of variance model. The Scheffe' Test was employed to pinpoint which differences in the pairs of main scores were associated with the statistically significant findings of the post-test data.

Hypotheses seven and eight investigated data obtained by parents on the Rotter I-E Scale, on the parental attitude questionnaire and on the behavioral observation of anxiety checklist. A 2-way analysis of variance model was employed and the Tukey HSD test was used to test the possible comparisons of the obtained means.

#### Results Related to Hypotheses One, Two and Three

To test the first three hypotheses, a 3-way analysis of variance test was performed on the pre-test data obtained on the parental attitude questionnaire. Table 4 presents the central tendency and dispersion of pre-test scores for the parental attitude questionnaire for the feedback condition, by the sex of the parent and by the sex of the child.

The ANOVA table for the 3-way ANOVA run on the pre-test data is found in Table 5. Significant interaction ( $p < 0.05$ ) was found for the feedback condition, for sex of child, between sex of parent and sex of child and between feedback, sex of child and sex of parent.

For the purposes of analyses, the data obtained from the parental attitude questionnaire was categorized into thirteen groups. The one hundred and sixty participating parents were comprised of male and female parents of male and female children. Each parent received feedback of psychological test results. This feedback was classified as very negative, negative, positive, and very positive. Thus, there

Table 4

Central Tendency and Dispersion of Pre-test Scores  
 Obtained on the Parental Attitude Questionnaire for the  
 Feedback Conditions, by Sex of Parent and by Sex of Child

<u>Feedback:</u>	N	$\bar{X}$	S
Very Negative	31	106.32	16.80
Negative	81	123.83	17.10
Positive	41	123.24	22.32
Very Positive	7	145.00	7.00
Total:	160		

---

<u>Sex of Parent:</u>	N	$\bar{X}$	S
Male	48	121.71	22.41
Female	112	121.00	19.00
Total:	160		

---

<u>Sex of Child:</u>	N	$\bar{X}$	S
Male	81	116.53	21.06
Female	79	126.01	16.76
Total:	160		

Table 5  
 Three Dimensional ANOVA for Pre-test  
 Parental Judgment Questionnaire Scores

Source	df	SS	MS	F
Feedback	3	11035.480	3678.49	12.47*
Sex of Parent	1	0.164	0.16	0.00
Sex of Child	1	1734.363	1734.36	5.88*
Feedback X Sex of Parent	3	1519.803	506.60	1.72
Feedback X Sex of Child	2	890.273	445.14	1.51
Sex of Parent X Sex of Child	1	2015.316	2015.32	6.83*
Feedback X Sex of Child X Sex of Parent	1	3888.277	3888.28	13.19*
Within	146	43054.977	294.90	
Total	158	63171.965		

\*p < 0.05

were sixteen resulting groups for all possibilities, i.e., four categories of feedback, two categories for the sex of parent, and two categories for the sex of child of 16 possible groups. However, there were two group categories for which there were no subjects. There were no male parents of female children who received very negative feedback, or male parents of male children who received very positive feedback. There was one group for which there was only one subject (a female parent of a male child who received very positive feedback). This group was dropped from the analysis because the analysis of variance model compares individual to group scores and in this instance individual and group would be one in the same. Table 6 presents a description of the thirteen groups that were analyzed. Examination of Table 6 shows that the group comprised of female parents of female children who received negative feedback of results had the largest number of subjects ( $N = 31$ ). Conversely, there were three male parents of female child who received very positive feedback of results, thus constituting the smallest group that was analyzed.

Since the 3-way interaction was statistically significant ( $p < 0.05$ ), the pre-test means obtained on the parental attitude questionnaire by the thirteen groups of parents were then graphed to facilitate the determination of causal influence. This graph is presented in Figure 1. As noted in the graph, the potential cause of the significant 3-way interaction was the crossing of a male parent and a male child with a female parent and a female child, and with a male parent and a male child between negative and positive

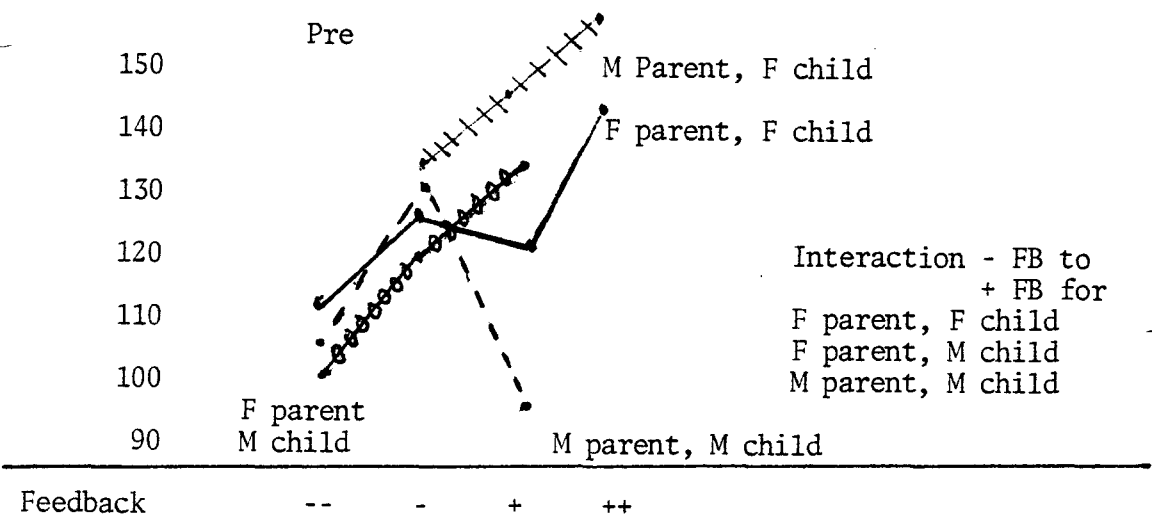
Table 6

Description of Groups of Parents Analyzed by Data Obtained  
From The Parental Judgment Questionnaire Instrument

Group	Sex of Parent	Sex of Child	Type Of Feedback	N
1	Female	Female	Very Negative	11
2	Female	Female	Negative	31
3	Female	Female	Positive	17
4	Female	Female	Very Positive	3
5	Female	Male	Very Negative	11
6	Female	Male	Negative	24
7	Female	Male	Positive	14
8	Male	Female	Negative	9
9	Male	Female	Positive	5
10	Male	Female	Very Positive	3
11	Male	Male	Very Negative	9
12	Male	Male	Negative	17
13	Male	Male	Positive	5
Total				159*

Figure 1

Interaction Graphing of Feedback, Sex of Parent and Sex of Child for the Pretest Data Obtained on the Parental Attitude Questionnaire





feedback conditions. That is to say, that these subgroups obtained statistically significant different pretest versus posttest means on the parental judgement questionnaire as a result of feedback of results.

Given this significant 3-way interaction ( $p < 0.05$ ), a repeated measures randomized block design was then employed. The summary table is presented in Table 7. Examination of the table noted statistically significant first-order interactions ( $p < 0.05$ ); therefore, comparisons among simple-effects means were needed to interpret the data. Presented in Table 8 are the cell means obtained by the groups on the parental attitude questionnaire.

The Tukey HSD (honestly significant difference) posteriori test was employed to make all possible pairwise comparisons among means. The resulting data is presented in Table 9. Given statistical significance, there were 13 testings of Hypothesis One. For all very negative feedback groups, all three pre-test means exceeded the post-test means with only one of the three groups (i.e., the female parent and female children subgroup) being statistically significant ( $p < 0.05$ ). For all negative feedback groups, all four pre-test means exceeded the post-test means, with only two (i.e., the male parent, female child, and the male parent, male child subgroups) being statistically significant ( $p < 0.05$ ). For all positive feedback groups, the post-test means exceeded the pre-test means, but none was statistically significant. For the very positive group, the post-test means exceeded the pre-test means for the female parent and female child subgroups and the pre-test means exceeded the post-test

Table 7

Repeated Measures Summary Table for the Pre- and Post-Test Scores Obtained on the Parental Judgment Questionnaire Instrument

Source	df	SS	MS	F
Pre-Post	1	2858675.95	2858675.95	6163.67*
Group	12	45404.93	3783.74	8.16*
Within	146	67713.98	463.79	
PJQ Instrument	1	452.18	452.18	5.16*
PJQ by Group	12	3905.67	325.47	3.72*
Within	146	12782.30	87.55	

\*p < 0.05

Table 8

## Group Cell Mean Scores for the Parental Attitude Questionnaire

Group		1	2	3	4	5	6
Mean Scores:	Pre-Test	114.45	125.65	120.53	139.22	100.00	118.95
	Post-Test	101.18	120.00	126.88	144.53	90.27	117.16
Marginal Scores:		107.82	120.82	123.70	141.83	95.14	118.06
Standard Deviations:	Pre-Test	10.48	16.75	22.69	2.30	15.59	16.86
	Post-Test	11.08	16.20	14.55	7.02	18.06	13.75

## Group

7	8	9	10	11	12	13	Marginal Scores
130.85	131.22	140.00	151.00	104.11	123.47	94.40	121.06
134.50	119.67	141.00	141.67	93.44	114.47	109.80	117.32
132.68	125.44	140.50	146.33	98.78	118.97	102.10	119.19
18.28	9.51	10.39	6.24	21.57	20.23	10.64	
10.12	16.94	10.77	8.08	20.06	24.06	11.56	

Table 9

Paired Comparisons of Pre- and Post-Test Means for the  
Parental Judgment Questionnaire by the Tukey  
HSD (Honestly Significant Difference) Test

Groups		Feedback	$\bar{X}$ Scores		Difference	Tukey HSD Scores
Parent	Child		Pre	Post		
Female	Female	--	114.45	101.18	13.27*	3.70*
Female	Female	-	125.00	120.00	5.64	6.22
Female	Female	+	120.00	126.00	6.36	8.36
Female	Female	++	139.00	144.00	5.00	19.98
Female	Male	--	100.00	90.00	10.00	10.43
Female	Male	-	118.00	117.00	1.79	7.067
Female	Male	+	130.00	134.00	3.65	9.25
Male	Female	-	131.22	119.66	11.56*	11.50*
Male	Female	+	140.00	141.00	3.00	15.48
Male	Female	++	151.00	141.00	9.34	19.98
Male	Male	--	104.00	93.00	10.67	11.54
Male	Male	-	123.47	114.47	9.00*	8.40*
Male	Male	+	94.00	109.00	5.40	15.48

\*p < 0.01

means for the male parent, female child subgroup.

Overall, the trends indicated that the pre-test means exceeded the post-test means for the very negative and negative feedback groups with the converse being the case for the positive and very positive feedback groups. Only three of the thirteen Tukey HSD's were statistically significant ( $p < 0.05$ ), however, 3 of the 7 negative and very negative feedback groups were statistically significant.

Null hypothesis one, which predicted that there was no significant difference in the mean scores obtained on a parental attitude questionnaire by parents who received positive versus negative feedback of results was rejected as indicated by the generally non-significant post-hoc Tukey HSD; the very negative and negative feedback condition pairs of mean scores were statistically significant.

Null hypothesis two, which predicted that there was no significant difference in the mean scores obtained on a parental attitude questionnaire by male versus female parents was not rejected because there were no significant trends noted via the Tukey HSD analysis for either male or female parents.

Null hypothesis three, which predicted that there was no significant difference in the mean scores obtained on a parental attitude questionnaire by parents of male versus female children was also not rejected since there were no significant trends for the differences of sex of child, as identified via Tukey HSD analysis.

#### Results Related to Hypotheses Four, Five and Six

Hypotheses four, five and six examined data obtained on the

behavioral observation of anxiety checklist. Presented in Appendix B are the descriptive statistics obtained, showing a frequency distribution of pre- and posttest results.

To examine the pretest scores obtained, a 3-way ANOVA test was employed. Presented in Table 10 is the ANOVA summary table. As noted in the table, the interaction and the main effects among the variables were not statistically significant ( $p < 0.05$ ). The posttest scores were then analyzed via a 3-way ANOVA. Table 11 presents the resulting ANOVA summary table. Significant simple effects were found for the feedback condition and for sex of parent but interaction and main effects were not statistically significant. The Scheffe' Method was then used to make all possible comparisons among the posttest means for the feedback condition. Presented in Table 12 are the mean differences of the posttest scores from the behavioral observation of anxiety checklist. Statistically significant findings were revealed for the very negative and the positive feedback groups ( $p < 0.05$ ) via the Scheffe' procedure (See Table 13).

Null hypothesis four, which predicted that there was no significant difference in the mean scores on a behavioral observation of anxiety checklist by parents who received positive versus negative feedback of results was rejected for there were statistically significant simple effects for the feedback conditions via 3-way ANOVA on posttest data. The Scheffe' procedure did, however, pinpoint significant posttest mean differences between the very negative and the positive feedback conditions.

Null hypothesis five which predicted that there was no

Table 10  
 Three-Way ANOVA for the Pre-test  
 Behavioral Observation of Anxiety Checklist Scores

Source	df	SS	MS	F
Feedback	3	35.328	11.776	2.172
Sex of Parent	1	6.117	6.117	1.128
Sex of Child	1	0.071	0.071	0.013
Feedback X Sex of Parent	6	35.818	5.970	1.101
Feedback X Sex of Child	3	12.336	4.112	0.758
Sex of Parent X Sex of Child	2	12.092	6.046	1.115
Feedback X Sex of Child X Sex of Parent	1	3.126	3.126	0.577
Within	146	0.693	0.693	0.128
Total	158	869.660	5.504	

Table 11  
 Three-Way ANOVA for the Post-Test  
 Behavioral Observation of Anxiety Checklist Scores

Source	df	SS	MS	F
Feedback	3	114.314	38.105	9.174*
Sex of Parent	1	18.810	18.810	4.529*
Sex of Child	1	0.028	0.028	0.007
Feedback X Sex of Parent	6	20.168	3.367	0.809
Feedback X Sex of Child	3	2.578	0.859	0.207
Sex of Parent X Sex of Child	2	17.526	0.763	2.110
Feedback X Sex of Child X Sex of Parent	1	0.0006	0.006	0.001
Within	146	606.385	4.153	0.334
Total	158	761.094	4.817	3.104



Table 12

Description of the Central Tendency and Dispersion of  
Post-test Mean Scores Obtained on the Behavioral Observation  
of Anxiety Checklist

Variables	N	Post Test Mean Scores
<u>Feedback:</u>		
Very Negative	31	-13.74
Negative	81	2.75
Positive	41	1.98
Very Positive	6	20.31
<u>Sex of Parent:</u>		
Female	111	-0.45
Male	48	1.04
<u>Sex of Child:</u>		
Female	79	3.50
Male	80	-3.45

Grand Mean = 121.07

Table 13

Scheffe' Comparisons for all Mean Differences of the Behavioral  
Observation of Anxiety Checklist Post-Test Scores

Condition	F Values for Feedback Conditions**		
	Negative	Positive	Very Positive
Very Negative	0.65	1.79*	0.13
Negative		0.60	0.00
Positive			0.14

\* $p < 0.05$

\*\*Table values for df 12 and 146 ( $p < 0.05$ ) = 2.31

significant difference in the mean scores on a behavioral observation of anxiety checklist by male versus female parents was not rejected since significant simple effects were found via the 3-way ANOVA on the posttest data. There was no need to run a post-hoc comparison for the sex of the parents since this was merely a dichotomous division between male and female. However, there was a trend noted suggesting that female parents had slightly higher means obtained on the posttest behavioral observation checklist as compared with male parents on the posttest.

Null hypothesis six, which predicted that there was no significant difference in the mean scores on a behavioral observation of anxiety checklist by parents of male versus female children was also not rejected.

#### Results Related to Hypothesis Seven

Presented in Appendix C are descriptive statistics for data obtained by parents defined as introverts, both introverts and extroverts and extroverts on the Rotter's I-E Scale. Examination of Appendix C shows the divisions in the data, with extremely low scores  $\leq 10$ , constituting 32% of the range of obtained scores; extremely high scores  $\leq 16$ , constituting 31% of the scores; and both (i.e., score ranging from 11 to 15, constituting 37% of the scores. The mean scores by the parents on the Parental Judgment Questionnaire, under the four feedback conditions are presented in Table 14.

Data was analyzed by an Analysis of Variance model as shown in Table 15. Significant interaction ( $p < 0.05$ ) was noted. Since the assumption of independent main effects per the interaction testing

Table 14

Description of the Central Tendency and Dispersion  
of Scores Obtained on the Parental Judgment Questionnaire  
by Locus of Control Groups

Feedback	Locus of Control								
	Introverts			Extroverts			Both		
	N	$\bar{X}$	S	N	$\bar{X}$	S	N	$\bar{X}$	S
Very Negative	4	96.50	14.62	34	99.21	14.17	24	103.50	22.09
Negative	56	124.84	15.77	44	115.43	21.15	62	121.21	15.07
Positive	34	134.21	14.32	20	129.75	15.93	28	113.89	20.37
Very Positive	8	146.80	7.01	2	144.50	9.19	4	140.50	3.70

Table 15

ANOVA of Parental Judgment Questionnaire for  
Locus of Control Group and Feedback Conditions

Source	df	SS	MS	F
Locus of Control Group	2	3789.14	1894.57	6.59*
Feedback	3	25152.08	8384.03	29.17*
Interaction	6	5489.19	914.87	3.18
Within	308	88515.31	3974.34	
Total	319	122945.72		

\*p < 0.05

was not met; simple effects were thus investigated. Presented in Table 16 are the simple effects ANOVA for the feedback conditions for introverts. The Scheffe' procedure was employed to determine which differences in the pairs of means were associated with the overall statistically significant findings. A summary of the findings are presented in Table 17. Statistically significant findings ( $p < 0.05$ ) were found between parents defined as introverts, who received negative and very negative, positive and very negative, very negative and very positive, and negative and very positive feedback of results. To examine the data obtained by both introverts and extroverts under the feedback conditions, ANOVA was employed (See Table 18). Since the simple effects for the group defined as both introverts, and extroverts, was statistically significant for the feedback conditions, the Scheffe' procedure was used to test all possible mean comparisons. The mean comparisons between very negative, negative, and very positive were found to be statistically significant ( $p < 0.05$ ). Furthermore, the mean comparisons per the Scheffe' procedure between positive and very positive were statistically significant ( $p < 0.05$ ) (See Table 19). The simple effects for the extroverts group under the feedback conditions were then systematically investigated. Table 20 presents the simple effects ANOVA for the extrovert group. The means were statistically different ( $p < 0.05$ ).

The Scheffe' procedure was utilized to isolate which differences in the pairs of means were associated with the overall statistically significant findings. Presented in Table 21 is a

Table 16

Simple Effects ANOVA for the Feedback Conditions for Introverts

Source	df	SS	MS	F
Among	3	8404.68	2801.56	12.81*
Within	98	21424.81	218.62	
Total	101	29829.49		

\* $p < 0.05$

The means were statistically different ( $p < 0.05$ ).

Table 17

Scheffe' Comparisons for All Mean Differences of  
Introverts for Feedback Conditions\*\*

Condition	Negative	Positive	Very Positive
Very Negative	4.54*	7.74*	9.83*
Negative		2.68	4.88*
Positive			1.41

\* $p < 0.05$

\*\*Tabled values for df 3- and 98 ( $p < 0.05$ ) = 2.20



Table 18

Simple Effects ANOVA of Feedback Conditions for  
Both Introverts and Extroverts

Source	df	SS	MS	F
Among	3	7926.08	2642.03	8.29*
Within	114	36317.34	318.57	
Total	117	44243.42		

\*p < 0.05

Table 19

Scheffe' Comparisons for All Mean Differences of Both  
Introvert and Extrovert Groups for the Feedback Conditions\*\*

Condition	Negative	Positive	Very Positive
Very Negative	5.47*	1.41	4.94*
Negative		1.21	1.44
Positive			2.55*

\* $p < 0.05$

\*\*Tabled values for df 3 and 114 ( $p < 0.05$ ) = 2.69.

Table 20

Simple Effects ANOVA of Feedback Conditions for Extroverts

Source	df	SS	MS	F
Among	3	14308.14	4769.38	14.88*
Within	96	30780.90	320.63	
Total	99	45089.04		

\*p < 0.05

Table 21

Scheffe' Comparisons for All Mean Differences for the  
Extrovert Group for the Feedback Conditions\*\*

Condition	Negative	Positive	Very Positive
Very Negative	5.47*	12.12*	4.02*
Negative		3.05	1.69
Positive			0.41

\* $p < 0.05$

\*\*Tabled values for  $df$  3 and 96 ( $p < 0.05$ ) = 3.94.

summary of these findings. The comparisons of the very negative feedback versus the other three types of feedback, were statistically significant per the Scheffe' procedure, for the three groups. The mean of very negative was statistically lower ( $p < 0.05$ ) when compared to negative, positive, and very positive. A test of simple effects for very negative feedback conditions was conducted via the analysis of variance test. However, the obtained value was not statistically significant ( $p < 0.05$ ) for the very negative feedback condition for the three parent groups. The simple effects for the negative feedback condition and the extroverts was then tested via the ANOVA test. A summary of the data is found on Table 22. Since the simple effects of the negative feedback condition for the extroverts was statistically significant, the Scheffe' procedure was employed to test all possible mean comparisons between the Introverts and Both groups, the Introvert and Extroverts group and between the Both and the Extroverts groups. Examination of Table 23 notes that none of the mean comparisons for these groups were statistically significant. The Scheffe' procedure is among the most statistically conservative measure in this instance; however, the differences in mean comparisons for the negative feedback condition could not be pinpointed.

Presented in Table 24 is the ANOVA summary of data for the positive feedback condition utilized to determine simple effects. Means for the positive feedback condition were statistically significant ( $p < 0.05$ ). The Scheffe' procedure was used to test all mean differences for the three locus of control groups (Introverts, Both, and Extroverts). Statistically significant differences in means were

Table 22

Simple Effects ANOVA of Negative Feedback Condition  
for Parent Groups of Varying Loci of Control

Source	df	SS	MS	F
Among	2	2191.80	1095.90	3.73*
Within	159	46763.42	294.11	
Total	161	48955.22		

\*p < 0.05

Table 23

Scheffe' Comparisons for All Mean Differences of  
of the Negative Feedback Conditions for  
the Introvert, Both, and Extrovert Groups\*

Groups	Both	Extroverts
Introverts	0.75	3.76
Both		1.42

\*Tabled values for df 2, and 159 ( $p < 0.05$ ) = 3.90.

Table 24

Simple Effects ANOVA of the Positive Feedback Condition  
for Parent Groups of Varying Loci Control

Source	df	SS	MS	F
Among	2	6676.68	3338.24	11.57*
Within	79	22787.77	288.45	
Total	81	29464.25		

\*p < 0.05



obtained between the Introverts and Both groups and between the Extroverts and the Both groups ( $p < 0.05$ ) for the positive feedback conditions (See Table 25).

The simple effects for the very positive feedback condition for the varying loci of control groups were tested and data from the ANOVA is presented in Table 26. No significant differences between the means were found via ANOVA for the very positive group.

In summary, the testing of the seventh null hypothesis demonstrated that there was significant interaction found as a result of the ANOVA test for the means obtained on the Parental Judgment Questionnaire for the feedback conditions by parents of varying loci of control. The simple effects were then used to test the hypothesis. That is to say that for the simple effects of feedback conditions for the Introvert group, there was a significant overall difference ( $p < 0.05$ ) in the means by type of feedback. The Scheffe' procedure revealed statistically significant findings for introverts under the four feedback conditions. The simple effects of the feedback conditions for the group defined as Both, Introvert and Extrovert, via ANOVA, also revealed statistically significant findings ( $p < 0.05$ ). Further analysis by the Scheffe' procedure revealed significant findings for the very negative, negative and very positive feedback conditions for the Extrovert group. The simple effects for the feedback conditions for the three groups (Introverts, Both, and Extroverts) were then systematically analyzed. Differences were found for negative and the positive feedback conditions only. The Scheffe' procedure to test the mean differences for the negative feedback

Table 25

Scheffe' Comparisons for All Mean Differences of the  
Positive Feedback Condition for the Introvert,  
Both, and Extrovert Groups\*\*

Group	Both	Extroverts
Introvert	10.22*	0.43
Both		4.84*

\* $p < 0.05$

\*\*Tabled values for  $df$  2, and 79 ( $p < 0.05$ ) = 3.96.

Table 26

Simple Effects ANOVA of the Very Positive Feedback  
Condition for Parent Groups of Varying Loci of Control

Source	df	SS	MS	F
Among	2	80.86	40.43	0.95
Within	11	469.50	42.68	
Total	13	550.36		

condition did not pinpoint where the differences were found between the groups. Differences in means were found via the Scheffe' procedure for the positive feedback condition between the Introvert and the Both group and between the Both group and the Extrovert group. Therefore, the seventh null hypothesis was rejected indicating that there are significant differences in the mean scores obtained on a parental attitude questionnaire, by parents who have a varying locus of control when they have received graditions of positive or negative feedback of results.

#### Results Related to Hypothesis Eight

The descriptive statistics for the locus of control groups obtained on the Behavioral Observation of Anxiety Checklist for the feedback conditions is presented in Table 27. To test the hypothesis, an Analysis of Variance test was conducted. As was suggested in the descriptive narrative, there was a statistically significant interaction ( $p < 0.05$ ) (See Table 28). Since the assumption of independent main effects per the interaction was met, the main effects were investigated (See Table 29). The Scheffe' procedure was used to test the main effects for the mean differences of the locus of control groups. Statistically significant findings were noted between the Introvert and the Extrovert groups only (See Table 30). The main effects for the feedback conditions were then systematically examined. As noted on Table 30, findings for the four feedback conditions for the locus of control groups on the Behavioral Observation of Anxiety Checklist revealed no statistically significant difference between the means via the Scheffe' procedure. Therefore, the eighth null

Table 27

Description of the Central Tendency and Dispersion  
of Scores Obtained on the Behavioral Observation of  
Anxiety Checklist by Locus of Control Groups

Feedback	Locus of Control								
	Introverts			Extroverts			Both		
	N	$\bar{X}$	S	N	$\bar{X}$	S	N	$\bar{X}$	S
Very Negative	4	4.50	1.29	34	5.29	2.04	24	4.83	2.02
Negative	56	4.07	2.38	44	5.61	2.37	62	4.39	1.97
Positive	34	2.76	2.32	20	4.35	1.93	28	3.82	1.79
Very Positive	8	3.00	2.33	2	7.50	0.71	4	5.00	3.16

Table 28

ANOVA of the Behavioral Observation of Anxiety Checklist  
for Locus of Control Groups and Feedback Conditions

Source	df	SS	MS	F
Locus of Control Groups	2	113.06	56.53	12.03*
Feedback	3	62.91	20.97	4.46*
Interaction	6	26.51	4.42	0.94
Within	308	239.28	21.75	
Total	319	451.76		

\*p < 0.05

Table 29  
Description of Main Effects for Locus of Control Groups

Groups	Locus of Control Groups		
	N	$\bar{X}$	S
Introverts	102	3.57	2.39
Both	118	4.36	2.02
Extroverts	100	5.29	2.21

Table 30

Scheffe' Comparisons for All Mean Differences for  
the Locus of Control Groups\*\*

Groups	Both	Extrovert
Introvert	0.72	3.40*
Both		0.99

\* $p < 0.05$

\*\*Tabled values for df 2, and 308 ( $p < 0.05$ ) = 3.03.



hypothesis was not rejected, indicating that there were no significant differences in the mean scores obtained on the Behavioral Observation of Anxiety Checklist by parents who have a varying locus of control when they have received graditions of positive to negative feedback of results.

## CHAPTER V

### DISCUSSION

Eight null hypotheses were examined in the present study. An analysis and overall synthesis of the findings was presented in Chapter IV. The conclusions drawn here are based upon these additional analytic findings.

Research studies by Dana and Graham (1976), et.al., indicated that how one reacts to feedback is influenced by the kind of feedback, and by a variety of relevant subject variables. Of the variables examined in the present study (namely, the type of feedback (+,-) given to parents concerning their child's performance on a psychological evaluation by a school psychologist, the sex of the parent and the sex of the child and locus of control), it was concluded that feedback is the most important variable to be considered in the interaction of the school psychologist with the parent. Positive feedback tended not to alter the parent's perception of the child, but it did tend to result in observably anxious behavior. Negative feedback, on the other hand, tended to abate the positive parental perception of the child and tended to result in higher overtly anxious behavior in the parent. These findings correlated in part with findings by Blue (1976), and Morris and Fulmer (1976) who found that negative feedback aroused worry in high-test-importance situations.

In the present study, the sex of the parent was also found to

be an important variable to be considered in the discussions of the school psychologist and the parent. Female parents tended to exhibit more overtly anxious behavior than did male parents. Similarly, Price-Bonham and Addison (1978) reported that mothers, upon learning that their child was mentally handicapped, exhibit more overtly emotional reactions than did fathers.

The large majority of effort in regard to the counseling of parents and the study of parental attitudes has been directed toward the mother; however, Levine (1966) concluded that a major effort should be made to include fathers in the consideration, particularly if the child is male. He further concluded that there is a necessity for studying the nature of communication to fathers and mothers of children diagnosed as mentally retarded based on the sex of the child. However, the sex of the child in the present study, was not found to be an important variable to be considered in the discussions of the school psychologist and the parents of the child.

The locus-of-control research literature has suggested that the tendency to attribute responsibility of behavior to oneself instead of the environment predicts consistencies in behavior. One's attribution may affect the direction of one's behavior (McKeachie, 1976). Wittrock (1978) reported that perceptions of internal causes increases emotional responses. It can be concluded that parents who had varying loci of control (i.e., external, internal and both external and internal groups of parents) were affected by the nature of the feedback. These parents had less positive perceptions of their child when feedback was negative and more positive perception when feedback was

positive. There was no significant changes in the levels of anxiety emitted by the parents, however, as a result of feedback of psychological findings.

#### Discussion Related to Hypotheses One, Two and Three

The Parental Judgment Questionnaire was employed to obtain an assessment of parent's attitudes toward their child referred for a psychological evaluation. An assessment was obtained by parents before they received feedback of results and after they received feedback of results. This instrument was found to be sensitive enough to isolate differences in pre- and post-test mean scores.

The independent variable that was investigated in null hypothesis one was that of feedback. Feedback of results was defined as very negative, negative, positive, and very positive. In the present study, the nature of feedback of results was found to be an important variable, especially when the feedback was negative, and very negative. Unfortunately, there was no published literature that dealt specifically with the effects of feedback of results of a psychological evaluation to parents. Logically, it would seem that school psychologists should be made aware of the factors which effect parent's perceptions of their children, through training and inservice. The indications from the present study suggest that school psychologists should be particularly sensitive in cases where there is a higher probability of adverse parent-child relationships. Knowledge of the parents' attitude toward the child who is referred for a psychological evaluation can also be valuable since the feedback given can serve to reinforce existing attitudes, particularly when the attitudes are negative.

Cronbach, et.al., (1977) noted that an attitude developed in one situation generates to a class of similar situation. Parents' attitudes toward their children shape their behavior and future expectations (Robinson, 1976).

In null hypothesis two, the independent variable investigated was the sex of the parent. The literature cited differences in the reactions of mothers and fathers of children diagnosed as having special problems (Levine, 1966; Price-Bonham and Addison, 1978). In the present study, the sex of the parent was found to be a significant variable, as mothers tended to exhibit a change in attitude toward their child referred as a result of feedback of results. This finding is consistent with the existing literature that addresses the issue of how information has an impact on attitude. It has been reported that one of the most influential sources of individual differences in influenceability is sex. A long history of research in this area concludes that women's attitudes are more readily influenced than are those of men (McGuire, 1969).

Given the fact that there were differences in the reactions of fathers and mothers to feedback of results in this study, more research with information feedback of psychological results and the sex of parents is needed to confirm the present exploratory findings. These findings would imply that differences between the reactions and perceptions of mothers and fathers do exist and that the school psychologist may alter these parental perceptions when feedback is given, particularly female parents.

The sex of the child referred for the psychological evaluation

was the independent variable examined in null hypothesis three. Parental attitudes were not significantly altered after feedback of results were given, based upon the sex of the child referred in the present study. The indications are that the sex of the child is not an important factor to be considered in the discussions of the school psychologist and the parents. It would be interesting, however, to validate these findings in studies utilizing parents of different socio-economic status and among White and Spanish parents.

#### Discussion Related to Hypotheses Four, Five and Six

The Behavioral Observation of Anxiety Checklist was employed to assess overtly anxious behavior emitted by parents before and after feedback of psychological results were given.

Null hypothesis four investigated the effects of feedback of results on parent's behavior as assessed by the Behavioral Observation of Anxiety Checklist before and after positive or negative feedback of results was given to parents. Those parents who received very negative and positive feedback demonstrated increased measurable signs of anxiety after feedback was given. These findings suggested that when feedback is very negative and positive, parents were more overtly anxious. This was not the case when feedback was very positive and negative. This trend has not been explored directly in the literature; however, Llewellyn (1974) did explore the relationship between self concepts and the perception of positive and negative feedback and found that positive feedback was correlated with higher post self-concept scores. That is to say that when feedback is positive, one generally feels more positive about one's self and the

converse is true, when feedback is negative. In the present study, parents demonstrated changes in number of overt behavioral signs of anxiety (i.e., knees trembling, voice quivering, clearing of throat) when they were told that results of their child's psychological evaluation was very negative and positive. The present findings suggest a necessity for future research in this area. Specifically, parent's anxiety may be related to their expectations of future success of their child. Those parents who received very negative feedback of results may have shown more overtly anxious behavior as a result of the nature of the feedback and the possibly lower expectations for that child. It is also possible that positive feedback could raise the parent's expectations and thereby increase the level of anxiety. These relationships need to be explored in future research studies.

Null hypothesis five examined the relationship between the sex of the parent and the number of behavioral signs of anxiety emitted by these parents when interviewed by the school psychologist. The null hypothesis predicting that there was no significant difference in the mean scores on a Behavioral Observation of Anxiety Checklist by male and female parents was not rejected; however, there was a trend noted to suggest that female parents had slightly higher post-test means as compared with male parents on the posttest. School psychologists should be aware of the differences in reactions and levels of anxiety emitted by fathers and mothers in intake and feedback sessions, and should attempt to lower levels of anxiety through appropriate counseling.

The independent variable examined in null hypothesis six was sex of the child referred. It was predicted that there was no significant difference in the pretest and posttest scores on the Behavioral Observation of Anxiety Checklist for parents of male versus female children was not rejected. In the present study, the sex of the child was not an important variable when considering the level of observable anxiety by parents in the discussions with the school psychologist.

#### Discussion Related to Hypothesis Seven

Data obtained from the Rotter I-E Scale and from the Parental Judgment Questionnaire by parents who had received very positive, positive, negative, and very negative feedback of results were systematically investigated.

Parents were defined as internal (i.e., if people perceive that they, rather than someone or something else, controls and are responsible for the events which occur in their lives), external (i.e., if people perceive that luck, chance, fate, or powerful others control their destiny), or both (i.e., both internal and external as defined by scores obtained on the Rotter I-E Scale).

Statistically significant findings were found for parents defined as introverts who received very negative, negative, positive, and very positive feedback of results. Statistically significant findings were also found for those parents defined as both on the Rotter I-E Scale across the feedback conditions (i.e., very negative, negative, positive, and very positive feedback). Further analysis revealed significant findings for the extrovert group of parents who



received very negative, negative, and very positive feedback of results. It was, therefore, concluded that feedback of results produces changes in attitudes of parents who have varying loci of control, towards the child who is referred for a psychological evaluation.

#### Discussion Related to Hypothesis Eight

Data obtained from the Rotter I-E Scale and from the Behavioral Observation of Anxiety Checklist was examined in the eighth null hypothesis. There were no significant differences in the mean scores obtained on the Behavioral Observation of Anxiety Checklist by parents who have a varying locus of control when they have received positive versus negative feedback of results. That is to say that varying locus of control groups of parents; namely, the introvert, the extrovert and the both groups, did not emit significantly increased signs of anxiety (i.e., restrained hands, lack of eye contact, speech blocks) when positive versus negative feedbacks were given by the school psychologist.

Several studies cited in the literature have shown a significant relationship between various measures of anxiety and the I-E Scale. Butterfield (1964) found that external control was positively related to intropunitive responses to frustration. External control was also positively related to debilitating anxiety and negatively related to facilitating anxiety. However, the present study did not find such a relationship between observable anxiety and locus of control. Perhaps this result could best be explained by the supposition that parents of varying loci of control did not find the interaction with the school psychologist and the feedback given, anxiety

producing and thereby, tended not to emit increased signs of anxiety.

### Suggestions for Future Research

In recent years there has been an increasing interest in the effects of feedback of information on a person's attitudes and behavior, and in how feedback of information and one's attitude influences one's expectations. The present study investigated the effects of informative feedback on parent's attitudes toward their child who is referred for a psychological evaluation. Of the independent variables that were examined (i.e., feedback, sex of parent and sex of child), feedback of results was found to be the most important variables when considering the discussions of school psychologist and parents; however, more research with feedback of psychological results is needed to confirm present findings. The importance of feedback from the school psychologist was underscored by the present research findings. It has been previously hypothesized that individuals will readily listen to messages which they agree, but may turn away to other things when confronted with a message with which they do not agree (Abelson, 1969). It would have been interesting to have further assessed whether parents exhibited changes in attitudes because the feedback that they received was indeed, consistent with the information that they had already stored about their child or whether cognitive dissonance occurred. A specifically designed open-ended questionnaire to be completed by the parents during the intake interview may yield specific data that could be supplemented by the Parental Judgment Questionnaire. The effects of feedback of results made a significant difference in the observable signs of anxiety demonstrated

by parents. Research should be designed to also explore the effects of feedback on worry. It has been noted that two people may have equally high (or low) expectancies, but attach different degrees of certainty to their judgments, and thus experience differing amounts of worry about the situation (Epstein, 1967). The present study in part examined the effects of feedback on overt signs of anxiety emitted by parents during the pre-test and post-test sessions with the school psychologist. Additional investigations of the relationship between parents' expectancies and resulting worry and anxiety following feedback of psychological findings of their students would be beneficial for school psychologists and educators.

The sex of the parent is another important variable to be considered by the school psychologist when conferring with parents regarding their child's psychological evaluation results. Consistent with the literature, there were trends to suggest that females demonstrated a more significant change in attitudes following feedback of results.

While there was a call for future study in the importance of the sex of the child (Levine, 1966), this variable was not found to be of particular importance.

The instruments employed in this study were the Parental Judgment Questionnaire, the Behavioral Observation of Anxiety Checklist and Rotter's I-E Scale. Continued use of the Parental Judgment Questionnaire and the Rotter's I-E Scale is encouraged. However, an alternative instrument for the Behavioral Observation of Anxiety Checklist should be employed (i.e., a more sensitive instrument specifically designed to

assess anxiety).

The present study employed a sample of parents from a Black, low SES population. Validation of these findings employing a middle and upper SES Black sample of parents, a low and a middle SES sample of Spanish parents, and a low, middle, and upper SES sample of white parents is also needed. A similarly designed study could be conducted in school districts that have middle-class students from diversified ethnic and racial backgrounds and may result in different findings. Parent's reaction to feedback of findings of psychological results may be more varied in middle and upper socioeconomic status families and there may be a larger sample of male parents who are available to interact with the school psychologist. These parents generally may have different expectations and attitudes toward their child who is evaluated. The authority of the school psychologist may be more readily challenged by these parents and consequently may result in less changes in attitude as a result of feedback. A cross-validation of the present finding should prove beneficial.

## CHAPTER VI

### SUMMARY

The purpose of this study was to examine the effects of informative feedback of results of a psychological evaluation on parental attitudes regarding a child referred for such an evaluation. Parents were identified as having an internal or external locus of control, and the differences of attitudinal responses of fathers and mothers toward their sons and daughters were also investigated.

One hundred and sixty parents of elementary school-age children participated in this study. These parents were pre-tested and post-tested on the Parents' Judgment Regarding a Particular Child questionnaire. Investigators (eight certified school psychologists) used the Timed Behavioral Checklist for performance anxiety to rate each parent after the intake interview and after the feedback sessions. Parents also completed Rotter's I-E Scale. For the purposes of the present study, feedback of psychological results was regarded on a continuum from very positive, to very negative, indicated that a change in educational program was recommended for the child. The variables of interest were the type of feedback, the sex of the parent, the sex of the child, and the locus of control of the parent. These variables were analyzed using a 3-way factorial analysis of variance (feedback, sex of parent, sex of child, locus of control) for the parental judgment questionnaire data and the behavioral observation of anxiety data. Significant findings from factorial analysis of variance were

further analyzed via a repeated measures design. Of the four variables analyzed, feedback was found to be the most important variable. The sex of the parent was also found to be an important variable to be considered in the discussions of the school psychologist and the parent in that the female parents tended to exhibit more overtly anxious behavior than did male parents. It was also found that parents who had varying loci of control were differentially affected by the nature of the feedback. Generally, parents had less positive perceptions of their child when feedback was negative and more positive perceptions when feedback was positive.

All things considered, the school psychologist appears to play an important role in effecting changes in parental attitudes toward their children referred for a psychological evaluation.

## REFERENCES

- Abelson, R. P., et.al. (Eds.). Theories of cognitive consistency: A source book. Chicago: Rand McNally, 1968.
- Adams, R., Lerner, L., & Anderson, J. Discussing diagnostic findings with parents. Journal of Learning Disabilities, 1979, 12, 5, 315-319.
- Allen, E. The effect of corrective and signal feedback on academic performance. Dissertation Abstracts International, 1973, 34, 3127.
- Ammons, R. P. Effects of knowledge of performance: A survey and tentative theoretical formulation. Journal of Genetic Psychology, 1956, 54, 279-299.
- Anderson, N. H. Information integration theory applied to attitudes about U. S. presidents. Journal of Educational Psychology, 1973, 64, 1-8.
- Anthony, J., & Benedek, T. Parenthood: Its psychology and psychopathology. New York: Little, Brown, 1970.
- Bandura, A. Principles of behavior modification. New York: Holt, Rinehart and Winston, 1969.
- Barron, F. Artists in making. New York: Seminar Press, 1972.
- Baum, M. H. Some dynamic factors affecting family adjustment to the handicapped child. Exceptional Child, 1962, 28, 387-392.
- Bell, H. A. Educational aspirations of black parents. Ebony, 1979, 68-75.
- Berscheid, E., & Walster, E. Attitude change, part II. Pp. 121-123 in J. Mills (Ed.). Experimental social psychology. New York:

Macmillan, 1969.

- Bilodeau, E. A., & Bilodeau, I. McD. Motor-skills learning. Annual Review of Psychology, 1951, 12, 243-280.
- Blue, T. W. The effect of written and oral student evaluation feedback and selected teacher and student demographic and descriptive variables on the attitudes and ratings of teachers and students. Dissertation Abstracts International, 1976, 37, 3284-3285.
- Breckenridge, R. L. Schedule and information effects of feedback on judged dissimilarity of sebematic patterns. Dissertation Abstracts International, 1973, 34, 2962.
- Brown, J. S. A proposed program of research on psychological feedback (knowledge of results) in the performance of psychomotor tasks. Conference Report 49-2. USAF Air Training Command Human Resources Center, 1949, 81-87.
- Bush, W. J., & Waugh, K. W. Diagnosing learning disabilities. Columbus, Ohio: Charles E. Merrill Publishing Company, 1976.
- Butterfield, E. C. Locus of control, text anxiety, reaction to frustration, and achievement attitudes. Journal of Personality, 1964, 32, 298-311.
- Chigler, E. Down's syndrome. Lexington, Massachusetts: Heath, 1972.
- Crandall, V., Katkovsky, W., & Crandall, V. J. Children's belief in their own control of reinforcements in intellectual-academic achievement situations. Child Development, 1965, 36, 91-109.
- Cronbach, L. J. Educational psychology. New York: Harcourt Brace Jovanovich, Inc., 1977.
- Dana, R. H., & Graham, E. D. Feedback of client-relevant information



- and clinical practice. Journal of Personality Assessment, 1976, 40, 464-469.
- Davis, W. C., & Phares, E. Parental antecedents of internal-external control of reinforcement. Psychological Reports, 1969, 24, 427-436.
- Dollard, J., & Miller, N. E. Personality and psychotherapy. New York: McGraw-Hill, 1950.
- Drews, E. M., et.al. Guidance for the academically talented student. National Education Association Project on the Academically Talented Student and American Personnel and Guidance Association, Washington: Government Printing Office, 1961.
- DuCette, J. Locus of control and levels of aspiration in black and white children. Review of Educational Research, 1972, 42, 493-504.
- Epstein, W. Varieties of perceptual learning. New York: McGraw-Hill, 1967.
- Erez, M. Feedback: A necessary condition for the goal-setting performance relationship. Research Report No. 10, May, 1976, 451-452.
- Erikson, E. H. Growth and crises of the "Healthy personality". In C. Kluckhohn and H. Murray(Eds.), Personality in Nature, Society, and Culture (2nd Ed.) New York: Knopf, 1953.
- Feather, N. T. Valence of outcome and expectation of success in relationship to task difficulty and perceived locus of control. Journal of Personality and Social Psychology, 1967, 7, 372-386.
- Freehill, M. F. Gifted children, their psychology and education. New

- York: Macmillan, 1961.
- Gehlbach, R. D. Individual differences: Implications for instructional theory, research, and innovation. Educational Researcher, 1979, 8-14.
- Gewitz, J. L. Levels of conceptual analysis in environment infant interaction research. Merrill-Palmer Quarterly of Behavior and Development, 1969, 15, 7-47.
- Gill, D. L., & Martens, R. The informational and motivational influence of social reinforcement on motor performance. Journal of Motor Behavior, 1975, 7, 171-182.
- Good, P. The effect of feedback of intelligence test results upon achievement and self-estimates of ability at the sixth grade level. Dissertation Abstracts International, 1972, 31, 3146-3147.
- Gordon, P. L. Insight vs. desensitization in psychotherapy. California: Stanford University Press, 1966.
- Grebow, P. Evaluation: A determinant of parental attitudes in an adult-child interaction. Dissertation Abstracts International, 1971, 72, 287, 109.
- Grossman, F. Brothers and sisters of retarded children: An exploratory study. Syracuse University, 1972.
- Group for the Advancement of Psychiatry. The joys and sorrows of parenthood. New York: Charles Schribner's.
- Gunz, E. J., & Gubrium, J. F. Comparative parental perceptions of a mentally retarded child. American Journal of Mental Deficiency, 1972, 77, 175-180.
- Hays, W. Statistics for the social sciences. New York: Holt, Rinehart

- and Winston, 1973.
- Hersh, A. Changes in family functioning following placement of a retarded child. Social Work, 1970, 15, 93-102.
- Hildreth, G. H. Introduction to the gifted. New York: McGraw-Hill, 1966.
- Hobbs, N. The future of children. San Francisco: Jossey-Bass, 1975.
- Holding, D. N. Principals of training. New York: Pergamon Press, 1965.
- Itkin, W. Some relationships between intra-family attitudes and pre-parental attitudes toward children. The Journal of Genetic Psychology, 1952, 80, 221-252.
- Additional Itkin, W., 1955.
- Jeffreys, L. B. The relationship between self-concept and the perception of positive and negative feedback. Dissertation Abstracts International, 1974, 36, 5815-A, 5816-A.
- Joe, V. C. Review of the internal-external control construct as a personality variable. Psychological Reports, 1971, 28, 619-640.
- Johnson, G. O., & Cruickshank, W. M. Education of exceptional children and youth. Englewood Cliffs, N.J.: Prentice-Hall, 1958.
- Kanner, L. Parents' feelings about retarded children. American Journal of Mental Deficiency, 1953, 52, 375-383.
- Karnes, M., & others. Factors associated with underachievement and overachievement of intellectually gifted children. Dissertation Abstracts International, 1961, 38, 3021-3023.
- Kerlinger, F. N. Foundations of behavior research. New York: Holt, Rinehart and Winston, 1973.

- Kulhavy, R. W. Feedback in written instruction. Review of Educational Research, 1977, 47, 2, 211-232.
- Lane, R. C., & Singer, J. L. Familial attitudes in paranoid schizophrenia and normals from two socio-economic classes. Journal of Abnormal and Social Psychology, 1959, 59, 328-339.
- Lefcourt, H. M. Internal versus external control of reinforcement: A review. Psychological Bulletin, 1966, 65, 206-220.
- Levine, S. Sex-role identification and parental perceptions of social competence. American Journal of Mental Deficiency, 1966, 70, 907-912.
- Llewellyn, R. C. Praise and criticism have different effects on low and high verbal performance. Dissertation Abstracts International, 1974, 34, 5170-5171.
- Logan, T. H., & Wodtke, K. H. Effects of rules of thumb on transfer of training. Journal of Educational Psychology, 1968, 59, 147-153.
- Longstreth, L. E. Tests of the law of effect using open and closed tasks. Journal of Experimental Psychology, 1968, 59, 147-153.
- Love, H. D. Characteristics of parents having mentally retarded children as compared with parents not having mentally retarded children. The Digest of Mentally Retarded, 1967-68, 4, 103-106.
- Love, H. D. Parental attitudes toward exceptional children. Springfield: Charles C. Thomas, 1972.
- MacDonald, A. P., Jr., & Hall, J. Internal-external locus of control and perception of disability. Journal of Consulting and Clinical Psychology, 1970, 34, 132-138.

- McDonald, J. E. The effect of knowledge of results on learning in a rate based program. Dissertation Abstracts International, 1973, 34, 3148.
- McKeachie, W. J. Psychology in America's bicentennial year. American Psychologist, 1976, 819-832.
- Miller, G. R., & Rokeach, M. Individual differences and tolerance for inconsistency. Ch. 60, pp. 624-632, in R. D. Abelson, et.al. (Eds.), Theories of cognitive consistency: A source book. Chicago: Rand McNally, 1968.
- Moos, R. Evaluating educational environments: Procedures, measures, findings, and policy implications. San Francisco: Jossey-Bass, 1979.
- Morris, L. W., & Fulmer, R. S. Text anxiety (worry and emotionality) changes during academic testing as a function of feedback and test importance. Journal of Educational Psychology, 1976, 68, 817-824.
- Newman, M. I. Delay of information feedback and the retention of meaningful connected discourse. Dissertation Abstracts International, 1973, 34, 1708-1709.
- Nuttin, J., & Greenwald, A. G. Reward and punishment in human learning. New York: Academic Press, 1968.
- Peck, J. R., & Stephens, W. B. A study of the relationship between the attitudes and behaviors of parents and that of their mentally defective child. American Journal of Mental Deficiency, 1960, 74, 839-843.
- Pelc, R. E., & Midlarsky, E. Effect of evaluative feedback on the

- subject probability of success. Journal of Psychology, 1977, 96, 191-196.
- Potkay, C. R. Simulated test-taking as a teaching technique. Journal of Humanistic Psychology, 1973, 13, 69-73.
- Price-Bonham, S., & Addison, S. Families and mentally retarded children: Emphasis on the father. The Family Coordinator, 1978, 29, 221-230.
- Pryzwansky, W., & Bersoff, D. N. Parental consent for psychological evaluations: Legal, ethical and practical considerations. Journal of School Psychology, 1978, 16, 274-281.
- Ramsey, G. V. Review of group methods with parents of the mentally retarded. American Journal of Mental Deficiency, 1967, 71, 857-863.
- Ray, W. J., & Katahn, M. Relation of anxiety of locus of control. Psychological Reports, 1968, 23, 1196.
- Redl, F., & Wineman, A. Children who hate. Glencoe, Ill.: Free Press, 1951.
- Reinert, H. R. Children in conflict: Educational strategies for the emotionally disturbed and behaviorally disordered. St. Louis: Mosby, 1976.
- Robinson, H. B., & Robinson, N. M. The mentally retarded child. New York: McGraw-Hill, 1965.
- Robinson, L. L. Attitudes toward parenthood: A parents synonymous group versus a comparison group. Dissertation Abstracts International, 1976, 35, 5843-B, 5844-B.
- Rosen, C. E. Why clients relinquish their rights to privacy under

- sign-away pressures. Professional Psychology, 1977, 8, 17-24.
- Rosenthal, R. The pygmalion effect lives. Psychology Today, September, 1973, 56-73.
- Rosenthal, R. A., Bruce, B., Dunn, F., & Ladd, F. C. Different Stroke. Boulder Co.: Westview, 1976, 3, 358.
- Ross, A. O. The exceptional child in the family. New York: Grune and Stratton, 1964.
- Rotter, J. B. Generalized expectancies for internal versus external control of reinforcement. Psychological Monographs, 1966, 80, 1.
- Rotter, J. B. A new scale for the measurement of interpersonal trust. Psychological Review, 1967, 72, 301-316.
- Ruch, F. L., & Zimbardo, P. G. Psychology and Life. Glenview, Ill.: Scott, Foresman and Company, 1971.
- Shaw, M. E., & Wright, J. M. Scales for the measurements of attitudes. New York: McGraw-Hill Book Company, 1967.
- Shrauger, J. S., & Lund, A. K. Self-evaluation and reactions to evaluations from others. Journal of Personality, 1975, 43, 94-108.
- Shrauger, J. S., & Sorman, P. B. Self-evaluations, initial success and failure, and improvement as determinants of persistence. Journal of Consulting and Clinical Psychology, 1977, 45, 785-795.
- Singer, B. D. Feedback and society. Lexington, Massachusetts: D. C. Heath and Company, 1973.
- Singh, B. D., Thakur, R.C., & Kumar, K. The interactional affects of KR, set and sense modality on reaction time. Indian Journal of Applied Psychology, 1974, 11, 43-46.

- Strodtbeck, F. L. Family interaction, values and achievement. In D. McClelland (Ed.), Talent and society. New York: Van Nostrand, 1958, 138-145.
- Tallman, I. Spousal role differentiation and the socialization of severely retarded children. Journal of Marriage and the Family, 1965, 27, 37-42.
- Thorndike, E. L. Fundamentals of learning. New York: Teachers College, Columbia University, 1932.
- Tolor, A., & Jalowiec, J. E. Body boundary, parental attitudes, and internal-external expectancy. Journal of Counseling and Clinical Psychology, 1968, 32, 206-209.
- Travers, R. M. Essentials of learning. New York: Macmillan, 1977.
- Van Wagenen, R. K., & Murdock, E. E. A transistorized single-package for toilet training of infants. Journal of Experimental Child Psychology, 1966, 3, 312-314.
- Wadsworth, H. G., & Wadsworth, J. B. A problem of involvement with parents of mildly retarded children. The Family Coordinator, 1971, 20, 141-147.
- Walter, D. R., & Laniberg, W. J. Research on the effect of feedback on writing: Review and implications. University of Texas, 1976.
- Waterman, J. H. Counseling and psychotherapy with the mentally retarded. New York: Macmillan, 1957.
- Watson, J. B., & Hayner, R. Conditions of emotional reaction. Journal of Experimental Psychology, 1920, 3, 1-24.
- Weisenberg, M. Informative and affective feedback: Implications for interviewing. Psychological Reports, 1973, 33, 527-534.



- Werblo, D. Experiences in historical research and changes in self-evaluation of gifted children. Exceptional Child, 1966, 33, 137-142.
- Wikler, L. A comment on "families and mentally retarded children: Emphasis on the father". The Family Coordinator, 1979, 30, 421-422.
- Wittrock, M. C. The cognitive movement in instruction. Educational Psychologist, 1978, 13, 15-29.
- Wortman, C. B. Some determinants of perceived control. Journal of Personality and Social Psychology, 1975, 31, 282-294.

APPENDIX A

Descriptive Statistics Obtained on the Parents'  
Judgment Regarding a Particular Child Instrument:  
 Frequency Distribution of Pre and Post Test Results

<u>Pre*</u>			<u>Post**</u>		
Scores	Frequency	Cumulative Frequency	Scores	Frequency	Cumulative Frequency
60-69	1	1	60-69	4	4
70-79	3	4	70-79	4	8
80-89	10	14	80-89	16	24
90-99	14	28	90-99	4	28
100-109	20	48	100-109	25	53
110-119	18	66	110-119	27	80
120-129	26	92	120-129	25	105
130-139	42	134	130-139	34	139
140-149	22	156	140-149	15	154
150-159	4	160	150-159	5	159
160-169	0	160	160-169	1	160

\*X = 121.212      S = 20.015  
 \*\*X = 117.500    S = 20.597

APPENDIX B

Descriptive Statistics Obtained Using the Timed  
Behavioral Checklist Instrument: Frequency Distribution  
of Pre and Post Test Results

Scores	Pre*		Scores	Post**	
	Frequency	Cumulative Frequency		Frequency	Cumulative Frequency
0	10	10	0	4	4
1	9	19	1	7	11
2	22	41	2	19	30
3	28	69	3	25	55
4	28	97	4	18	73
5	21	118	5	22	95
6	15	133	6	31	126
7	8	141	7	15	141
8	16	157	8	15	156
9	1	158	9	4	160
10	0	158	10	0	160
11	2	160	11	0	160

\* $\bar{X}$  = 4.119      S = 2.362  
\*\* $\bar{X}$  = 4.681      S = 2.207

## APPENDIX C

Descriptive Statistics Obtained on the Rotter I-E Scale:  
 Frequency Distribution of Results\*

Score	Frequency	Frequency
0	0	0
1	0	0
1	2	2
3	1	3
4	3	6
5	4	10
6	9	19
7	5	23
8	10	34
9	9	43
10	8	51
11	9	60
12	10	70
13	11	81
14	16	97
15	13	110
16	30	140
17	6	146
18	7	153
19	4	157
20	0	157
21	2	159
22	1	160

\* $\bar{X}$  = 12.487

S = 4.266

Median = 13.409

Mode = 12.487

\*The Rotter I-E Scale provides a way of examining the internal-external personality characteristics dimension. Instead of the dichotomous external-internal division, this study examined a trichotomous division.

## APPENDIX D



Parents' Judgment Regarding a Particular Child

Following is a list of statements to which you might have one of five reactions. You might strongly agree, agree, be uncertain, disagree, or strongly disagree. Please draw a line under whichever of these choices best describes the way you feel about your child.

- \*1. I consider myself very close to this child.  
 Strongly Agree    Agree    Uncertain    Disagree    Strongly Disagree
2. I feel that this child does not have enough respect for his (or her) parents.  
 Strongly Agree    Agree    Uncertain    Disagree    Strongly Disagree
3. I feel that this child does not love me enough.  
 Strongly Agree    Agree    Uncertain    Disagree    Strongly Disagree
4. I find myself being nice to this child at one moment and being very angry at it the next.  
 Strongly Agree    Agree    Uncertain    Disagree    Strongly Disagree
- \*5. I love this child so much that I cannot bear to be away from him (or her) for even a short time.  
 Strongly Agree    Agree    Uncertain    Disagree    Strongly Disagree
6. This child has been a difficult child to bring up.  
 Strongly Agree    Agree    Uncertain    Disagree    Strongly Disagree
7. I feel that this child does not appreciate the sacrifice his (or her) parents make for him (or her).  
 Strongly Agree    Agree    Uncertain    Disagree    Strongly Disagree
- \*8. I am extremely proud of this child.  
 Strongly Agree    Agree    Uncertain    Disagree    Strongly Disagree

9. I feel that this child complains too much.  
Strongly Agree   Agree   Uncertain   Disagree   Strongly Disagree
10. I am somewhat disappointed in this child.  
Strongly Agree   Agree   Uncertain   Disagree   Strongly Disagree
11. This child has always been difficult to control.  
Strongly Agree   Agree   Uncertain   Disagree   Strongly Disagree
12. In my judgment this child does not sufficiently appreciate his (or her) parents.  
Strongly Agree   Agree   Uncertain   Disagree   Strongly Disagree
13. I am often annoyed by this child.  
Strongly Agree   Agree   Uncertain   Disagree   Strongly Disagree
14. When this child is out of my sight, I always worry for fear that something will happen to him (or her).  
Strongly Agree   Agree   Uncertain   Disagree   Strongly Disagree
15. In my opinion, this child expects to be waited on too much.  
Strongly Agree   Agree   Uncertain   Disagree   Strongly Disagree
16. This child is too great an expense to the family.  
Strongly Agree   Agree   Uncertain   Disagree   Strongly Disagree
17. This child is everything that I could hope a child of mine to be.  
Strongly Agree   Agree   Uncertain   Disagree   Strongly Disagree
18. I like to spend as much of my spare time as I can with this child.  
Strongly Agree   Agree   Uncertain   Disagree   Strongly Disagree

\*The same set of response alternatives is used with each item numbered 1 through 18; items expressing a favorable attitude toward this child are marked with an asterisk.

In each of the following you are given a statement which can be completed in any one of several ways. Place a check in front of whichever of the alternative choices most nearly resembles your own feelings.

19. It is necessary for you to punish this child...

(a) Very frequently

(b) Quite often

(c) Sometimes

(d) Seldom

(e) Never

20. I find myself becoming angry at this child...

(a) Very frequently

(b) Quite often

(c) Sometimes

(d) Seldom

(e) Never

21. I feel that I get along with this child...

(a) Very well

(b) Well

(c) Fairly well

(d) Not very well

(e) Poorly

22. This child gets on my nerves...

(a) Frequently

(b) Quite often

(c) Sometimes

(d) Seldom

\_\_\_(e) Never

23. I get...

\_\_\_(a) Very much satisfaction from this child

\_\_\_(b) Considerate satisfaction from this child

\_\_\_(c) Some satisfaction from this child

\_\_\_(d) Very little satisfaction from this child

\_\_\_(e) No satisfaction from this child

Following is a list of traits of personality. Below each trait are five expressions which describe five different degrees of the trait. The first of these descriptions would indicate that the child being described possesses the trait considerably more than the average, the second would indicate that the child possesses the trait noticeably more than the average, the third average, the fourth noticeably below average, and the fifth considerably below average.

Please draw a line below whichever of the descriptions most nearly describes your child.

24. Selfishness

Very Selfish	More Selfish than the average	Average	Less Selfish than the average	Very Unselfish
-----------------	-------------------------------------	---------	-------------------------------------	-------------------

25. Helpfulness

Very Helpful	More Helpful than the average	Average	Less Helpful than the average	Not Helpful at all
-----------------	-------------------------------------	---------	-------------------------------------	--------------------------

26. Affectionateness

Very Affectionate	More Affectionate than average	Average	Less Affectionate than average	Very Unaffectionate
----------------------	--------------------------------------	---------	--------------------------------------	------------------------

27. Considerateness

Very Considerate	More Considerate than average	Average	Less Considerate than average	Very Inconsiderate
------------------	-------------------------------	---------	-------------------------------	--------------------

28. Courteousness

Very Courteous	More Courteous than average	Average	Less Courteous than average	Very Discourteous
----------------	-----------------------------	---------	-----------------------------	-------------------

29. Respectfulness

Very Respectful	More Respectful than the average	Average	Less Respectful than the average	Very Disrespectful
-----------------	----------------------------------	---------	----------------------------------	--------------------

30. Obedience

Very Obedient	More Obedient than the average	Average	Less Obedient than the average	Very Disobedient
---------------	--------------------------------	---------	--------------------------------	------------------

31. Agreeability

Very Agreeable	More Agreeable than the average	Average	Less Agreeable than the average	Very Disagreeable
----------------	---------------------------------	---------	---------------------------------	-------------------

32. Laziness

Very Lazy	More Lazy than the average	Average	Less Lazy than the average	Not Lazy at all
-----------	----------------------------	---------	----------------------------	-----------------

33. Carelessness

Very Careless	More Careless than the average	Average	Less Careless than the average	Not Careless at all
---------------	--------------------------------	---------	--------------------------------	---------------------

34. Dependability

Very Dependable	More Dependable than the average	Average	Less Dependable than the average	Very Undependable
-----------------	----------------------------------	---------	----------------------------------	-------------------

35. Reasonableness

Very Reasonable	More Reasonable than the average	Average	Less Reasonable than the average	Very Unreasonable
-----------------	----------------------------------	---------	----------------------------------	-------------------

APPENDIX E

Timed Behavioral Checklist for Performance Ability

Rater \_\_\_\_\_  
 Parent # \_\_\_\_\_

Behavior Observed	Check ( )
1. Paces	
2. Sways	
3. Shuffles Feet	
4. Knees Tremble	
5. Extraneous Arm and Hand Movement (swings, scratches, toys, etc.)	
6. Arms Rigid	
7. Hands Restrained	
8. Hands Restrained (in pockets, behind back, clasped)	
9. No Eye Contact	
10. Face Muscles Tense (drawn, tics, grimaces)	
11. Face "Deadpan"	
12. Face Pale	
13. Face Flushed	
14. Moistens Lips	
15. Swallows	
16. Clears Throat	
17. Breathes Heavily	
18. Perspires (face, hands, armpits)	
19. Voice Quivers	
20. Speech Blocks or Stammers	

Comments:

APPENDIX F



THE I-E SCALEDirections:

The following scale investigates the way which certain important events in our society affects different people. Each item consists of a pair of alternatives lettered A or B (and only one) which you strongly believe to be the case as far as you're concerned. Be sure to select the one you actually believe to be more true, rather than the one you think you should choose, or the one you would like to be true. This is a measure of personal belief; obviously there are no right or wrong answers.

Please answer these items carefully, but do not spend too much time on any one item. Also try to respond to each item independently when making your choice; do not be influenced by your previous choices.

Simply underline your choice of item A or B for each of the numbered statements:

1. A. Children get into trouble because their parents punish them too much.  
B. The trouble with most children nowadays is that their parents are too easy with them.
2. A. Many of the unhappy things in people's lives are partly due to bad luck.  
B. People's misfortunes result from the mistakes they make.
3. A. One of the major reasons why we have wars is because people don't take enough interest in politics.  
B. There will always be wars, no matter how hard people try to prevent them.

4. A. In the long run people get the respect they deserve in this world.  
B. Unfortunately, an individual's worth often passes unrecognized no matter how hard he tries.
5. A. The idea that teachers are unfair to students is nonsense.  
B. Most students don't realize the extent to which their grades are influenced by accidental happenings.
6. A. Without the right breaks one cannot be an effective leader.  
B. Capable people who fail to become leaders have not taken advantage of their opportunities.
7. A. No matter how hard you try some people just don't like you.  
B. People who can't get others to like them don't understand how to get along with others.
8. A. Heredity plays the major role in determining one's personality.  
B. It is one's experiences in life which determine what they're like.
9. A. I have often found that what is going to happen will happen.  
B. Trusting to fate has never turned out as well for me as making a decision to take a definite course of action.
10. A. In the case of the well prepared student there is rarely if ever such a thing as an unfair test.  
B. Many times exam questions tend to be so unrelated to course work that studying is really useless.
11. A. Becoming a success is a matter of hard work, luck has little or nothing to do with it.  
B. Getting a good job depends mainly on being in the right place

at the right time.

12. A. The average citizen can have an influence in government decisions.  
B. This world is run by the few people in power, and there is not much the little guy can do about it.
13. A. When I make plans, I am almost certain that I can make them work.  
B. It is not always wise to plan too far ahead because many things turn out to be a matter of good or bad fortune anyhow.
14. A. There are certain people who are just no good.  
B. There is some good in everybody.
15. A. In my case getting what I want has little or nothing to do with luck.  
B. Many times we might just as well decide what to do by flipping a coin.
16. A. Who gets to be the boss often depends on who was lucky enough to be in the right place first.  
B. Getting people to do the right thing depends upon ability, luck has little or nothing to do with it.
17. A. As far as world affairs are concerned, most of us are the victims of forces we can neither understand, nor control.  
B. By taking an active part in political and social affairs the people can control world events.
18. A. Most people don't realize the extent to which their lives are controlled by accidental happenings.  
B. There really is no such thing as "luck."

19. A. One should always be willing to admit mistakes.  
B. It is usually best to cover up one's mistakes.
20. A. It is hard to know whether or not a person really likes you.  
B. How many friends you have depends upon how nice a person you are.
21. A. In the long run the bad things that happen to us are balanced by the good ones.  
B. Most misfortunes are the result--of lack of ability, ignorance, laziness, or all three.
22. A. With enough effort we can wipe out political corruption.  
B. It is difficult for people to have much control over the things politicians do in office.
23. A. Sometimes I can't understand how teachers arrive at the grade they give.  
B. There is a direct connection between how hard I study and the grades I get.
24. A. A good leader expects people to decide for themselves what they should do.  
B. A good leader makes it clear to everybody what their jobs are.
25. A. Many times I feel that I have little influence over the things that happen to me.  
B. It is impossible for me to believe that chance or luck plays an important role in my life.
26. A. People are lonely because they don't try to be friendly.  
B. There's not much use in trying too hard to please people, if they like you, they like you.

27. A. There is too much emphasis on athletics in high school.  
B. Team sports are an excellent way to build character.
28. A. What happens to me is my own doing.  
B. Sometimes I feel that I don't have enough control over the direction my life is taking.
29. A. Most of the time I can't understand why politicians behave the way they do.  
B. In the long run the people are responsible for bad government on a national as well as on a local level.

Figure 1

Psychologist's Log\*:

Sex of Parent		Sex of Student		Feedback of Results	
M	F	M	F	++/+	-/--

Parent:

- 1.
- 2.
- 3.
- 4.
- 5.
- 6.
- 7.
- 8.
- 9.
- 10.
- 11.
- 12.
- 13.
- 14.
- 15.
- 16.
- 17.
- 18..
- 19.
- 20.

\*Simply denote M or F for the sex of participating parent, M or F for sex of student evaluated, and plus or minus to denote feedback of psychological results.

## Figure 2

Parental Consent Form

Date: \_\_\_\_\_

I, \_\_\_\_\_, hereby give my consent to participate in a research study to determine how parents feel about their child who is referred for a psychological evaluation. I understand that I will be asked to complete questionnaire forms, but that participation in this research is in no way connected to the psychological evaluation that my child will receive. No information used in the study will include names or any other identifying data and all other information regarding my child will be discussed with me as soon as he/she has been evaluated. I can at any time decide to discontinue my participation in this research without prejudice.

APPROVAL SHEET

The dissertation submitted by Deidra G. Roberson has been read and approved by the following committee:

Dr. Ronald R. Morgan, Director  
Associate Professor, Foundations, Loyola

Dr. Jack A. Kavanagh  
Associate Professor and Chairman, Foundations, Loyola

Dr. John M. Wozniak  
Professor, Foundations, Loyola

The final copies have been examined by the director of the dissertation and the signature which appears below verifies the fact that any necessary changes have been incorporated and that the dissertation is now given final approval by the Committee with reference to content and form.

The dissertation is therefore accepted in partial fulfillment of the requirements for the degree of Doctor of Education.

Date

12/8/80

Director's Signature

A handwritten signature in black ink, appearing to read "Ronald R. Morgan", is written over a horizontal line. The signature is fluid and cursive.