ADULT ROLE-PLAYING RESPONSES TO VARYING CHILD COMMUNICATIONS

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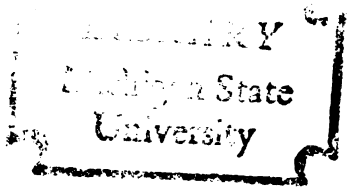
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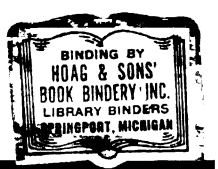
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ADULT ROLE-PLAYING RESPONSES TO VARYING CHILD COMMUNICATIONS

By

Edward Charles Teyber

A THESIS

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Edward C. Teyber

The purpose of this study was to provide additional information relevant to how adults respond to varying types of child communications. More specifically, the present research examined the extent to which types of adult responses and their communication of acceptance and rejection are affected by child communication sequences involving loving, neutral, and/or hostile messages.

In an attempt to gain information about adult responses to these types of emotion-laden child communications that would be reflective of actual social behavior, the present research had subjects role play a parent and verbalize their immediate response to two sequences of tape recorded child communications. A global rating of acceptance/rejection was used in conjunction with 26 scoring categories that assessed the specific and concrete responses used by adults in their communications to the child. The scoring categories utilized were designed to describe adult responses along affective and behavioral dimensions indicative of either theoretically sensitive adult responding to children (Stollak et al, 1973) and insensitive behavior (Gordon, 1970). These measures

were used to test the hypotheses that 1) various child communications would elicit reciprocal or similar adult responses, and 2) initial child communications of a positive and negative nature would establish a response "set" and influence the adult's response to a second sequential child cue.

Subjects for the experiment included 180 (90 male and 90 female) undergraduates who responded to the role-play tape. Adult behavior was scored by raters into 26 categories. The mean frequency of category usage was factor analyzed and six composite variables were generated. These factors described the following modes of responding: I) teaching-lecturing; II) control dominance; III) adult expression of their own experience and child's influence upon them; IV) empathy; V) intimidation-interrogation; and VI) instrumental control. These factors, along with a global acceptance-rejection scale, served as dependent variables which were examined in relation to the independent variables by means of a multivariate analysis of variance.

Results confirmed the initial hypothesis where adults were found to respond <u>in kind</u> to child messages with reciprocal acceptance and rejection. Concerning specific modes of response given, Factors I, II and V were elicited in response to negative-rejecting child cues, and Factor III was elicited in response to positive-loving child cues. A sex difference was obtained where males were both globally rated as being less accepting and demonstrated greater usage of the punitive-

rejecting Factors II and V than did females. The very low frequency of the child-centered Factor IV mode of response was also noted.

These results were discussed in terms of their implications for education and training in child-care-giving. The methodology used in this study was discussed as a useful instrument for studying the adult-child communication process, and finally, an explanation for the failure to confirm the second hypothesis was proposed.

To my parents, Kate and Ed

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INTRODUCTION

In each moment, followed by another, we experience our own existence through our consciousness. From the base of this constant, individuals acknowledge the behavior and experience that constitutes their lives to different degrees and with varying intensities. Some find their moments more differentiated and wholly integrated into their point of experiencing than others, and each finds more or less of happiness-sadness, meaningfulness, and companionship. Early learning and childhood experiences no doubt play an important part in understanding the determinants of these differently labeled intrapersonal experiences and interpersonal behaviors. These critical and significant learning experiences of childhood are most likely to occur in parent-child encounters.

Acknowledging this important role early parent-child interaction plays in psychological development, education in child-care-giving may offer us leverage in enhancing mental health on a national scope. In the past our society has reflected the attitude that innate guidance provided by "maternal instinct" and such self-satisfying adult statements as "That's the way I was raised and it didn't hurt me," would provide the necessary guidelines for effective parenting. Indeed, that "professionals" perpetuated

this attitude is exemplified by Baldwin, Kalhorn, and Breece (1945) who concluded that "...emotionally mature parents will be able to derive for themselves satisfactory methods for handling children." A softening of this attitude of lay responsibility and expertise for parenting is demonstrated in the growing child rearing literature. Clinical child psychologists such as Axline, Moustakas, Ginott, and Gordon, have presented to therapists and parents attitudes and "modes of encountering" from a Rogerian theoretical base. The need exists, however, for behavioral science to validate and refine the directives put forth and provide data furthering our understanding of the paramenters of sensitive and effective adult child-care-giving.

Among the many researchers responding to this need, Stollak, Scholom, Kallman, and Saturansky (1973) investigated the responses of undergraduates to problem situations with children. The authors found that written adult responses to the projective problem situation demonstrated a general lack of sensitivity to child needs, conflicts, and impulses as determined by scoring categories assumed indicative of effective responding designed by the authors, and usage of ineffective/destructive categories taken from Gordon (1970). Focusing on "problem ownership" (Gordon, 1970) when the adult's needs were the ones primarily being thwarted in the problem situation, the Ss' responses were both more ineffective and destructive than when the confrontation centered around primarily the child's needs. In this latter case Ss did

focus their communications significantly more often on the child's feelings and how he or she can express them.

In a further study, Kallman and Stollak (1974) presented similar hypothetical need arousing situations to both mothers and their first, third or fifth grade children. The written responses of the parents and verbal responses of their children were coded along categories similar to the previous research. The average mean usage for the summation of the "ineffective" and "effective" responses over the projective situations was virtually identical for college adults and mothers. For both groups there was noticeably less usage of "effective" than "ineffective" responses overall, and significantly more "ineffective" responses were again found for parental need arousing situations. Thus, college students and mothers rarely focused their messages to children on their own needs or the needs of the children in situations that strongly involved feelings, needs, and wishes. The most frequently reported "ineffective" responses for both college adults and mothers were the use of logical persuasion, questioning, providing answers, and ordering.

Following from this format and the study of "problem ownership," the purpose of the present study was to provide additional information relevant to how adults respond to varying types of child communications. More specifically, the present research examined the extent to which types of adult responses and their communication of acceptance and rejection are affected by child communication sequences

involving loving, neutral, and/or hostile messages. Little information is available in the important area of how adults respond to children in intimate encounters. I believe, and a number of theorists (cited below) assert, that it is in these especially critical moments of adult-child interaction where adult messages that significantly affect the child's feelings toward himself and others occur. Rather than obtaining thought-out written responses to hypothetical situations, data were more spontaneous spoken responses to tape recorded child scenarios which simulated real life encounters.

Becker (1964) states, "In many instances it is possible that making the parent more aware of how his or her behavior is having an impact on the child, can motivate a change in the parent's handling of the child (p 208)." In this regard, it was hoped that the results obtained would provide information concerning the nature of adult responses to children that can be utilized by parents and child rearing educators in developing more effective and sensitive interaction with children.

LITERATURE REVIEW

Acceptance

One of the most basic aims of this study was to provide information concerning the nature of adult acceptance. Although it has been theorized to be a fundamental and necessary parent-child construct, the conditions under which it is expressed have not been investigated through the study of adult responses to varying types of child communication. Data from the present study provides insight into when and how acceptance and rejection is elicited and withheld. In particular, information was gathered concerning where in the communication process do rejecting adult responses occur that may lead to anxiety, guilt, escape-avoidance mechanisms, and constricted expression and awareness for the child.

Carl Rogers (1961) defined unconditional positive regard as valuing the person irrespective of the differential values which one might place on his specific behaviors. This is the concept of accepting the whole person. Rogers theorized that when the self experiences of the young child are discriminated by significant others as being more or less worthy of positive regard, then self-regard becomes selective - that is, you have conditions of worth. For Rogers, this is the basic estrangement of man, "...for the

sake of preserving the positive regard of others the child has now come to falsify some of the values he experiences and to perceive them only in terms based upon their value to others." The child's concept of self is based on a distorted symbolization where the child learns "I perceive this behavior as unsatisfying" rather than as parental attributes. His/her feelings get mixed up and values that the child attaches to his/her experience become divorced from his/her own organismic functioning and, in this manner, the capacity for self-differentiation is impaired.

There is a history of empirical support for this fundamental weighting of an acceptance dimension. Parental acceptance has been correlated with a wide set of child attributes such as self-acceptance, adjustment, peer acceptance, positive affective orientation, and cooperation (Medinus & Curtis, 1963; Symonds, 1939; Sommers, 1952; Hoffman, 1963; Newirth, 1971). Acceptance has also been studied as a global process occuring in interaction with other dimensions. Coopersmith (1967) concluded that unconditional parental acceptance is a necessary but not sufficient condition for high self esteem. Similarly, Baumrind (1967) found high parental warmth and acceptance to be one of several dimensions necessary for the pre-school aged child's display of behaviors indicative of instrumental competence. Becker (1964) noted in his review of parent discipline that the same behavior has different effects on the child depending on the context of warmth-hostility in which it occurred.

The present study included a global measure of acceptance/rejection that complemented the specific behavioral and content categories that were utilized.

Specific and Global Measurement of Adult-Child Communication

One purpose of this study was to provide descriptive information about how adults respond to various types of communications that children commonly express in their day to day lives. Information needs to be gathered about what does occur in adult-child encounters before we can teach what should occur. Eschewing specificity, most parent-child studies utilize global dimensions of interaction variables such as warmth-hostility, restrictive-permissive, and anxious emotional involvement vs. calm detachment (Becker, 1964). Observational studies such as Baumrind (1967) cluster discrete behaviors into broad dimensions such as "self control" or "maturity demands." Thus, general factors that bear some empirical relationship to each other have been developed but they tend to obscure the specificity of the content of exchange.

Syntonic with the focus on measurement of specific adult responding in this study psychological speculation has been shifting towards an emphasis on the specification of the content and mode of communication in interaction rather than relying upon general attitudes or intent. Gordon (1970) claimed that "A parent must learn how to demonstrate his acceptance so that the child feels it." Similarly, Linden

and Stollak (1968) stated "Whether or not one can project of "put himself into another's shoes" is only part of interpersonal sensitivity. Another major variable is the communication of whatever empathy one feels. (p 216) Information on how parents communicate acceptance and empathy or interest or any feeling and attitude to their children is needed. As Haley (1963) noted that it is necessary to develop a classification of the patterns and modes of communication acted out between family members for us to increase our understanding of family life.

A significant movement in the direction of investigating specific and concrete adult responses has been given by Stollak et. al. (1973). Scoring categories (also utilized in the present study) were designed that described adult responses along affective and behavioral dimensions indicative of theoretically sensitive adult responding to children (see Appendix A). The categories refer to the adult's awareness and concern about childs' feelings (categories 1, 10, 11, and 12), relating the child's feeling and/or behavior to adult's feelings and/or behavior (categories 2, 3, 4, 5, and 6), and communicating directions to the child regarding his behavior (categories 7, 8, 9, and 13). These three dimensions are presumed to relate to the development and maintenance of the child's feeling of self esteem and worth, to the child's development of interpersonal skill and competence (how one person affects another), and to the

child's ability to master his environment through the socialization process (learning what he can do and how he can do it).

Another twelve categories refer to "insensitive" or "destructive" behavior taken from Gordon's (1970) work. He claims that these responses are used most frequently by parents in problem situations and have undesirable effects upon the child.

Three categories were added to the previous scoring systems for this research that were seen as potentially frequent occuring adult responses (Kallman and Stollak, 1974). Whether the adult attempted to find a mutual compromise or alternative for a child, offered him a reward contingent upon his behavior, or used compliance or appeasement toward child requests, suggestions, or problems was scored where appropriate.

Thus, this study was designed to provide information on patterns of specific adult responses to varying child communications.

With these scoring categories, the specific responses that adults use in their child communications may be assessed. This specific accounting of <u>what</u> and <u>how</u> parents respond is complimented with a global rating of acceptance/rejection. One possible criticism of the scoring systems previously used by Gordon (1970) and Stollak et al. (1973) is that adult intent such as concern or involvement may not be differentiated in the scoring system where the content of feeling

expressed is not accounted for. In this research, this scoring system was considered descriptive rather than evaluative of adult responding and a separate rating of child acceptance or rejection by the parent was used. This instrument is a 1-5 scale reflecting adult responses of acceptance (moving towards), neutral, and rejecting (moving against) the child. The instrument demonstrates face validity, and this type of global measure of acceptance/rejection has been successfully used in previous research (e.g. Guerney, 1971).

Interaction Sequences

Therapists and people in general have often noted the importance of when something is said as well as what is said. The appropriate response is rendered ineffective if poorly timed. The effects of timing are also evident in establishing a "set" to respond - an initial reaction may influence or color an entire exchange between people. The sequential impact that current behavior has on subsequent response patterns in chain response interactions can be exemplified. Rausch (1959, 1960) found a complimentary relationship between friendliness and hostility within two groups of normal and emotionally disturbed preadolescent boys. In peer interaction episodes there was a significant tendency for the type of behavior communicated by one boy to be received from the other child in interaction. A child communicating anger in approximately 50% of his interaction received reciprocal communications of anger in very close

approximations to his matched percentage. The author noted that passive aggression evokes dominant aggression and dominant aggression evokes passive aggression. As the group of institutionalized boys improved over the course of one and one half years of treatment, their anger communications and matched responses both decreased in a parallel fashion. In child to adult interactions in the residential setting, it was found that the adults also had a tendency to respond in kind to the communications of the child but that the adults had a therapeutic disposition to temper or balance the interaction sequences toward a more positive point of equilibrium (42-52%). In a later study Rausch and Sweet (1961) concluded that healthy children had a propensity to "rescue" interactions and prevent a disintegrating cyclic exchange that disturbed children did not possess. Regarding this, Rausch (1963) stated that the development of psychopathology occurs in the context of chronically poor communication.

In the description of modes of adult responses involved in this study it was necessary to investigate communication sequences, that is, changes in the content and affect expressed as the interactants move through different types of sequence dialogues. In this manner, the cumulative effects of initial communications on subsequent adult-child interactions could be investigated. In order to study these effects, two sequence child communication scenarios were tape recorded reflecting all combinations of a loving, neutral, and hostile

nature. Subjects then responded to these simulated adult-child exchanges as if they were interacting with their own seven year old son in the situation described.

Direction of Effects

Through using child communications as an independent variable, this study addresses the important issue of direction of effects. Bell (1968, 1971) has noted the need to move beyond the one-way effects model where the parent has been viewed as the agent transmitting cultural codes to the receptive child. He stated that an emphasis on sources of control in the child "are not now represented in customary ways of looking at parent child interaction (p 84)". Several reviewers (Becker & Krug, 1965; Bell, 1968; Caldwell, 1964; Orlansky, 1964; Sewell, 1963; and Yarrow, Campbell, & Burton, 1968) have noted that research that omits the study of the child's effects on parents is not as informative or as useful as including the study of reciprocal effects. For example, Yarrow et al. (1968) concluded that the case for positive findings when only partial effects are studied can only be maintained by relying on studies in which both parent and child behavior was reported by the same informant, by interpreting consistency in nonsignificant correlations, or by ignoring contradictory data. The child's contribution to parent-child interaction has often not been recognized. Genetic, congenital, experiential, or maturational contributions and their differential weights affect the child as a stimulus for parent and other adult behaviors. The child

continually integrates experience and continually manifests new products of this integration. He/she presents the adult with emergent behavior which in turn can modify subsequent adult behaviors. The purpose of this different conceptual focus and weighting is to open up for consideration, along with the specific parental effects, a variety of ways in which stimuli from the child control and guide adult behavior.

Studies that have questioned the "parent's effects" model have dmonstrated on a broad basis how innate differences in the child control and guide parental behavior; parents do not necessarily have fixed techniques for socializing children. In his earlier article Bell (1968) theorized that parent behavior is organized hierarchically involving the area of social response and control. Child behaviors activate these repertoires and affect the level of response within hierarchies, and they differentially reinforce the parent behavior which has been evoked. Individuals have different repertoires of behavior available to them, some more organized, flexible, and differentiated. This acquired repertoire is a function not only of the acknowledged cultural demands and parental belief systems, but also a result of stimulation from the child and reinforcement received from him or her. Parental responses will differ for high activity, impulsive, demanding and assertive behavior in children, as well as lethargic, inhibited, and unresponsive child behaviors (Schaffer & Emerson, 1964; Pasamanick, Robers, & Lilienfeld, 1965). The parent effects model that has been cited as

inadequate and characterizing child development research assumes a fixed and invariantly applied repertoire. Bell (1968) has cited several studies which emphasize the manner in which characteristics in the child influence parental behaviors. For example, Etzel and Gewirtz (1967) manipulated levels of crying and smiling behavior in 6-20 week old infants. Observation showed that increases in smiling/happy behavior through stimulation in an experimental room affected the behavior of several caretakers resulting in increased time they spent with the happier infant.

Theoretical Formulation

A more general theory of interpersonal relations than Bell's specific parent-child interaction provides additional information relevant to the proposed study. With the interpersonal theory proposed by Sullivan (1953) and later operationalized by Leary (1955), parent-child relations are viewed as a series of interactions between adult and child where each, by his/her own behavior, exerts some impact on the subsequent behavior of the other. Communication is seen as a circular process of elicitation, feedback, and reinforcement rather than a linear cause (parent)-effect (child) model.

Interpersonal theory posits a self system in which the motivating force of all behavior is the avoidance of anxiety in interpersonal relations and the maintenance of self-esteem. Mental health is viewed as a continuum on which the maturity or health of the individual is measured by the degree to which security operations aimed at maintaining self-esteem

in anxiety arousing interpersonal relations restrict or inhibit the range of interpersonal behaviors available to an individual. Interpersonal theory has also focused upon the reciprocal effects or complimentary "pull" of one person's actions on another in an interpersonal situation. Leary (1957) maintains that the most important single aspect of personality is "the reflex manner in which human beings react to others and train others to respond to them in select ways." In this regard, he posits a principle of reciprocal relations, a general probability principle which holds that "interpersonal reflexes tend with a probability greater than chance to initiate or invite reciprocal interpersonal responses from the other person in interaction that leads to a repetition of the original reflex" (p 125).

The reciprocal principle (Sullivan, 1953; Leary, 1957; Carson, 1969) proposes that behavior has both an eliciting value (i.e. the tendency for Ss' behavior to stimulate or "pull" behavior from the other person) and a reinforcing value (i.e. the tendency for Ss' behavior to confirm or disconfirm the preceding behavioral stance of the other person). A circumplex model composed of two orthogonal dimensions of dominance-submission and love-hate has been posited (Leary, 1957). Reciprocity occurs on the dominant submissive axis (dominance compliments-elicits and reinforces, submissiveness and submissiveness, in turn, compliments dominance); and on the basis of correspondence on the love-hate axis where friendliness elicits friendliness and hostility is complimentary to hostility. The general assumption that

all interpersonal behavior is governed in part by the principle of reciprocity of emotions also results in the specific assumption that the child, as a result of his varying behavioral productions, has the ability to influence (elicit and reinforce) the subsequent behavior of the adults he/she encounters. In the process of development the child comes to learn and perform a series of behaviors which may be viewed as both eliciting and reciprocal in relation to his/her parents and significant others. With his/her own set of eliciting behaviors the child is stimulating certain responses from his/her environment from the very beginning of life; for example, both the activity level of the infant and momentary tension states will tend to pull certain responses from others. In the present study, significant child communications served as an independent variable, while the adults' responses to these behaviors were the dependent measures. The adults' responses to the various child communications were coded in terms of both specific content categories and broader ratings of acceptance-rejection rather than following the circumplex system which yields only global descriptions of interactive behaviors. In addition, an attempt was made to investigate the critical points in adult to child communication sequences in which meaningful changes in the sensitivity of the adults' response occurred.

Sensitive Adult Responding

The purpose of this study was to provide information that hopefully would help in the development of more appropriate and sensitive child-relating through education and training. Determining what are "effective" and "ineffective" responses remains a theoretical issue within which a wide range of potentially appropriate responses still exists. Research has demonstrated that parents directly influence the child's pro-social development and suggest that optimal levels of certain parental behaviors are most effective. For example, the implications of parental warmth for the emotional growth of the child have been studied (Sears, Maccoby, and Levin, 1957; Becker, 1964). Too much parental warmth or indulgence tends to develop an inhibiting dependency in the child, while too little warmth or rejection develops insecurity and is related to delinquency and anti-social behavior. Hoffman (1963) found that children who were more considerate of others, more friendly, and who had greater impulse control had parents who scored low on reactive, unqualified power assertion. Children of parents who used high degrees of power assertion and less acceptance were found to be more hostile and less accepting of others. More comprehensive evaluations of effective parenting have been reported by Coopersmith (1967), for example, who found the conditions conducive to high self-esteem in preadolescent boys to be based upon general indices of parental warmth and acceptance, clearly defined and enforced limits, and respect and latitude within those limits.

The results of these and other empirical studies can be combined with the formulations of theorists and clinicians previously cited in an attempt to specify the adult behaviors that are most conducive to pro-social development of the child. "Effective" responses to children, for example, should indicate awareness of the child's feelings, should help the child understand the relationship between his feelings and behavior and the feelings and behavior of the adult, and should help him/her find appropriate outlets for his/her feelings, needs, and wishes (Stollak, 1973).

These theoretically "effective" adult responses were utilized to score adult responses in this study. Baumrind (1967, 1971) has provided some empirical support for evaluating the effects of both "effective" and "ineffective" adult responses to children. In her research, the behavior of parents of the most instrumentally competent children--highest self control, self-reliance, self-assertion, competence, and contentment--was labeled "authoritative." When compared to "permissive" and "authoritarian" parent groups, these most effective parents used less withdrawal of love, less ridicule, less negative sanctions, and less moralizing in their communications to their children. These types of messages are typical of Gordon's (1970) "ineffective" responses which also were scored in the present research. The "authoritative" parents also "solicited and respected the child's feelings and opinions, communicated more clearly in terms of expected behavior, expressed warmth through empathy, and exercised

firm control with reason for their children's behavior" (Baumrind, 1967, pp. 77-81) to a greater extent than other parent groups. These characteristics of the effective, "authoritative" parent are syntonic with the "effective" response categories utilized in the present study.

Under varying circumstances, however, the "effectiveness" of these categories may be weighted differentially. For example, Baumrind (1971) reported, "The effective parent used reason, power, and shaping by reinforcement to achieve her objectives." These types of adult responses may be similar to what Gordon has labeled as "ineffective." For example, supporting, interpreting, or logical persuasion could, under certain circumstances, be considered a characteristic of effective adult responding. Thus, further research assessing the effects of a wide range of specific adult responses in varying situations upon child behavior is needed before we can fully understand the wide range of effective child-relating behavior and thereby evaluate the relative validity of these somewhat contrasting theoretical positions.

Methods of Study

In a study that used a similar methodology to that employed in the present research, Jackson (1955) had mothers and fathers write responses to hypothetical problem situations that involved a child who behaved unacceptably. Jackson coded these responses along a comprehensive "coercion" continuum. Results indicated that the mothers balanced their severity with additional, milder methods of control. One

important finding was the multiplicity of parental responses--parents did not threaten, scold, or spank; they threatened, scolded, and spanked.

In choosing this method of study, Jackson noted that previous approaches to studying parental responses frequently have employed retrospective reports of past action by parents and assessment of parental child rearing attitudes. The assumed relationship between verbal report and actual behavior in the home had received general, but not conclusive, support (Mannino et al., 1968). These methods of study, however, have been classified by Bell (1958) as postdictive rather than predictive since they tended to be exploratory in nature and not based on any well-formulated theoretical perspective.

Another methodology frequently used has been direct behavioral observation. Although this method allows for descriptive observation of parent and child interaction effects typically there is a limitation of the types of behavior displayed. Jackson noted the spontaneous character of many events and Stollak et al. (1973) cited the infrequency of need arousing and conflictful situations as well as of more intimate sharing moments in which adult responses to children probably are most critical.

The present study used the methodological framework of these previous investigations by presenting hypothetical situations in which adults responded to important but less frequent and available child communications. Child messages of a loving and hostile nature are received by adults in

their day-to-day child encounters. Adult responses to these emotion-laden encounters may be particularly influential in establishing the nature of the adult-child relationship and the child's feelings toward himself and his social world. In an attempt to gain information about adult responses to these types of child communication sequences that would be most reflective of actual social behavior, subjects role-played a parent and verbally emitted their immediate responses to two tape-recorded sequences of child communications. Unlike the previous studies, subjects' responses were not carefully thought out written responses, but immediate spoken responses to a child's expressive communications.

Hypotheses

1. (a) The quality of adult response for "positive-loving" child communications will be more effective/sensitive than adult responses to "negative" child communications. This hypothesis will be supported if there is greater usage of what may be termed positive categories and fewer usage of negative categories and higher global acceptance-rejection rating for positive than for negative child communications.

(b) The quality of adult response for "Negative-rejecting" child communications will be less sensitive/effective than adult responses to positive child communications. This hypothesis predicts greater usage of negative categories and lesser usage of positive categories and a lower acceptance-rejection rating for negative than for positive child communications.

2.(a) Child communications of a "positive-loving" nature, followed by a positive, neutral, or negative statement will generate less destructive and more sensitive responses that have a higher global acceptance-rejection rating than will positive, neutral, or negative statements that were preceded by a neutral or negative child statement.

(b) Child communications preceded by a "negative-rejecting" child communication will be less effective as determined by fewer positive and more negative categories and a lower global acceptance/rejection rating than will dialogues begun with a positive or neutral child statement.

METHOD

Subjects and Design

Subjects for the experiment were 180 (90 male and 90 female) undergraduates. There were 5 subjects in each of the 18 cells of a 2 (sex of subject) X 2 (situation order) X 3 (type of child communication I) X 3 (type of child communication 2) X 2 (situation, a repeated measure) X 2 (response, a repeated measure) design.

Measures

Parent-Child Interaction Projective Tape: The PCIPT is a verbal or role playing interaction sequence designed by the author in which the S responds to tape recorded child communications as if he or she were actually in the situation described and responding to his or her seven-year-old son (instruction to S and script located in Appendix B). The PCIPT consists of two different situational contexts each of which are followed by nine two-sequence child communications that represent all permutations of an adult-enhancing positive child statement, a neutral-commentary child statement, and a hostile adult-rejecting communication. Each S responds to one of the nine ("a" through "i") interaction sequences for both situations giving a total of four responses.

In order to insure that the quality of parental response is a function only of type of child communication,

several factors have been controlled for in the PCIPT.

To insure that each child response was positive, neutral, or negative, as intended, independent coders rated the child statements. Agreement on the nature of the child communication was perfect. The criteria for this rating and detailed results are located in Appencix C.

It also was necessary to determine that the positive, neutral, and negative child statements were of equivalent stimulus intensity both across situations I and II and for each of the positive, neutral, and negative statement within the (a) through (i) dialogues that comprised each situation. Within the nine (a-i) dialogues of each situation there were six positive, six neutral, and six negative statements. Attempts at generating stimuli of equal intensity were made by using the same core phrases in each statement. Five of the statements were repeated exactly and the sixth was changed slightly for reasons of syntax. Equality of stimulus intensity for the (a) through (i) dialogues between the two situations was attempted by again using similar themes or child statements such as "I need you," "I hate you," "I want to go outside and play now" in both situations. The degree of equality of the intensity of the various stimuli was determined by interjudge agreement (see Appendix C).

To control for the possible confounding influence that the environmental situation may exert on parental response, two different situations were used that are similar in parental need arousal, privacy, and general environmental

setting. These two situations were presented to every subject, with the order of their presentation counterbalanced over subjects (i.e., Situation I given first; Situation II given first) and it was expected that no differences in quality of parental response would be found for the two situations.

Administration

Each subject was given two practice dialogues so that he or she could become familiar with the role-playing task. These practice situations and the subject respond to an adults' recorded voice as if he were a friend. Following this rehearsal, the subject was given the PCIPT. The subject was told (fecticiously) that the second child-communication would be selected contingent upon his or her response to the first statement, and it would be selected from one of the several tapes the experimenter had available to him for this purpose. Instructions to the subject rehearsal situations and dialogues, and the PCIPT script are presented in Appendix B.

Scoring the Dependent Variables

The PCIPT was designed to obtain the projective verbal response of adults to three different types of child communication (Positive, Negative, and Neutral) and their response across interaction sequences. The adult responses to the two sequence dialogues were scored into revised categories previously used by Stollak et al. (1973). Thirteen categories of "effective" adult responding were used, but because of low

usage and difficulty in obtaining rater reliability, three categories, which were concerned with giving directions to the child in the present or future, were combined into one category. Gordon's (1970) 12 "ineffective" categories, previously discussed, also were used, as were three categories taken from Kallman and Stollak (1974) which were described as frequently occuring adult responses. Each subject responded to four child communications (two interaction sequences for both environmental situations) and each response was scored for these 26 categories. All categories were scored for each PCIPT item as being present or absent in that item. Each item could be scored for more than one category, but a category could only be scored once each item. Reliability estimates for this study were obtained for each category.

In addition to the specific scoring categories, each of the subject's four responses were also coded for a global measure of acceptance/rejection, and interrater reliabilities for this 1-5 scale also were obtained.

RESULTS

Inter Rater Reliabilities

Independent Variable: PCIPT

Three raters were asked to describe each of the 18 statements comprising the PCIPT as being a positive (moving towards), neutral, or a hostile (moving away) statement. Perfect agreement was obtained (r = 1.00).

Two raters then were asked to listen to the audio-tape and score the stimulus cues, on a scale of 1-5, in terms of the intensity and strength of the statements as a function of both verbal content and tonal expressions. A correlation (r) of .92 was obtained for the rater pairs. Instructions to raters and detailed results of the reliability checks are located in Appendix C.

Dependent Variables

Scoring Categories. Six raters were trained in the scoring procedure for approximately 15 hours. Three pairs of raters were formed who independently scored the PCIPT responses along 26 categories descriptive of adult responding. Each rater-pair scored responses from one-third of the subjects. Correlations (rs) for each pair across the 26 categories, combined, were .92, .88, and .93. The overall mean was .91, with reliabilities ranging from .63 to 1.0. Table 1 presents

Table 1. Inter-rater Reliability for Scoring Categories.

Rater Pairs Category	I	II	III	Mean Category Reliability
1	.86	.95	.83	.88
2	-	.93	.71	.82
3	.96	.94	.94	.95
4	.86	.96	.96	.93
5	.95	.91	.83	.90
6	.64	.89	1.00	.84
7	.94	.96	.97	.96
8	.93	1.00	1.00	.98
9	.82	.89	.86	.86
10	1.00	.81	.89	.90
11	.90	.88	.94	.91
12	1.00	.92	-	.96
13	.92	.66	1.00	.86
14	.92	.94	.99	.95
15	.91	.70	.94	.85
16	1.00	-	1.00	1.00
17	1.00	.97	.95	.97
18	-	-	1.00	1.00
19	.92	1.00	.97	.96
20	-	.63	-	.63
21	-	-	-	-
22	1.00	.90	1.00	.97
23	.96	.87	.92	.92
24	.90	-	.95	.93
25	1.00	.63	.86	.83
26	.86	1.00	1.00	.95
Mean Reliability for Rater Pair	.92	.88	.93	.91

Inter Rater Reliability for Acceptance-Rejection Measure

Rater Pairs	I	II	III	Mean Reliability
	.86	.88	.93	.89

these correlation coefficients across raters and categories (see Appendix D).

Acceptance-Rejection Measure. The same six coders* also were trained for approximately five hours to score the PCIPT responses along a 1-5 scale measuring global acceptance or rejection. Three rater pairs each independently rated responses from one-third of the subjects; inter-rater reliabilities (*rs*) were .86, .88, and .93, with a mean of .89. Specific instructions to the raters and sample scorings are presented in Appendix A.

Relations Between Categories

Category Usage

The most frequently obtained response was Category 14 ($\bar{X}$ = 1.76), "statement of adult feelings," and least frequently scored were Categories 18, "relating child behavior to adult behavior," and 20, "child given specific directions regarding present feelings" ($\bar{X}$S = .02), for both categories. One category, "child given specific directions regarding future feelings," was not used. Table 2 (Appendix E) presents the mean category usage and standard deviations for the 25 scoring categories in order of frequency of their usage.

Factor Analysis

Relations between the 25 categories were explored via a principal axis factor analysis--R^2 was used as the estimate of communality; factors were rotated to a varimax solution.

*The author would like to thank Denise Ballnik, Ross Fleurry, Mary McCaslin, Juanita Solis, David Solomon, and Jennifer Walters.

Table II. Mean category usage and standard deviation for the 25 scoring categories utilized. 25 scoring categories ranked by mean usage with std. dev.

Rank	Category	Mean	STD. DEV.
1)	14	1.7611	1.9242
2)	3	.9611	1.4887
3)	19	.8389	1.3167
4)	17	.7778	.8861
5)	22	.7778	1.3184
6)	11	.7500	1.3573
7)	7	.7278	1.2633
8)	1	.6611	1.2779
9)	5	.6662	1.1144
10)	4	.5500	.8861
11)	23	.4778	.9656
12)	21	.4611	.9766
13)	25	.2611	.7040
14)	15	.200	.6964
15)	8	.1833	.7128
16)	13	.1389	.4931
17)	24	.1278	.5596
18)	6	.1056	.4546
19)	9	.1056	.4786
20)	10	.1056	.6118
21)	2	.0944	.5563
22)	12	.0667	.3441
23)	16	.0500	.2851
24)	18	.0222	.1478
25)	20	.0222	.1817

The categories generated six somewhat independent factors that accounted for .50 of the cumulative, proportionate variance. Loadings for five of the 25 categories were so low or diffuse on the factors that the categories were excluded from further examination. The highest loading for Category 6, "judging negatively, disproving," was .2438, and was found with equivalent strength across three factors (I, V, VI). "Praising, Approving, Agreeing" (7) had a highest loading of .2493, and was also found to load about equally on factors I, III, and VI. Category 10, "Supporting, Reassuring, Agreeing" had a highest loading of only .2074. Category 19's ("child given directions") most substantial loading was .20, and Category 25 ("compliance, appeasement") also had a maximum loading of .22. Table 2 indicates that categories 6, 10, and 25 were infrequently used, and, while Categories 7 and 19 were frequently used, a consistent pattern could not be found for them. Thus, there appeared to be reasonable grounds for not examining any of these variables further. A more detailed discussion of the results of the factor analysis for the remaining categories is presented below, and a complete summary of the factor loadings can be found in Appendix F.

Factor I: Instructing - Lecturing. The strongest factor (.1012 of variance) is comprised of three categories that form a conceptual unit. (See Table 2 for their mean frequencies of usage.) Category 4 tells the child how to solve a problem, gives him advice or suggestions, or provides

answers or solutions for the child. Category 5 tries to influence the child with arguments, logic, or adult opinions. Category 22 is loaded negatively on factor 1 in that it measured the extent to which the adult systematically attempts to obtain more information or understanding from the child regarding his behavior.

Thus, this most common form of adult response is an instructional, instrumental act in which the adult directively provides solutions or argues for them--and systematically avoids seeking more information. Helpful intent and constructive direction may be proffered in this mode of responding, but encouragement of the child's own developing problem solving abilities and mastery strivings are stifled. Similarly, respect that may be communicated through a style of mutual interaction, encompassing listening and shared exploration of the child's experience is thwarted with this response.

Factor II: Authoritarian Control, Psychological Dominance. The second most prominent factor (.0993 of variance) was comprised of five categories. (Again, see Table 2 for a presentation of the mean frequencies and ranked order with which these responses were emitted). The first four categories represent responses that establish adult power or dominance over the child through several different modes. Category 1 ("ordering, directing, commanding") is a reactive/assertive stance that controls the child from an authoritarian position. Category 2 ("warning, admonishing,

threatening") reflects a challenging/punitive orientation to child control that is also authoritarian based power assertion. With Category 3 ("exhorting, moraling, preaching"), power and dominance is not expressed over the child in a harsh and intimidating fashion as in 1 and 2, but through a more passive manner utilizing guilt or shame inducement. The fourth category that loaded substantially on Factor II extends the theme of dominance to intellectual control. Category 9 ("diagnosing, interpreting, reading-in") leaves the child's motives and feelings vulnerable to adult intrusion. In all four categories, the child is subordinated to adult power, which implies, in large part, attitudes of threat and inferiority. These categories clearly do not establish defined, non-judgemental, or behavior-focused limits and control on child behavior. The final category, 12 ("withdrawing, distracting, avoiding"), does not continue the directive theme of control, but is an opposite type of response, one that moves away from active confrontation and avoids or de-emphasizes the situation. This act may reflect either an attitude of rejection similar to category 3, or perhaps a good-willed attempt to make things "go better."

Factor III: Adult Expression of Child's Interpersonal Influence. Factor III (.073 of variance) is made up of three related categories that, from a theoretical perspective, are effective responses. Category 14 ("statement of adult feelings") communicates to the child his/her reactions to their encounter. This was the most frequently given adult

response, which may partially be accounted for as a reciprocal emotional response to the strong affectively received child cues. Category 15 ("relating child feelings to adult feelings") takes the child directly into consideration for the first time, as does Category 17 ("relating child behavior to adult feelings"). Categories 15 and 17 serve as an educational input for the child that teaches him the interpersonal impact of his feelings and behavior upon others. Factor III is made up of categories that address adult and child "feelings"; however, it is interesting to note from Table 2 that usage of Category 15, which concerns child feelings, is much lower ($\bar{X}$ = .20) than Category 17, which concerns child behavior ($\bar{X}$ = .77). In all three categories, the adult is responding with the feelings aroused in him by the child behaviors, feelings or situations, which makes this an adult centered response.

Factor IV: Empathy. Factor IV (.0719 of variance) is made up of four child-centered responses. Category 13 ("statement of child feelings") generally communicates an awareness and acceptance of the child. Category 18 ("relates child feelings to adult behavior") teaches the child about the interpersonal sources and consequences of his feelings. Category 20 is also geared toward helping the child understand himself and his social world by giving him "specific directions regarding expression of present feelings." In this way, the child maintains his feelings, but learns appropriate channels of expression for them. All three of

these categories, which reflect a child-centered responsiveness, were found to be used very infrequently (see Table 2). Category 23 offers the child a "compromise or alternative" which again reflects a responsiveness to the child that expresses concern with his needs and teaches him an appropriate or mutually satisfying outlet for them. This group of adult responses does not focus on adult feelings as did Factor 3, but instead takes the point of view of the other--the child.

Factor V: Ridiculing/Interrogating. Factor V (.0776 of variance) is made up of two categories that may be seen not merely as insensitive or ineffective but as potentially abusive in a psychological sense. Category 8 ("name calling, ridiculing, shaming") actively moves against the child with strong critical rejection that portends harmful psychological consequences. This is the most severe of the 26 categories utilized. This category is coupled with 11 ("questioning, probing, cross-examining, prying, interrogating"), which does not seek further understanding but rather puts the child on the spot. This response often expresses adult anger, superiority, and distrust; and it seeks motives, blame, and fault in the child. Category 11 is less intensely attacking than 8, and although it could possibly express a more neutral or positive attitude, it also reflects to some extent an aggressive approach toward the child. Table 2 shows that Category 8 was used substantially, and it tended to occur more frequently than any of the four categories of Factor IV. Moreover, Category 11 is the sixth most commonly used mode of adult response.

Factor VI: Instrumental Control. Factor VI may be viewed as an attempt to direct or control child behavior. Category 18 ("relating child behavior to adult behavior") is a constructive category, helping to make the child aware of the behavioral consequences of his actions. Category 21 ("attempt to gain more information about child feelings") loaded negatively on factor 6. Category 24 ("bribe or contingency established") sets up conditions of approval or reinforcement that do not involve the adult directly or attempt to work with the child, as is done in Category 23, ("offers alternative or compromise"). Although the first category of Factor VI may be an educational, child-centered response, the second category is inimical to listening and exploring with the child, as is the third category, which attempts to control the child without personal involvement. This is the least influential factor (.0772 of variance) and its categories are used with very low frequency (see Table 2).

Acceptance - Rejection Measure

The six factors discussed above were generated through quantitative, multivariate analysis of the 26 scoring categories. One additional variable, identified for convenience as Factor VII, also was examined further. This variable is the global measure of acceptance or rejection of the child, discussed previously.

Multivariate Analysis of Variance

The results of the factor analysis served as the basis for generating composite dependent measures that then were

examined in terms of possible relations with the independent variables. Composite variables were produced by calculating the mean frequency of usage across the categories that loaded substantially on a factor (see above). In this way, six composite "factors" were generated; the global acceptance-rejection scale was the seventh dependent measure.

The seven dependent variables were subjected to a 2 (sex) X 2 (situation order) X 3 (treatment 1) X 3 (treatment 2) X 2 (situation) X 2 (response) multivariate analysis of variance, with the last two factors repeated within subjects. When a multivariate F ratio exceeded a confidence level of .05, associated univariate F ratios for each of the seven factors were examined. Findings are reported for univariate results which (a) were significant at $p < .01$, and (b) were not qualified by significant higher-order effects. A simple effects analysis further investigated any significant interactions, and individual comparisons between the positive, neutral, and negative child stimuli of Treatments 1 and 2 were completed where appropriate.

The multivariate analysis revealed a large number of significant effects (17 out of 31). Table 3 presents the nine F ratios for those multivariate comparisons which reflected at least one significant univariate result that was not qualified by any higher-order effect. Presented below is a detailed statement of these findings including, where appropriate, the final results of the simple effects analysis.

Table 3. Summary of Significant Multivariate Results Reflecting Significant Univariate Comparisons Not Qualified by Higher Order Effects.

	Source	F[a]	p
1.	Sex	2.9890	.0006
2.	Sex X Treatment 1 X Situation	1.898	.0266
3.	Sex X Treatment 1 X Situation Order	1.829	.0345
4.	Sex X Treatment 1 X Response	1.9795	.0194
5.	Sex X Treatment 1 X Situation Order X Treatment 2 X Situation	1.6264	.0237
6.	Treatment 1 X Response	26.34	.0001
7.	Treatment 1 X Response X Situation X Situation Order	4.883	.0001
8.	Treatment 2 X Response	26.346	.0001
9.	Treatment 2 X Situation Order X Situation	2.963	.0004

[a] df for the comparisons were always 7/144.

This overall finding indicated that males responded with less acceptance ($\bar{X}$ = 6.57) than did females ($\bar{X}$ = 7.0).

Sex Main Effect

The significant multivariate main effect for sex reflected, in part, a significant univariate comparison (F = 11.10; p .002) for Factor VII (acceptance-rejection), which was not qualified by any significant interactions.

Sex X Treatment 1 X Situation Interaction

The obtained multivariate Sex X Treatment 1 X Situation interaction reflected a significant (F = 8.738; p .0003)

univariate effect for Factor II (dominance-control). The interaction was explored further via simple effects analyses (see Appendix G for a more complete presentation of these findings). These tests indicated that individual comparison between the conditions of Treatment 1 for Situation I, and for males and females separately within Situation II were appropriate. These comparisons for Situation I (see Table 4 for condition means) revealed no significant differences in adult response between positive and neutral child stimuli ($F_o < 1$) but a significant difference between neutral and negative child stimuli ($F_o = 31.68$).

Table 4. Mean Factor 2 Responses Emitted in Situation I as a Function of Treatment I.

Situation I	Treatment I Stimuli	
Positive	Neutral	Negative
.33	.35	.85

Within Situation II, simple effects analyses revealed a sex difference for Treatment 1 where females did not significantly differ in response usage ($F = 2.98$); however, males did differ significantly ($F = 17.28$). Individual comparisons showed no significant difference in positive to neutral cues ($F < 1$), but a significant increase in Factor II usage for negative child cues ($F = 28.62$) was revealed. Table 5 presents the cell means that are relevant to these findings. Note, however, that the general pattern of means

is the same for males and females in Situation II and for responses in Situation II (compare Tables 4 and 5).

Table 5. Mean Factor 2 Responses by Males and Females in Situation II as a Function of Treatment I.

	Treatment 1 Conditions - Situation II		
Sex	Positive	Neutral	Negative
Males	.63	.43	2.33
Females	.30	.63	1.13

Sex X Treatment 1 X Situation Order Interaction

The multivariate Sex X Treatment 1 X Situation Order interaction was associated with a nonqualified, significant ($F = 5.52$; $p < .0050$) univariate effect for Factor III (adult expression of child's interpersonal effect). This interaction was explored further by means of a simple effects analysis (see Appendix G for a more complete presentation of this procedure). These tests indicated that individual comparisons between the conditions of Treatment 1 within each condition of Situation Order were appropriate. The comparisons for Situation I given first reflected a significant difference in adult response between positive and neutral child cues ($F = 56.18$), and a non-significant difference for neutral to negative cues ($F = 1.95$).

With Situation II given first, individual comparisons for Treatment 1 positive to neutral child cues reflected a significant difference ($F = 70.45$), but, again, no difference between neutral to negative child cues ($F < 1$); were found.

Again, the general pattern of results was the same across Situation Order, although minor differences did generate a significant interaction.

Table 6. Mean Factor 3 Responses Within Conditions of Situation Order as a Function of Treatment 1.

	Treatment 1 Conditions		
Situation Order	Positive	Neutral	Negative
Situation I Given First	9.60	3.53	4.66
Situation II Given First	10.46	3.66	3.00

Sex X Treatment 1 X Response

The multivariate Sex X Treatment 1 X Response interaction reflected a significant ($F = 9.2$; $p < .0002$) univariate effect for Factor V (ridiculing-interrogating). This interaction, which demonstrates a response pattern similar to that for Factor II above, was investigated further via simple effects analysis (see Appendix G for complete presentation). These tests indicated that individual comparisons for Response 1 within Treatment 1 were appropriate for males ($F = 20.37$) but not females ($F = 4.19$). The comparisons for Treatment 1 males revealed a non-significant positive to neutral response usage ($F = 1.38$) and a significant neutral to negative child cue difference ($F = 23.46$). Sex differences are established for both factors 2 and 5 where males, unlike females, significantly respond to negative-rejecting child stimuli with these two types of reciprocally rejecting responses.

No significant results were obtained for Response 2 which, contrary to prediction, was not effected by the conditions of Treatment 1. The means relevant to the Treatment 1 finding are presented in Table 7 below.

Table 7. Mean Factor 5 Responses Within Conditions of Sex as a Function of Treatment 1.

	Treatment 1 Condition		
Sex	Positive	Neutral	Negative
Males	.03	.33	1.56
Females	.03	.76	.46

Sex X Treatment 1 X Treatment 2 X Situation X Situation Order

The significant multivariate Sex X Treatment 1 X Treatment 2 X Situation X Situation Order interaction reflected a significant (F = 3.45; $p < .0100$) univariate effect for Factor VII (acceptance-rejection). This complex interaction was explored further by means of a simple effects analysis (see Appendix G for complete presentation). The results of these tests indicated that individual comparisons between the conditions of Treatment 1 within each condition of Situation Order were appropriate. Looking within Situation I given first, individual comparisons reflected a significant difference between positive and neutral stimuli (F = 13.88) but no differences between neutral and negative cues ($F < 1$). Table 8 presents the means relevant to these findings.

Table 8. Mean Factor VII Responses Within Situation I as a Function of Treatment 1.

Situation I - Treatment I Condition		
Positive	Neutral	Negative
7.38	6.35	6.2

Within Situation II given first, individual comparisons revealed a significant difference between positive and neutral cues (F = 6.07); and between neutral and negative child cues (F = 25.48). Table 9 presents these cell means. Although to different degrees, both situations demonstrate the same pattern of decreasing adult acceptance as subjects progress through positive, neutral, and negative child messages.

Table 9. Mean Factor VII Response Within Situation II as a Function of Treatment 1.

Situation II - Treatment I Condition		
Positive	Neutral	Negative
7.8	7.2	5.8

Treatment 1 X Response

The multivariate Treatment 1 X Response interaction reflected three significant unqualified univariate effects: Factor II (F = 33.28; $p < .0001$), dominance-control; Factor III (F = 103.94; $p < .0001$), adult expression of child's interpersonal impact; and Factor VII (F = 74.66; $p < .0001$), global rating of acceptance-rejection. These three interactions each were explored further via simple effects analysi-

(see Appendix G for complete presentation of these results). These tests revealed that individual comparisons between the conditions of Treatment 1 within Response 1 were appropriate for all three univariate effects. Contrary to Hypothesis 2, there were no significant results obtained for Response 2, which, apparently, was not effected by Treatment 1. The relevant cell means for each factor are presented in Tables 10, 11, and 12 below.

For Factor II within Response 1, individual comparisons revealed no significant differences in adult response between positive and neutral child cues ($F < 1$), and a significant increased usage for negative stimuli ($F = 66.91$).

Table 10. Mean Factor II Responses Within Response 1 as a Function of Treatment 1.

Treatment 1 Condition		
Positive	Neutral	Negative
0.0	.11	2.28

Within Response 1 for Factor III, the individual comparisons reflected a very significant difference between positive and neutral child cues ($F = 301.49$), and a non-significant difference between neutral and negative stimuli ($F = 2.68$). The obtained means for Factors II and III (see Tables 10 and 11) demonstrate that these particular types of adult responses are elicited virtually exclusively by their respective negative and positive child cues, and are rarely used elsewhere.

Table 11. Mean Factor III Response Within Response 1 as a Function of Treatment 1.

Treatment 1 Condition		
Positive	Neutral	Negative
3.75	.21	.55

Individual comparisons between the conditions of Treatment 1 within Response 1 for Factor VII also revealed a clear pattern of significant results. Significant differences between both positive and neutral (F = 58.86), and neutral and negative (F = 73.66) child cues were obtained. There was a significant decrease in adult acceptance (i.e., movement toward the child) as his communications moved from positive-loving to neutral to negative-rejecting. These means are presented in Table 12 below.

Table 12. Mean Factor VII Responses Within Response 1 as a Function of Treatment 1.

Treatment 1 Condition		
Positive	Neutral	Negative
8.41	6.89	5.18

Treatment 1 X Situation Order X Situation X Response

The significant multivariate Treatment 1 X Situation Order X Situation X Response interaction also reflected three significant lowest-order univariate effects: Factor I (F = 23.12; $p < .0001$), instructing-arguing; Factor IV

(F = 4.99; $p < .0080$), empathy; and Factor V (F = 5.54; $p < .0048$), ridiculing-interrogating. This interaction was investigated further via simple effects analysis for each univariate effect (see Appendix G for a complete presentation of these results). These tests revealed that the following direct comparisons involving the conditions of Treatment 1 were appropriate. In all three univariate cases, significant results were found only for Response 1, since Treatment 1 did not affect Response 2. The cell means relevant to these findings are presented below in Tables 13 through 16.

Simple effects analysis for Factor I indicated that individual comparisons between the conditions of Treatment 1 within each condition of Situation Order were appropriate. Factor I usage was found to increase in a step-wide fashion across positive, neutral, and negative child cues for Situation 1 occurring first or second. The increase in factor usage was sufficient to reach statistical significance, however, only for the condition of positive to neutral child cues when Situation I was given second (F +o = 5.69).

Table 13. Mean Factor I Responses for Response 1 in Situation I Within Conditions of Situation Order as a Function of Treatment 1.

	Treatment 1 Condition		
Situation Order	Positive	Neutral	Negative
Situation 1 Given First	1.7	2.03	2.43
Situation 1 Given Second	1.7	2.2	2.4

A slightly different trend was observed within Situation II. Mean usage of Factor 1 decreased from positive to neutral child cues (Situation II first: $\underline{F}$ +o = 2.54; Situation II second: $\underline{F}$ +o = 7.31) and increased very significantly in response to negative stimuli (Situation II first: $\underline{F}$o- = 124.05; Situation II second: $\underline{F}$o- = 91.08) within both Situation II order conditions. Again, however, Table 14 indicates that highest usage of Factor 1 occurred in response to negative child communications.

Table 14. Mean Factor I Responses For Response 1 in Situation II Within Conditions of Situation Order as a Function of Treatment 1.

	Treatment 1 Conditions		
Situation Order	Positive	Neutral	Negative
Situation II Given First	1.46	1.13	3.47
Situation II Given Second	1.86	1.30	3.30

Simple effects analysis for Factor IV revealed a Treatment 1 X Situation Order X Situation interaction significant at the .01 level ($\underline{F}$ = 7.67). Further investigation revealed that no simple effect was significant at the .01 level so that individual comparisons between the conditions of Treatment 1 were not appropriate. The obtained means are presented in Table 15; note the very low mean usage of this sensitive-empathic mode of response in all of the conditions.

Table 15. Mean Factor IV Responses for Response 1 Within Conditions of Situation Order for Treatment 1.

Situation	Situation Order	Treatment 1 Conditions		
		Positive	Neutral	Negative
I	Situation I Given First	.13	.33	.16
	Situation I Given Second	.6	0.0	.33
II	Situation II Given First	0.0	.36	.13
	Situation II Given Second	.13	0.0	.26

Simple effects tests indicated that individual comparisons between conditions of Treatment 1 and each situation condition were appropriate for Factor V within Response 1. These comparisons for Situation I demonstrated significant differences between positive and neutral stimuli ($F = 9.57$), but not between neutral and negative child cues ($F < 1$). The individual comparisons within Situation II reflected no significant differences between positive and neutral child cues ($F = 1.6$), but significant differences were obtained between neutral and negative stimuli ($F = 10.47$). Although significant increments in factor usage differed between Situations I and II, in both cases there was a step-wise increase towards highest usage of Factor V in response to more negative child communications.

Table 16. Mean Factor V Responses for Response 1 Within Conditions of Situation for Treatment 1.

	Treatment 1 Conditions		
Situation	Positive	Neutral	Negative
Situation I	0.0	.36	.45
Situation II	.03	.18	.56

Treatment 2 X Response

The significant multivariate Treatment 2 X Response interaction reflected three lowest-order significant univariate effects: Factor I (F = 39.08; $p < .0001$), instructing-lecturing; Factor II (F = 33.28; $p < .0001$), dominance-controlling; and Factor III (F = 103.9; $p < .0001$), expression of adult's experience and child's interpersonal effect. This interaction was explored further via simple affects analysis for each of the three univariate affects (see Appendix G for a complete presentation). These tests revealed that individual comparisons between the conditions of Treatment 2 were appropriate for all three factors within Response 2--which, of course, was when Treatment 2 was given. The cell means relevant to these findings are presented in Tables 17 through 19, below.

Factor I comparisons revealed no significant response differences between positive and neutral (F +o < 1) child cues; and a significant difference in factor usage between neutral and negative stimuli (Fo- = 35.92). Again, Factor I is most strongly elicited in response to negative child cues.

Table 17. Mean Factor I Responses for Response 2 With Treatment 2.

Treatment 2 Conditions		
Positive	Neutral	Negative
3.95	3.75	5.10

Individual comparisons for Factor II reflected no significant differences between positive and neutral stimuli ($F_{+o} = 1.14$), but showed a very significant increase in factor usage between neutral and negative cues ($F_{o-} = 87.84$). This type of adult responding is found to occur almost exclusively in reply to negative child stimuli.

Table 18. Mean Factor II Responses for Response 2 Within Treatment 2.

Treatment 2 Conditions		
Positive	Neutral	Negative
.11	.40	2.88

The individual comparisons between Treatment 2 conditions for Factor III revealed a highly significant result. Positive to neutral child cues reflected a highly significant difference in factor usage ($F = 281.96$), but no significant difference was obtained between neutral and negative child cues ($F < 1$). Factor III was found to occur frequently and selectively in response to positive-loving child cues.

Table 19. Mean Factor III Responses Within Response 2 for Treatment 2.

Treatment 2 Conditions		
Positive	Neutral	Negative
3.65	.23	.33

Treatment 2 X Situation Order X Situation

The final significant multivariate effect, a Treatment 2 X Situation Order X Situation interaction, reflected a nonqualified significant univariate effect (F = 10.10; $p <$ .0001) for Factor I (instructing-lecturing). Tests of simple effects explored this interaction further (see Appendix G for complete presentation of tests). The results of these analyses indicated that individual comparison between the conditions of Treatment 2 within each situation order condition were appropriate.

Within Situation I, given either first or second, there were no significant Treatment 2 effects. The means, which are presented in Table 20 below, demonstrate the pattern of slight increases in factor usage across positive, neutral, a and negative stimuli.

Table 20. Mean Factor I Responses in Situation I Within Conditions of Situation Order for Treatment 2.

	Treatment 2 Conditions		
Situation Order	Positive	Neutral	Negative
Situation I Given First	4.16	4.26	4.20

Table 20 (cont'd.).

Situation I Given Second	4.13	4.23	4.60

Within Situation II, presented first or second, however, individual comparisons within Treatment 2 were appropriate. Significant differences between positive and neutral child cues were found when Situation II was presented second (Situation II first: $\underline{F}$ +o < 1; Situation II second: $\underline{F}$ +o = 15.64), while significant differences between neutral and negative child cues, irrespective of presentation order, (Situation II first: $\underline{F}$o- = 21.33; Situation 2 second: $\underline{F}$o- = 18.36), were also obtained. The relevant means are presented in Table 21, below.

Table 21. Mean Factor I Responses in Situation II Within Conditions of Situation Order for Treatment 2.

	Treatment 2 Conditions		
Situation Order	Positive	Neutral	Negative
Situation II Given First	3.80	3.73	5.13
Situation II Given Second	4.5	3.3	4.6

Summary of Results

Factor Analysis Results

Adult behavior was scored into twenty-six specific categories. The mean frequency of category usage was factor analyzed and six composite factors were generated. These factors described the following modes of responding:

I) teaching-lecturing; II) control-dominance; III) adult expressions of their own experience and child's impact; IV) empathy; V) intimidation/interrogation; and VI) instrumental control. These factors served as dependent variables which were examined in relation to the independent variables.

Summary of Manova Results

Sex. Three significant results reflected male-female differences. Females had a significantly higher mean rating of global child acceptance than did males across all types of child cues. Males used both Factor II (power assertion/manipulative dominance) and Factor V (intimidating/interrogation) significantly more often than did females in response to negative child stimuli. These three results support the more threatening-punitive male stereotype.

Situation, Situation Order, and Response. In order to account for environmental setting and need arousal of the adult, two different settings and script dialogues were designed. These two different situations (I and II) which were designed to be of equal stimulus intensity were given in alternate order (Situation I or II first). Response (1 or 2) concerns which of the four adult responses obtained are being investigated for a particular analysis. These three independent variables produced two general results.

Concerning situation and situation order, it was consistently found that the Situation II dialogue elicited stronger responses. The results for Situations I and II followed the same general patterns, except Situation II

pulled more extreme high and low means and obtained higher significant F ratios than Situation I. The obtained F ratios for Situation II were often sufficiently larger than those of Situation I to effect a situation order interaction. The actual order in which the two situations were given did not seem to be an important effect.

Within this pattern of similar but more intense responding for Situation II, one difference was occasionally noted. Trends toward differential usage of Factors IV and V for the neutral child stimuli between Situations I and II were sometimes observed but generally not to a significant degree. Further exploration of this minor variation in an otherwise consistent pattern of results is presented in the discussion section.

Response 1 was only affected by Treatment 1, and Response 2 only by Treatment 2. In all cases, only the appropriately paired results (e.g. Factor VII for Treatment 1 and Response 1) were significant. This indicates that no other variables than Treatment 1 or 2 were influencing adult response. In sum, the effects of these three independent variables are only tangential to the overall results of the study.

Treatment 1, Treatment 2. Positive-loving, neutral, and negative-rejecting child statements comprise the two treatment conditions. Hypothesis 2 predicted that the type of initial Treatment 1 cue received by the adult would influence his/her response to the second Treatment 2 cue.

Significant results were not obtained for this hypothesis although a trend was suggested through two Treatment 1 X Treatment 2 interactions that approached significance at the .05 level only. This finding will be explored further in the discussion section. The results for each of the positive neutral, and negative stimuli comprising the two treatment conditions clearly confirmed hypothesis I and are presented below.

Positive Child Stimuli. Two significant results were obtained that characterize how adults responded to loving-approaching child stimuli. Factor VII is the global rating of acceptance-rejection. Adults responded to positive child cues with reciprocal acceptance and warmth. Within the context of this global evaluation, only one specific mode of response was elicited in response to positive child stimuli. Factor III--an adult statement of how they felt or of identifying the impact the specific child behavior or feeling had upon them was used. Thus, although the child emitted strong affective cues that were both positive and negative in nature, the adults tended to respond with statements of their own feelings only when the child's communications were of the positive, loving, moving towards type.

Neutral Child Stimuli. Subjects also responded to a non-emotional child statement that did not move towards or against them. Significant results were obtained for Factor VII (acceptance/rejection) only where the adult again responded with a reciprocally neutral affective reply. A

slightly different pattern of responding between neutral Situation I and II cues was obtained and will be explored in the discussion section, as noted earlier.

Negative Child Stimuli. Four factor results were obtained descriptive of adult response to angry-rejecting child communications. Factor 1 represents a lecturing or instructing mode of response to child communications that emphasize the adult's answer or viewpoint to the exclusion of seeking more information from the child. The results indicate this to be the most frequent adult response to negative child statements for all treatment conditions.

The Factor II mode of adult response indicates control of the child through reactive power assertion and threat or with a less overt psychological control of shame or belittlement of the child's self. The child receives a punitive/rejecting message of inferiority and experiences the adult moving against him/her in their interpersonal relationship. Anova's across five different treatment levels revealed the same pattern of highly significant results: Factor II usage changes in a step-wise fashion from slight to almost non-existent presence in positive and neutral child statements and then increases dramatically to very high usage in response to negative child communications. A sex difference, noted earlier, revealed that female usage increased in a step-wise fashion across positive, neutral, and negative cues but there was not the dramatic increase for negative cues that males expressed. Simply, adults, and especially males, responded

in kind to the hostile-rejecting child statements with anger or manipulative control.

Factor V was described as the most harmful category because of the psychological abuse evident in Category 8--shaming, name calling, ridiculing. The second category (11) was less severe but complementary in attacking or moving against the child through interrogation. A sex difference result was obtained where males significantly responded in this manner to negative child cues while females did not. A somewhat different pattern of responses was also obtained for Situations I and II within this factor. A stepped increase in Factor V usage occurs across positive, neutral, and negative cues for both situations, as expected. However, the largest factor usage occurs in the neutral cue for Situation I and in the negative cue for Situation II. A possible explanation of this variation in response patterning is explored in the discussion.

Significant results were also obtained for the Factor VII measure of acceptance-rejection with negative child cues. The adults' response to these stimuli fell to a mildly rejecting score that was a significant increase in the rejection-moving away score from neutral stimuli. The child's rejecting communication was significantly met with a reciprocal response from the adult that was hostile-rejecting.

Thus, the results for Factor VII clearly confirm Hypothesis 1 where adults are found to respond to varying child communications in a reciprocal or like manner. Specific

modes of response show Factors I, II, and V to occur significantly more often in response to negative child cues and Factor III in response to positive child stimuli. No significant results were obtained with Factor VI. Finally, the reader is alerted to the very low frequency with which the most sensitive and empathic Factor (IV) was utilized throughout the study.

DISCUSSION SECTION

The purpose of this study was to provide information concerning how adults respond to children. In their day-to-day activities, young children present the adults that they encounter with a wide array of communications that could be broadly described as avoiding, approaching, or attacking. Thus, the role that these positive-loving, neutral, and negative-rejecting child communications play in the kinds and characteristics of adult response was investigated.

Reciprocal Adult Responding

Acceptance-Rejection. The major hypothesis of this study that predicted adults would respond in kind to the varying affective child communications was confirmed. These results and their implications are elaborated below.

Parental acceptance was one of the most basic issues addressed in this study. Reviewing theoretical and empirical studies, Reif and Stollak (1972) cited adult acceptance, warmth, or positive regard as the single most important dimensions of the adult-child relationship. The results obtained here demonstrated that the important quality of acceptance was conveyed by adults only when in response to similar loving-accepting child messages. Child statements of a positive affective nature elicited reciprocal loving-

accepting adult statements; affectively neutral child cues elicited a significant drop in adult acceptance and "moving-towards" the child to a neutral rating; and negative-rejecting child cues pulled rejecting "moving-away" from the child responses. In addition to adult acceptance being communicated only in response to similar positive child stimuli, the adults used in this study did not mediate their role-play replies to negative child cues, but, again, responded reflexively with counter child-rejecting responses.

Davis (1965) reports that the most widely held child-rearing belief in America today is in the importance of parents acceptance or love of the child. However, the results obtained here point up the delimited conditions within which adult acceptance is actually expressed to the child. The reciprocal rejecting responses which were obtained may diminish the child's experience or expression of many "negative" affects. Here, the possibility arises that making adults aware of their propensity to respond reflexively in a reciprocal fashion, and of the potential influence these types of responses may exert on the child, could, through training, result in an enlarged repertoire of available and more effective responses.

Specific Modes of Response. Within the context of the global finding concerning acceptance and rejection, the specific manner in which the adult responded to the varying child cues was investigated. When the adult received a positive child statement that expressed love, care, or need

of them, a very specific mode of response was obtained. All factor usage was very low in response to the positive cues except for Factor III, which was used to a very significant degree. Adults responded to the approaching child communication with a statement of how they felt or identifying the child's impact upon them. This could be considered an effective mode of adult response that teaches the child an interpersonal awareness of how one person affects another and provides a model of affective communication.

Two distinctions further characterize this mode of response. First, within this factor, the most frequently used category was adult expression of their own feelings. Less frequently used was the educative response of communicating the effects of the child's behavior upon the adult and the least emitted response related child feelings to adult feelings. This pattern of results confirms the earlier findings of Stollak, Scholom, Kallman and Saturansky (1973) that adults tend to focus their responses on child behavior and not on the child's feelings. Further, theorists have stressed the importance of acknowledging or reflecting the child's inner life. However, it is important to note the adult-centered responsiveness of Factor III. In contrast to Factor IV, for example, the adult is not expressing the child's experience but their own. Although this could be considered an appropriate response, it is noteworthy that the capacity for child-centered responsiveness is not evidenced.

Subjects also responded to a non-emotional child statement that did not move "toward" or "against" them. A

slightly different patterning of results between Situations I and II was noted for the neutral stimuli. Within Situation I, a stepped increase across positive, neutral, and negative child cues was obtained with Factor I, while for Situation II, there only was a drop in Factor 1 usage from positive to neutral cues. In accounting for this inconsistency, there is a notable difference between the dialogues of Situation I and II. The dialogue for Situation I places the adult in the kitchen unpacking packages onto the table and the neutral child cue is that she can "almost reach the cupboards" but is going outside to play. Here, the possibility that the child could assist the adult in his/her chores is suggested. There is no such relatedness of adult and child activities in Situation II, it is not implied or suggested that the child has the ability to help the adult. Thus, Situation I may elicit more child direction and instruction concerning how he may help put the groceries away than Situation II. The same pattern also occurred for Factor 5 where higher usage was obtained for neutral Situation I than Situation II cues. Here it is possible that the adult responds to the child's ability to help him put the groceries away and his intention to go outside and play with an angry questioning (Category 11) or criticizing resentment (Category 8). No factor usage was elicited significantly highest in response to the neutral child stimuli.

Three different modes of response occurred in reply to the hostile-rejecting child communications. Factor I

was used highest in response to negative child stimuli. The effectiveness of this response may be evaluated differently. Baumrind (1967) describes the most effective parent as authoritative--one who "uses reason, power, and shaping by reinforcement to achieve her objective (p 80)." Although this may be similar to Categories 4 and 5 of Factor I, they are incompatible with Baumrind's further stress on maturity demands, warmth, and independence, all of which must occur concurrently in responding to the child. Hilton (1967) found mothers of dependent preschoolers to be significantly more involved and interfering than mothers of independent children. These results lend support to the evaluation of Factor I as an ineffective adult response, in which the child's own mastery skills are thwarted. Although a helpful intent may be implied and necessary guidance provided in particular circumstances or in conjunction with other adult communications, greater respect for the child's autonomy would be more effective.

Factor II was found almost exclusively in response to negative child communications. With this factor, control was exerted over the child through authoritarian power assertion or psychological manipulation. Becker (1964) has noted the relationship between power assertive discipline and externalized sources of control in the child. There is a communication of parental rejection inherent in this mode of response which has been found to be related to both dependence (Winder & Rau, 1962) and aggression (McCord,

1961) in preadolescent boys. The delectrious psychological effects of guilt which may also be imparted with this factor response have been widely acknowledged in clinical lore.

Similarly, Factor V occurred in response to negative child cues and communicated a challenging-rejecting stance. This response reflected the most directly rejecting-shaming attitude which serves to intensify the potential dependency or rebelliousness cited above. For all three, the adult responses given tend to diminish the child's positive self perceptions and sense of effectance.

Sex Differences. Cohesive sex differences were obtained for Factors II, V, and VII, which confirm previous findings. In the Jackson (1956) study of parental control cited earlier, females were found to take responsibility for child discipline but also to be considerably less severe and harsh than males in their mode of control. Becker's (1964) review of parental discipline noted that fathers were stricter, more punishing, and more fear-arousing than females, who were more nurturant in their discipline. This conclusion was confirmed in this study, since females did not significantly increase their usage of controlling/dominating (Factor II responses) and shaming and interrogating (Factor V responses) as a function of negative child cues as did males. Further, the responses of females to all child communications were rated as being significantly more accepting and responsive to the child than were male responses. In part, these results lend support to the role stereotype of punitive, harsh males

and more nurturant, less aggressive females. However, although significant differences are obtained with Factor VII (acceptance-rejection), examination of the means indicates a small absolute difference. Notably, neither males or females responded with a high acceptance, even to the positive child stimuli.

Empathy

The categories that clustered together to form Factor IV represent a very important interpersonal construct. Four categories that focused on child feelings and their communication reflected an ability of the adult to be aware of the psychological state of the child and express that recognition or understanding to the child. This awareness of the other in interaction has been theorized to be a critical element of healthy relationships and has received strong empirical support in psychotherapy research (Bergen & Garfield, 1971). This study revealed that adults tended not to behave in this manner since these categories were among the least frequently used modes of responding.

Factor III, which also was posited to be an effective response of adult expression and communication is notably different from Factor IV because it acknowledges the child's experience rather than taking their own adult point of view. The subjects in this study were able to utilize these Factor III categories with a very high frequency, but only in response to positive child stimuli. Two mechanisms are suggested here: (a) adults infrequently respond to the

experience of the child, and (b) they can only experience and express their own internal processes but even in this case, only when in response to an initial eliciting positive-loving child communication.

Sequence Effects

The second hypothesis, that an initial child communication would influence adult responses in a cumulative fashion, was not confirmed. Two interactions were obtained that approximated significance for this hypothesis, but only at the .05 level. A possible explanation for this lack of support can be found in the administration procedure. Two sequence dialogues were designed to simulate an actual conversation: Child Statement 1 - Adult Response 1, Child Statement 2 - Adult Response 2. However, to make the second child statement appear to be contingent on the adults' response the experimenter had to insert a second cassette tape between the first and second response, a procedure that caused a several second time delay and an intervening event. This lag and interruption may have served to break the attempted continuity of the conversation such that the subject felt that he/she was responding to a more independent second event. The emotional impact or cognitive set experienced from the first cue may have been lost or sufficiently diminished.

Methodology

To observe adult responses to important, but frequently unavailable child communications tape recorded scenarios were

developed. This was found to be an effective means of obtaining seemingly natural or genuine responses. In having to respond immediately to an affectively charged child cue with their own verbalized response, relatively spontaneous and unpremeditated replies were obtained. Future experimentation with this projective technique might continue to find it effective; however, two slight problems arose in this study. To control for situational effects, two different but similar environmental settings and child scripts were developed (Situation I and Situation II). Although they were designed to be of equal stimulus intensity--and raters scored them as nearly identical--Situation I obtained responses that were less intense or extreme than Situation II. Also, the neutral cue for Stimulus I elicited some differences from the same cue in Situation II, as was discussed earlier. Equality of stimulus type and intensity generally were obtained in this study, but small variations were observed that could and should be controlled in future research that uses this technique.

A second problem in the administration procedure was hypothesized to have accounted for the failure to confirm hypothesis two. Further studies that attempt both to simulate a sequential conversation and to convince the subjects that the second response of the child is contingent upon the meaning of their first response must have an audio tape set-up such that the recording of subjects' response and the playing of child cue operate with a minimum of experimenter

activity and time delay. If this were done more efficiently, a different pattern of results might be obtained concerning the effects of sequences or chains of communication on adult modes of response. In sum, this role-play projective technique deserves further attention as a potentially effective instrument for studying specific communication processes.

Generalizing to Other Populations

What inferences can be made from the results obtained with this under-graduate sample to other parent populations or to the future parenting of these same adults? It is hypothesized that the immediate verbal responses obtained from these subjects are similar to the responses available to them in their real-life interaction with children. Evidence supporting this is provided in one study that obtained thought-out and written adult responses to parent-child problem situations. Kallman and Stollak (1974) found that a sample of well-educated mothers of elementary school children responded in a nearly identical fashion as a similar sample of undergraduates on this projective test. This lends support to the notion that actual parent populations respond to their children in a similar fashion to the undergraduates that were observed in this study and that the parenting responses of these undergraduates probably will not change over time as they raise their own children. However, the results of this study must be viewed only as responses to a projective test and not absolutely predictive of actual adult-child behavior.

CONCLUSIONS

The purpose of this paper, as stated earlier, was to provide information descriptive of the adult-child communication process. Findings were obtained here that provide insight into how adults hypothetically respond to different types of important child messages. Hopefully, the information obtained here may be utilized to help educate adults to respond more effectively to children. Subscribing to the statement cited by Becker (1964) earlier, making adults aware of their behavior toward the child and of its impact on the child can serve to motivate a change in adult responding to children.

Through a program of education in child-care-giving, adults could be informed of the very strong propensity they will have to respond in a reciprocal manner to child communications. Particularly, hostile-rejecting messages that children will communicate to them will have a very strong tendency to elicit a similar rejecting response from them. Adults may be trained to "mediate" their responses and draw from a wider repertoire of alternative responses which may not continue the cycle of antagonistic-rejecting interaction. Concerning the finding of reciprocal rejecting responding, the three specific modes of negative response obtained

could also be revealed to adults who interact with children. Theoretically, each of these three modes of response has specific harmful or inhibiting influences upon the developing child. These potential effects could be discussed and the empirical research findings supporting these evaluations, such as those cited earlier, presented. Finally, the propensity for more severe rejecting, ridiculing, shaming, and threatening evidenced by males in this study could also be noted in order to facilitate their learning more effective modes of responding.

While the findings discussed above are relevant to the communication of ineffective responses, other findings concern adult responses and their influence on positive mental health. The adults in this study were not able to take the point of view of the child. Adults could express their own experience in response to positive-loving child cues, but they could not de-center and focus on the child in response to any type of communication. This ability for child-centered responding and empathy has been linked to healthy interpersonal relations. The low-usage of this sensitive form of response points up the need for training and skill development of this theoretically "effective" response.

Clearly, adults were found to respond in several particular ways. An awareness of these responses and their potential effects on the child could, through education, enable adults to respond more effectively. However, the fundamental question still remains unanswered. The effects

of these various modes of response on the personality and social development of the child have not yet been determined. The behavioral responses scored are indicative of theoretically sensitive and ineffective responding. Although these dimensions are supported with a broad set of empirical findings, the actual effects of these types of adult response on the child have not been established. The results of this study do provide descriptive information about hypothetical adult responding to children, but it leaves future research to answer--what do adults do to facilitate the rearing of loving, competent, and happy children?

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APPENDICES

APPENDIX A

SCORING GUIDE TO PCIPT

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SCORING GUIDE TO PCIPT

Responses on the PCIPT are scored for the following categories:

1. Ordering, Directing, Commanding

   Telling the child to do something, giving him an order or a command. This does not include telling him "You may do..." or giving him alternatives.

   Example phrases: "You must...," "You have to...," "You will..."
   Examples: "I don't care what other parents do, you have to do the homework."
   "Don't talk to your mother like that!"
   "Now you go back there and play with Ginny and Joyce."
   "Stop complaining."
   "Stop doing that."
   "Stop it now."

2. Warning, Admonishing, Threatening

   Telling the child what consequences will occur if he does something.

   Example phrases: "You had better...," "If you don't, then..."
   Examples: "If you do that you'll be sorry."
   "One more statement like that and you'll be sorry."
   "One more statement like that and you'll leave the room."
   "You'd better not do that if you know what's good for you."

3. Exhorting, Moralizing, Preaching

   Telling the child what he should or ought to do.

   Example phrases: "You should...", "You ought...", "It is your duty...", "It is your responsibility...", "You are required..."

3. (Cont'd.)

Examples: "You shouldn't act like that."
"You ought to do this."
"You must always respect your elders."
"Don't ever interrupt a person when he's reading."
"You have to learn to share."
"Always clean up after yourself."
"That's not a nice way to talk."

4. Advising, Recommending, Providing Answers or Solutions

Telling the child how to solve a problem, giving him advice or suggestions, providing answers or solutions for him.

Example phrases: "What I would do is...", "Why don't you...", "Let me suggest...", "It would be best for you to..."
Examples: "I suggest that you talk to your teacher about it."
"Can't you put each thing away after you use it."

5. Persuading with Logic, Arguing, Instructing, Lecturing

Trying to influence the child with facts, counter-arguments, logic, information, or your own opinions.

Example phrases: "Do you realize...", "Here is why you are wrong." "That is not right...", "The facts are...", "Yes, but..."
Examples: "College can be the most wonderful experience you'll ever have."
"Children must learn to get along with others."
"Let's look at the facts about college graduates."
"If kids learn to take responsibility around the house, they'll grow up to be responsible adults."
"Look at it this way--your mother needs help around the house."
"When I was your age, I had twice as much to do as you."

6. Evaluating/Judging Negatively, Disapproving, Blaming, Cricizing

Making a negative judgment or evaluation of the child.

Examples: "You are bad."
"You are lazy."
"You are not thinking straight."
"You are acting foolishly."
"You're very wrong about that."

7. Praising, Judging/Evaluating Positively, Approving, Agreeing

   Offering a positive evaluation or judgment of the child, agreeing.

   Examples: "You are a good boy."
   "That's good."
   "I approve of...".
   "Well, I think you're pretty smart."
   "I agree with you."
   "That's more like it."

8. Name-calling, Ridiculing, Shaming, Using Sarcasm, Making Light of

   Making the child feel foolish, putting the child into a category, shaming him

   Examples: "You're a spoiled brat."
   "Look here, Mr. Smarty."
   "You're acting like a wild animal."
   "Okay, little baby."
   "Get up on the wrong side of bed this morning."
   "Cat got your tongue."

9. Diagnosing, Psycho-analyzing, Interpreting, Reading-in, Offering insights

   Telling the child what his motives are or analyzing why he is doing or saying something; communicating that you have him figured out or have him diagnosed.

   Example phrases: "What you need is...", "What's wrong with you is...", You're just trying to get attention to...". "You don't really mean that...", "I know what you need." "Your problem is...".
   Examples: "You're just jealous of Ginny."
   "You're saying that to bug me."
   "You don't believe that at all."
   "You feel that way because you're not doing well in school."
   "You always want to play when I'm working."
   "You must love to see how far you can go before I get mad."
   "You're trying to get my goat."

10. Supporting, Reassuring, Excusing, Sympathizing, Consoling, Making Light of

    Trying to make the child feel better, talking him out of his feelings, trying to make his feeling go away, denying the strength of his feelings

10. (Cont'd.)

Examples: "It's not so bad."
"Don't worry."
"You'll feel better."
"That's too bad."
"You'll feel better tomorrow."
"All kids go through this sometime."
"I used to think that too."
"You could be an excellent student with your potential."

11. Questioning, Probing, Cross-examining, Prying, Interrogating

Trying to find reasons, motives, causes; searching for more information to help you solve the problem

Example phrases: "why...", "Who...", "Where...", "When...", "How"
Examples: "Why do you suppose you hate school?"
"Do the other kids tell you why they won't play with you?"
"Who put that idea in your head?"
"What will you do if you don't go to college?"

12. Withdrawing, Distracting, Avoiding, Ignoring, Bypassing

Trying to get the child away from the problem; withdrawing from the problem yourself; distracting the child or pushing the problem aside.

Examples: "Let's not talk about it now."
"Not at the table."
"Just forget it."
"That reminds me..."
"We can discuss it later."
"We've been through all this before, let's not go through it again."

13. Is there a statement of the child feelings?
"You seem sad." "You look happy."

14. Is there a statement of the adult feelings?
"I feel sad." "I am happy."

15. Is there a relating of child feelings to adult feelings?
"When you look upset, I become sad."

16. Is there a relating of child feelings to adult behavior?
"When you look upset, I try to cheer you up."

17. Is there a relating of child behavior to adult feelings?
"When you yell, I get angry."

18. Is there a relating of child behavior to adult behavior?
"When you yell, I tell you to stop."

19. Child given directions to change behavior now or in the future.
"You must stop hitting your sister and apologize."

20. Is the child given specific directions regarding present feelings--the way to handle feelings now?
"If you are angry at your sister, tell her so, right now."

21. Is the child given specific directions regarding future feelings--the way to handle feelings in the future?
"Whenever you get angry at your sister, you must tell her so."

22. Is there an attempt to obtain more information regarding child feelings?
"Can you tell me what you're upset about?

23. Is there an attempt to obtain more information regarding child behavior?
"Tell me what happened."

24. Child given an alternative or compromise solution based on mutual respect and cooperation.
"Next time we go shopping, we'll bring some fruit or raisins with us that you may eat while we shop."

25. Control of the child exerted through a bribe or contingency demand without mutual reciprocity.
"If you're good maybe I'll let you go."

26. Unrestricted compliance to child's needs, wishes, and demands.
"I'll take you to the zoo right now.

Acceptance-Rejection Measure

1-5 Scale reflecting responses of Acceptance-Moving Towards, Neutral, and Moving Against-Rejection.

5. Very strong affective approach to child--strong communication of acceptance moving towards.
   a) Strong statement of adult feelings in a positive manner. "I love you."
   b) Verbal recognition and acceptance of child feelings. "That really makes you feel good."
   c) Questioning attempt to understand child feelings in an accepting way. "I'm wondering if you're angry with me for leaving?"

4. Positive approach oriented response to child.
   a) request for mutual interaction. "Let's watch TV together." "Let's go outside and play as soon as we finish the dishes." "Maybe we can go shopping together."
   b) support, approval, comfort, consoling, encouragement. "I hope you had a good day."
   c) Questioning child about his behavior in an attempt to understand "How was your day today?"
   d) permission, compliance "I'll buy you one and let you put it together." "You can have one later."

3. Neutral
   a) information seeking "Will you help me put these groceries away?" "What's on TV?"
   b) opinions, explanations, reasons, facts, statements that are not evaluative of child "You can't have a yo-yo every time you ask for one."
   c) limits controls, directions "Put the puzzle away until after dinner." "Leave the puzzle alone."

2. Moving Away, against, mild rejection or unacceptance
   a) disapproval of child "You're wrong."
   b) unacceptance of child's feelings "You shouldn't be angry at her."
   c) moralizing
   d) criticism, withdrawal punishment, threatening

1. Statement of hate, condemnation, shaming, abusive language, rejection of child
   a) You're an idiot", "I'm going to stop feeding you." "I hate you."

APPENDIX B

INSTRUCTIONS TO SUBJECT

APPENDIX B

INSTRUCTIONS TO SUBJECT

A series of adult-child interaction sequences are tape recorded here. You are to imagine or pretend that you are the parent (mother or father) of the child involved, who will be a seven year old boy.

Your task is to respond exactly as you would if you actually were in each of the situations. Imagine yourself in the situation described and verbally respond to the child as if you were in that situation and were having that dialogue with him. Say the exact words that you would say to the child and the experimenter will select an appropriate second child response to which you are also to respond as if in a continuing dialogue. Again, respond to the child as if you are both actors in a play or movie. For example, do not say, "I would help him with his homework", instead, for example, say "I will help you with your homework for thirty minutes, Bobby, then you can go outside to play until dinner."

Please feel free to make each response as long and complete as you would like or feel you would naturally respond. The tape will only take about five minutes for you to complete. You are encouraged to role play and reflect the same emotions and intensity in your voices as you might be feeling in the actual encounter.

Rehearsal Dialogues

In order to become comfortable with the role playing situation we will begin by practicing with two dialogues. In these two rehearsals please respond to the person on tape as if he were a friend of yours. Respond exactly as you think you would if encountering this situation in real life. Make each response as complete as you naturally would, expressing the same feelings and thoughts you might be having if that encounter were actually taking place.

1. It's a Saturday morning and you are walking through the sporting goods dept. of Sears Roebuck when you see your friend David looking over the bicycles. As you walk up to greet him, he says to you:
Friend: Hi, look at these bikes. I'd sure like to get a new one for this spring.
Subject:
Friend: My old one isn't much good anymore. I've been looking bike stores over for a couple weeks now. It's fun to shop around.
Subject:

2. You and your friend Don are just sitting down to eat dinner. You've been working together all day and your friend Don says to you:
Friend: "Boy, it sure does feel good to sit down, I'm really tired and hungry."
Subject:
Friend: "It'll be good to just relax here for awhile. Gosh, I've got a lot of things to do tonight when I get home."
Subject:

Parent-child Interaction Projective Test Script

SITUATION 1.

You have just returned home from an unhurried afternoon of shopping. As you are standing in the kitchen and unpacking the last packages onto the table, your seven year old son comes in and says:

A.)
C. "Oh boy, I'm really glad you're home, I missed you lots and lots. It always feels so good to be with you."
A.
C. "I'm going to stay here and help you put the groceries away. It's fun to be with you because I love you."

B.)
C. "Oh boy, I'm really glad you're home, I missed you lots and lots. It always feels so good to be with you."
A.
C. "Hey, pretty soon I'll be tall enough to reach up to the cupboard and put the packages away. Well, I guess I'm going to go outside and play for awhile now."
A.

C.)
C. "Oh boy, I'm really glad you're home, I missed you lots and lots. It always feels so good to be with you."
A.
C. "Hey. There's not a Duncan yo-yo in here anywhere and you know that I wanted one. I don't like you anymore, I hate you, I hate your guts."
A.

D.)
C. "Hey, pretty soon I'll be tall enough to reach up to the cupboard and put the packages away. Well, I guess I'm going to go outside and play for awhile now."
A.
C. "You know, I'm really glad you're home, I missed you lots and lots. It always feels so good to be with you."
A.

E.)
C. "Hey, pretty soon I'll be tall enough to reach up to the cupboard and put the packages away. Well, I guess I'm going to go outside and play for awhile now."
A.
C. "My friend Bobby got a new bicycle and he's going to ride over and show it to me. It's really neat."
A.

F.)
C. "Hey, pretty soon I'll be tall enough to reach up to the cupboard and put the packages away. Well, I guess I'm going to go outside and play for awhile now."
A.
C. "Hey, there's not a Duncan yo-yo in here anywhere and you knew that I wanted one. I don't like you anymore. I hate you. I hate your guts."

G.)
C. "Hey, there's not a Duncan yo-yo in here anywhere and you knew I wanted one. I don't like you anymore, I hate you. I hate your guts."
A.
C. "Oh I don't really care about that. I'm glad you're home, I missed you lots and lots. It always feels so good to be with you."
A.

H.)
C. "Hey, there's not a Duncan yo-yo in here anywhere and you knew I wanted one. I don't like you anymore, I hate you. I hate your guts."
A.
C. "Oh well, I guess I'll just go outside and play. My friend Bobby got a new bicycle and he's going to ride over and show it to me. It's really neat."
A.

I.)
C. "Hey there's not a Duncan yo-yo in here anywhere and you knew I wanted one. I don't like you anymore, I hate you. I hate your guts."
A.
C. "I told you I hate you and I mean it."

SITUATION 2.

You have been upstairs doing bookwork and hear your seven year old son coming home from school. As you are walking down the stairs to greet him, you see him standing in the hallway and he says to you:

A.)
C. "Hi, it really feels good to see you. I like it when you're here to see me when I get home. I love you so much."
A.
C. "I'm glad I have you. You're the most important person to me in the whole world."
A.

B.)
C. "Hi, it really feels good to see you. I like it when you're here to see me when I get home. I love you so much."
A.
C. "We played basketball at noon today. Well, I think I'm going to watch TV for awhile now."
A.

C.)
C. "Hi, it really feels good to see you. I like it when you're here to see me when I get home. I love you so much."
A.
C. "Hey, that's my puzzle on the living room floor. You let my sister put it together and you knew I wanted to do it alone. Get out of here, I hate you. You make me sick."
A.

D.)
C. "Hi, we played basketball at noon today. Well, I think I'm going to watch TV for awhile now."
A.
C. "You know, it really feels good to see you. I like it when you're here to see me when I get home. I love you so much."
A.

E.)
C. "Hi, we played basketball at noon today. Well, I think I'm going to watch TV for awhile now."
A.
C. "Our class is going to go to the zoo with the first graders

E.) (Cont'd.)
next Monday. We're all going to go together on the big county busses."
A.

F.)
C. "Hi, we played basketball at noon today. Well, I think I'm going to watch TV for awhile now."
A.
C. "Hey, that's my new puzzle on the living room floor. You let my sister put it together and you knew I wanted to do it alone. Get out of here, I hate you. You make me sick."
A.

G.)
C. "Hey, that's my new puzzle on the living room floor. You let my sister put it together and you knew I wanted to do it alone. Get out of here, I hate you. You make me sick."
A.
C. "Oh, I don't really care about that. It really feels good to see you. I like it when you're here to see me when I get home. I love you so much."

H.)
C. "Hey, that's my new puzzle on the living room floor. You let my sister put it together and you knew I wanted to do it alone. Get out of here, I hate you. You make me sick."
A.
C. "Oh, I don't really care about that. I think I'm going to watch TV for awhile now.
A.

I.)
C. "Hey, that's my new puzzle on the living room floor. You let my sister put it together and you knew I wanted to do it alone. Get out of here, I hate you. You make me sick."
A.
C. "I don't want you to talk to me. I hate you."

APPENDIX C

RATER INSTRUCTIONS FOR P.C.I.P.T. EQUALITY

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RATER INSTRUCTIONS FOR P.C.I.P.T. EQUALITY

Describe each of the following statements as being positive-loving (+), neutral-interfering (o), or negative-hostile(-).

A positive-loving statement is a communication of moving towards the other person - an affective approach statement of love, care, need that would be positive or enhancing to the recipient.

A neutral-interfering communication is a bid for attention or acknowledgment, an interactive statement that does not express either strong love, care, need or hate, rejection, anger to the recipient. It is rather a statement of fact or intention.

A hostile-rejection statement is a moving away from the other person in interaction. It is an affective statement of anger, dislike, hatred, or rejection, a "negative" communication.

Three rates obtained perfect agreement, r = 1.0.

On a scale of 1-5 rate how intense or strong the statement is based on both its verbal content and tonal expression.

Positive statements:

1.	2.	3.	4.	5.
slightly more positive than neutral or no affective-approach to other		like or attraction		clear statement of love, basic caring, or strong personal involvement as expressed in enthusiasm towards or missing and needing of person

Neutral: no rating

Negative statements:

1.	2.	3.	4.	5.
slightly more negative than neutral or no affective rejection of other		displeasure dislike		clear statement of hatred, disgust, rejection

Two rates obtained an agreement of (r) = .92 for Situation 1 and 1.0 for Situation 2.

APPENDIX D

TABLE I

APPENDIX D

Table 1. Inter-rater Reliability for Scoring Categories.

Rater Pairs / Category	I	II	III	Mean Category Reliability
1	.86	.95	.83	.88
2	-	.93	.71	.82
3	.96	.94	.94	.95
4	.86	.96	.96	.93
5	.95	.91	.83	.90
6	.64	.89	1.00	.84
7	.94	.96	.97	.96
8	.93	1.00	1.00	.98
9	.82	.89	.86	.86
10	1.00	.81	.89	.90
11	.90	.88	.94	.91
12	1.00	.92	-	.96
13	.92	.66	1.00	.86
14	.92	.94	.99	.95
15	.91	.70	.94	.85
16	1.00	-	1.00	1.00
17	1.00	.97	.95	.97
18	-	-	1.00	1.00
19	.92	1.00	.97	.96
20	-	.63	-	.63
21	-	-	-	-
22	1.00	.90	1.00	.97
23	.96	.87	.92	.92
24	.90	-	.95	.93
25	1.00	.63	.86	.83
26	.86	1.00	1.00	.95
Mean Reliability for Rater Pair	.92	.88	.93	.91

Inter Rater Reliability for Acceptance-Rejection Measure

Rater Pairs	I	II	III	Mean Reliability
	.86	.88	.93	.89

APPENDIX E

TABLE II

APPENDIX E

Table II. Mean Category Usage and Standard Deviation for the 25 Scoring Categories Utilized. 25 Scoring Categories Ranked by Mean Usage with Std. Dev.

Rank	Category	Mean	STD. DEV.
1)	14	1.7611	1.9242
2)	3	.9611	1.4887
3)	19	.8389	1.3167
4)	17	.7778	.8861
5)	22	.7778	1.3184
6)	11	.7500	1.3573
7)	7	.7278	1.2633
8)	1	.6611	1.2779
9)	5	.6662	1.1144
10)	4	.5500	.8861
11)	23	.4778	.9656
12)	21	.4611	.9766
13)	25	.2611	.7040
14)	15	.200	.6964
15)	8	.1833	.7128
16)	13	.1389	.4931
17)	24	.1278	.5596
18)	6	.1056	.4546
19)	9	.1056	.4786
20)	10	.1056	.6118
21)	2	.0944	.5563
22)	12	.0667	.3441
23)	16	.0500	.2851
24)	18	.0222	.1478
25)	20	.0222	.1817

APPENDIX F

SUMMARY OF FACTOR LOADING

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SUMMARY OF FACTOR LOADING

ROTATED FACTOR LOADINGS

	FACTOR 1	FACTOR 2	FACTOR 3	FACTOR 4	FACTOR 5	FACTOR 6	COMM.
1 VAR. 1	.3011	.5883*	.0638	-.1546	.2416	.0914	.5314
2 VAR. 2	-.1234	.6282*	.0172	.0471	.1528	.1134	.4486
3 VAR. 3	.3980	.4269*	-.1560	-.0329	-.1937	.0438	.4055
4 VAR. 4	.6669*	-.1383	-.1018	.0548	.0642	.0260	.4820
5 VAR. 5	.7195*	.1120	-.0824	-.0782	.0652	-.0242	.5479
6 VAR. 6	.2243	.1980	.0241	-.1626	-.2438*	.2309	.2293
7 VAR. 7	-.1973	-.1012	-.2493*	-.0320	-.0508	.2156	.1614
8 VAR. 8	.1890	.0765	-.1117	-.1337	.5973*	.0215	.4291
9 VAR. 9	.1039	.3680*	.0100	.0736	.2302	-.1064	.2160
10 VAR. 10	.2074*	.1159	-.0407	.1889	.0667	-.1007	.1084
11 VAR. 11	.0060	.0556	-.0025	.0867	.7007*	-.0640	.5057
12 VAR. 12	-.0287	.5944*	-.1224	.0679	-.1894	-.1050	.4206
13 VAR. 13	-.1947	-.0569	-.1854	-.5917*	.2209	-.0543	.4773
14 VAR. 14	-.1481	-.2339	.3412*	-.0801	-.2107	-.2179	.2914

APPENDIX F (Cont'd.)

	FACTOR 1	FACTOR 2	FACTOR 3	FACTOR 4	FACTOR 5	FACTOR 6	COMM.
15 VAR. 15	-.0244	.0347	.5556*	-.2291	-.0597	.0511	.3691
16 VAR. 16	.0514	-.0139	.0680	-.5361*	.0214	-.0154	.2956
17 VAR. 17	-.0654	-.1656	.5640*	.0565	-.0291	-.1174	.3676
18 VAR. 18	.0555	-.0235	-.0420	.0981	-.0399	.5983*	.3746
19 VAR. 19	.0032	-.0572	-.2007*	.0098	-.1634	.0660	.0747
20 VAR. 20	.1487	-.0450	.2074	-.4534*	-.0578	-.0152	.2763
21 VAR. 21	-.2662	-.2393	-.1281	-.0506	-.0227	-.3258*	.2538
22 VAR. 22	-.3502*	-.1373	-.2295	.0899	.-786	-.2103	.2784
23 VAR. 23	-.0354	.0843	-.3052	-.3908*	-.1235	-.1416	.2895
24 VAR. 24	-.1060	-.0497	-.1755	.0058	-.0534	.7451*	.6026
25 VAR. 25	.1429	.0194	-.2244*	-.1149	.1134	-.0294	.0981
26 HI. LOAD.	.7195	.6282	.5640	-.5917	.7007	.7451	
27 PROP. VAR.	.1012	.0993	.0732	.0719	.0776	.0772	
28 COM. P.V.	.1012	.2005	.2737	.3456	.4232	.5004	

APPENDIX G

TESTS OF SIMPLE EFFECTS

APPENDIX G

TESTS OF SIMPLE EFFECTS

Sex X Treatment 1 X Situation. The multivariate analysis of variance reflected a significant ($p < .0260$) Sex X Treatment, X Situation interaction which was associated with a significant univariate effect for Factor II ($p < .0003$). Tests of simple effects explored this interaction further.

The data were initially divided into each condition of Situation and a two-way simple anova for Sex X Treatment 1 was performed. Looking within Situation I first, a Treatment 1 main effect was established ($F = 10.96$*). The reader is referred to the main body of the text where individual comparisons between levels of the Treatment 1 effect are completed.

Looking within Situation II next, a significant Treatment 1 X Sex interaction was obtained ($F = 11.88$*). This interaction was further broken down by dividing the data into each condition of Sex. The results of this anova revealed a nonsignificant Factor II usage for females ($F = 2.78$); but a significant usage for mates ($F = 17.28$*).

*significant at .01 level

No further analyses were then appropriate for female responding, and the reader is referred to the text where individual comparisons between Treatment 1 conditions for males are completed.

Sex X Treatment 1 X Situation Order Interaction. The multivariate analysis of variance revealed a Sex X Treatment 1 X Situation Order interaction ($p < .0345$) which was associated with a significant univariate effect for Factor III ($p < .0003$.) This complex interaction was explored further via simple effects tests.

The data were first divided into each condition of Situation Order and a two-way simple effects anova for Sex X Treatment 1 was performed. Looking within Situation I Given First, a Treatment 1 main effect was obtained ($F = 31.75$*). A follow-up explanation of individual differences within levels of Treatment 1 is presented in the text.

Within Situation II Given First, a Treatment 1 main effect was again established ($F = 52.05$*). This significant effect is further investigated in the main body of the results.

Sex X Treatment 1 X Response. The multivariate analysis reflected a significant Sex X Treatment 1 X Response interaction ($p < .0194$) which was associated with a significant univariate effect for Factor V ($p < .0002$). This complex interaction was investigated further via simple effects analysis.

The data were first divided into each level of Response and a two-way simple effects anova for Sex X Treatment 1 was performed. Within response 1, a significant Sex X Treatment 1 interaction was obtained (F = 9.64*). The data from this interaction were then divided into each condition of Sex. The two-way anovas for sex revealed a significant Treatment 1 effect for males (F = 4.19). No further analyses were then appropriate for females, and individual comparisons between Treatment 1 conditions for males are completed in the text.

No significant results were obtained within Response 2 as noted in the text.

Sex X Treatment 1 X Treatment 2 X Situation X Situation Order. The multivariate analyses of variance revealed a significant Sex X Treatment 1 X Treatment 2 X Situation X Situation Order interaction ($p < .0237$) which was associated with a univariate effect for Factor VII ($p < .01$). This complex interaction was explored further via simple effects analysis.

The data were first divided into each condition of Situation and a four-way simple effects anova was then computed. Looking within Situation I, the only significant result was a Treatment 1 X Situation Order interaction (F = 5.41*). This result was investigated further by performing a two-way anova within each condition of Situation Order. There tests reflected a significant Treatment I effect for both Situation I Given First ($F < 10.79$) and for Situation

II Given First (F = 29.33*). The reader is referred to the main body of the text where further investigation of within Treatment 1 differences are given.

Looking within Situation II, no significant effects are obtained as reported in the text.

Treatment 1 X Response. The multivariate analysis of varience reflected a Treatment 1 X Response interaction ($p < .0001$) which was associated with three unqualified univariate effects: Factor II (p .0001), Factor III ($p <$ .0001*) and Factor VII ($p <$ .0001). These three interactions were each explored further via simple effects analysis.

For all three univariate effects, the data were divided into each condition of Response and a two-way anova was performed. Within Response 1, a Treatment 1 main effect was found for Factor II (F = 47.13*), Factor III (F = 183.82*) and Factor VII (F = 132.38*). The reader is referred to the main body of the text where direct comparisons between Treatment 1 levels are presented.

No significant results were obtained within Response 2 as noted in the text.

Treatment 1 X Situation Order X Situation X Response. The multivariate analysis of variance revealed a significant Treatment 1 X Situation Order X Situation X Response interaction ($p <$ .0001) which was associated with three unqualified univariate effects: Factor I ($p <$ .0001*), Factor IV ($p <$ .0080), and Factor V ($p <$ .0048). These three univariate effects were explored further via tests of simple effects.

For Factor I, the data were initially divided into levels of Response. A three-way Treatment 1 X Situation Order X Situation anova was performed and found significant (F = 21.98*). This result was then divided within each level of Situation Order. This two-way anova found a significant Treatment 1 effect for both SituationI (F = 6.13*) and Situation II (F = 72.56*) Given First. The reader is referred to the main text, where further investigation of the Treatment I effects are presented.

Within Situation II, a two-way anova was again performed for the Treatment 1 X Situation Order interaction. This interaction was found significant (F = 11.46*) and the data were further investigated within each condition of Situation Order.

This two-way anova again reflected a significant Treatment 1 effect for both Situation I (F = 48.39*) and Situation II (F = 6.9*) Given First. There Treatment 1 effects are further investigated in the main body of the text.

No significant results are obtained for Response 2, as noted in the text.

For Factor IV, the data were divided into each level of Response and a three-way anova was performed. Within Response 1, a significant Treatment 1 X Situation Order X Situation interaction (F = 7.67*) was obtained. This interaction was further broken down by looking within each Situation condition. No significant results were obtained

for the Treatment 1 X Situation Order interaction for either Situation I (F = 3.04) a Situation II (F = 1.73). No further analyses are appropriate and any further statements about Treatment 1 cannot be made appropriately, as noted in the text.

Within response 2, again, no significant results were obtained.

For Factor V, the data again were initially divided into each level of Response, and a three-way anova was performed. Within Response 1, the Treatment 1 X Situation Order X Situation interaction was significant (F = 5.35*). This result was further broken down by looking within each condition of Situation.

Looking within Situation I, a Treatment 1 main effect was found (F = 8.16*). Within Situation II, a Treatment 1 main effect was also found (F = 10.78*). The reader is referred to the text where individual comparisons between levels of Treatment 1 are presented for both Situations Conditions.

No significant results were obtained for Response 2 as noted in the text.

Treatment 2 X Response. The multivariate analysis of variance reflected a Treatment 2 X Response interaction ($p <$ .0001) which was associated with three univariate effects: Factor I ($p <$ .0001), Factor II ($p <$ .0001), and Factor III ($p <$ .0001). Each of these results was investigated further via simple effects analysis.

For all three Factors, the data initially were divided into each Response condition and a two-way anova was performed. Looking within Response 1, no significant Treatment 2 effects were found, as noted in the text.

Within Response 2, a Treatment 2 main effect was found for Factor I (F = 20.92*), Factor II (F = 66.0*) and Factor III (F = 182.6*). The reader is referred to the main body of the text, where individual comparisons between each Treatment 2 level for all three Factors is presented.

Treatment 2 X Situation Order X Situation. The multivariate analysis of variance reflected a Treatment 2 X Situation Order X Situation interaction ($p < .0001$) which was associated with a univariate effect for Factor I ($p < .0001$). This interaction effect was explored further via simple effects analysis.

The data initially were divided into each condition of Situation and a two-way anova computed. Within Situation I, this test found the Treatment 2 X Situation Order interaction significant (F = 6.99*).

This result was further broken down by looking at the data within each level of Situation Order. No Treatment 2 effect was found for Situation I Given First ($F < 1$), but a significant effect for Situation II Given First was found (F = 13.97*). The reader is referred to the text where further investigation of this Treatment 2 effect is presented.

Within Situation II, the two-way anova again found the Treatment 2 X Situation Order interaction significant (F = 4.86*). This result was further investigated by dividing the data into each condition of Situation Order. A Treatment 2 effect was established for Situation I Given First (F = 11.72*), but not for Situation II Given First ($F < 1$). The reader is referred to the text where the significant interactions are explored further.