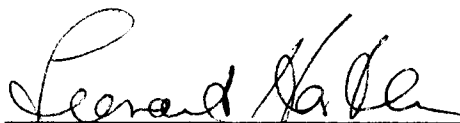


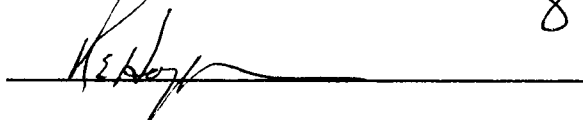
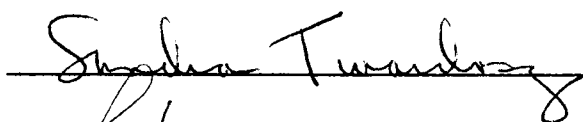
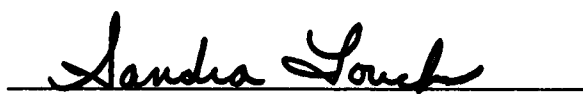
To the Graduate Council:

I am submitting herewith a dissertation written by William Allan Richards Jr. entitled "The Relationship Between Perceived Paternal Nurturance and Interpersonal Style". I have examined the final copy of this dissertation for form and content and recommend that it be accepted in partial fulfillment of the requirements for the requirements for the degree of Doctor of Philosophy, with a major in Psychology.



Leonard Handler, Major Professor

We have read this dissertation
and recommend its acceptance:



Accepted for the Council:



Associate Vice Chancellor and
Dean of The Graduate School

The Relationship Between Perceived Paternal Nurturance
and Interpersonal Style

A Dissertation
Presented for the
Doctor of Philosophy
Degree
The University of Tennessee, Knoxville

William Allan Richards Jr.

May, 1993

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Abstract

This study attempted to determine the relationship between college students' perceptions of paternal nurturance and their interpersonal styles. Students rated both parents on the Paternal Nurturance Measure, a scale developed for the purposes of the study. Eight interpersonal variables were assessed using Leary's Interpersonal Diagnostic System (Leary, 1957). Results indicated that perceived paternal nurturance was positively related to the likelihood that students had: (1) socially acceptable interpersonal styles (2) loving interpersonal styles (3) positive identifications with their fathers. Perceived maternal nurturance was also found to be related to students' interpersonal styles. No meaningful sex differences were found.

It was concluded that perceived paternal nurturance and perceived maternal nurturance were equally important factors in students' social adjustment. Students who rated both parents high in nurturance were viewed as having the best social adjustment and students who rated both parents low in nurturance were seen as having the worst social adjustment. Sullivan's (1953) interpersonal theory was used to explain the findings.

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Chapter 1

Introduction

The focus of this dissertation is on the relationship between college students' perceptions of paternal nurturance and their interpersonal styles. A primary reason for choosing to investigate the topic of perceived paternal nurturance is that ongoing socio-cultural changes, such as the expanding role of the father and the increasing emergence of non-traditional family structures, have made paternal nurturance particularly salient. Traditionally, there has been a paucity of research on perceived paternal nurturance, though this topic has received increased attention during the past twenty years. Unfortunately, studies that have been done on perceived paternal nurturance have been compromised by several methodological flaws. I will further address these methodological problems in the next chapter.

The need for research on perceived paternal nurturance can best be understood by a brief overview of the socio-cultural and theoretical forces that have historically led the social sciences to underestimate the importance of fathers in the family system. Psychological theories and research on human development have traditionally focused much more on maternal factors than on paternal factors, especially in regard to parental qualities such as nurturance that are

typically associated with the mother's role. This bias is partially attributable to socio-cultural pressures that have, until recently, kept the father out of the province of child-care. According to Lamb (1981), the industrial revolution helped create a rigid demarcation between the roles of the mother and the father in that it changed the fathers' workplace from in or near the home to a place more remote from home. The new work situation severely curtailed the amount of contact fathers had with their children. Correspondingly, mothers compensated for the absence of fathers by increasingly assuming the duties pertaining to child-care. Given the disparity in the amount of time that mothers and fathers have typically spent with their children since the advent of the industrial age (Lewis, Feiring & Weinraub, 1981), it is not surprising that most early investigations of parental factors in child development focused on the mother.

Another reason most research on child development has emphasized maternal determinants rather than paternal determinants is the biological and ethological underpinning of some of the prevalent theories in developmental psychology. Bowlby's attachment theory has perhaps guided more developmental research during the past 30 years than any other theory. Bowlby (1969) posited that evolution has prepared mothers, but not fathers, to instinctively form attachment relationships with their children. Moreover, Bowlby proposed that the mother-child relationship during the first years of

life serves as a prototype for later relationships with peers. Bowlby's theory has engendered a large amount of research on the attachment between mothers and their children, as well as research on the developmental impact of various types of mother-infant attachments.

Some of the object relations theorists, such as Melanie Klein (1948), have also conferred special status to the mother-child relationship, in part due to the fact that the mother is biologically equipped to feed the infant. Klein suggested that the infants' feeding experiences with their mothers form the internal and interpersonal foundations for future personality development.

Classical psychoanalytic theorists and researchers have also traditionally neglected the variable of paternal nurturance in their accounts of psychological development. The lack of attention to paternal nurturance in the psychoanalytic literature has been attributed to Freud's emphasis on the hostile and rivalrous father of the oedipal period of development (Griffith, 1987; Machtlinger, 1981). However, both Griffith and Machtlinger suggested that there should be more emphasis on paternal nurturance in classical psychoanalytic research, given that Freud himself indicated that paternal nurturance during the preoedipal period helps create the ambivalence that is necessary during the oedipal phase. As will be discussed in the literature review, there have been some recent articles which have conceptualized in

greater detail than did Freud the importance of paternal nurturance during the preoedipal period.

Despite the prominence of the traditional theories, there has been an increasing focus during the past two decades on the role perceived paternal nurturance plays in the development of children. There are many reasons which may account for this shift in attention, including cultural changes and empirical findings that challenge conventional notions of what fatherhood entails. The primary cultural shift relevant to the recent upsurge in research on fathers has been the increased flexibility of socially prescribed sex roles. This flexibility has probably come from, as well as fostered, the growing prevalence of non-traditional family structures such as dual-career marriages and single-parent households. The idea that children can receive most of the nurturance that they need from mothers who stay at home with them all day is now incongruent with the reality of the structure of most American families (Lamb, 1981). The new family configurations have made it more important than ever to broaden our conceptualizations of the roles of both parents so that they each include some of the child-rearing and economic functions of the family. Psychology has been responding to the emergence of new family structures with increased interest in topics such as father absence (Lamb, 1981), and the quality of parenting done by fathers when they assume the role of the primary care-giver (Pruett, 1983).

There have also been several empirical findings from developmental research during the past twenty years that have stimulated recent theoretical and empirical investigations of paternal influences. One type of study has focused on the quality of the parent-child relationship. Lewis et al. (1981) reviewed these studies and concluded that the quality of parent-child interactions is more important to child development than the quantity of time spent interacting. This type of finding challenged the commonly held belief that mothers have more impact on children's development than do fathers by virtue of the greater amount of time they spend with their children. Recent studies have responded to the above-mentioned research by examining the quality of father-child relationships (Lewis et al., 1981; Pruett, 1983; Russell, 1983). The results of these studies indicate that father-child interactions are not nearly as different from mother-child interactions as many theorists have hypothesized. For instance, Pruett (1983) found that fathers who are the primary care-givers to their infants have relationships with them that are qualitatively similar to traditional mother-infant relationships.

Another set of studies which have countered prevailing theoretical beliefs investigated the attachment between fathers and their infants. The primary finding of this kind of study is that most fathers form secure attachments with their infants within 18 months after birth (Chase-Lansdale &

Owen, 1987; Owen, Easterbrooks, Chase-Lansdale & Goldberg, 1984). This finding has placed pressure on attachment theorists to reconsider the role of the father in children's development. Indeed, there have been several recent studies that have further analyzed the nature of the father-infant attachment (Belsky & Rovine, 1988; Cordon & Dunn, 1988; Lamb, 1977). For instance, Lamb (1977) found that infants direct as many attachment behaviors (e.g., touching, proximity, fussing, approaching) toward their fathers as they do toward their mothers.

The recent broadening of the role of the father and the concomitant rise in research on fatherhood have challenged some long-standing assumptions about the nature of the father-child relationship. One of the most central of these assumptions is that perceived paternal nurturance is not nearly as important for children as is perceived maternal nurturance. The aim of this dissertation is to demonstrate the significance of perceived paternal nurturance by analyzing the relationship between college students' perceived paternal nurturance and their interpersonal styles. The study is designed in a way to circumvent many of the methodological weaknesses found in previous studies on perceived paternal nurturance. A more detailed account of the purpose of the study will be provided in Chapter 3.

Chapter 2

Literature Review

Theoretical Literature

The increased focus on fathers in the psychology literature has led to recent advances in the theoretical understanding of paternal effects on development. Particularly, there has been a shift from the classical psychoanalytic focus on the hostile oedipal father to an emphasis on the benefits of having a nurturant father during the preoedipal phase of development (Abelin, 1971; Machtlinger, 1981). Abelin (1971) expanded Mahler's separation-individuation theory of development to include the father's role in the child's first three years of life. He based his conceptualizations on data gathered from his observational study on the development of father-child relationships. Abelin claimed that fathers play a special role in helping children gain autonomy from their mothers. He stated that the particular ways in which fathers help their children establish autonomy change as the child goes through the various subphases of the separation-individuation process. According to Abelin, fathers become particularly salient to their children during the practicing and rapprochement subphases. Mahler considered the practicing subphase of development to be a time in which infants between the ages of

10 to 18 months are enraptured in the process of learning how to better function in the world around them (Mahler, Pine & Bergman, 1975). Abelin posited that fathers help their children learn about the outside world during this phase by playing with them in ways that sharpen their sensorimotor skills. The rapprochement subphase, as postulated by Mahler, is a period of development between the ages of 18 and 24 months in which infants alternate between clinging to their mothers and engaging in behavior that establishes their autonomy from them (Mahler et al., 1975). Abelin stated that fathers who provide children with a stable and supportive relationship during the rapprochement subphase help the children tolerate the intense ambivalence they feel towards their mothers.

Other theorists have modified and/or extended Abelin's position on the role of the father in the separation-individuation process. John Munder Ross (1982a, 1982b) focused on how a boy's relationship with his father may qualitatively change as he negotiates the preoedipal, oedipal, and latency stages of development. According to Ross (1982a), a son's preoedipal feelings towards his father may become increasingly aggressive and competitive after the rapprochement crisis has been resolved. Nevertheless, a father can temper this change by responding to his son in a nurturant way rather than a rivalrous way. Ross also stated that paternal nurturance in the oedipal phase of development

enables the son to begin identifying with the father and the masculine sex-role. During the latency phase, nurturant fathers help prepare their sons for the outside world by assuming the role of mentor (Ross, 1982b).

Tessman (1982) emphasized the importance of the father's role in the preoedipal development of girls. He hypothesized that it is particularly significant for a father to accept and affirm the excitement that his daughter feels towards him. Specifically, a father's appreciation of his daughter's erotic excitement will help her later transform this excitement into romantic love for a partner outside the family, whereas a father's affirmation of his daughter's endeavor excitement will help her later transmute this excitement into energy with which she can pursue her occupational goals.

Peter Blos (1985) hypothesized that the formation of the male personality is greatly impacted by the preoedipal father-son relationship. He based this notion from clinical data he derived from his work as a psychoanalyst. Blos diverged from most psychoanalytic theorists in that he considers adolescence to be a critical period in which boys grapple with unresolved developmental issues regarding their relationships with their fathers. He posited that fathers who are nurturant yet not overly involved with their adolescent sons facilitate their sons' resolution of the "isogender complex". More specifically, paternal nurturance creates a non-threatening environment that enables a son to safely integrate his

preoedipal loving feelings and his oedipal aggressive feelings about his father. Blos suggested that if a male has not successfully integrated these feelings by the end of adolescence, then he will likely become neurotic as an adult. Blos did not focus on female development.

Another important aspect of the father's role in child development is that he can extricate the child from a potentially harmful relationship with the mother (Ross, 1982a). Chused (1986) claimed that the father can compensate for an absent or neglecting mother during the preoedipal phase by becoming the primary nurturing figure. However, Chused suggested that this type of primary relationship between father and child can have negative repercussions for the child in later phases of development. For boys, Chused posited that a positive preoedipal relationship with the father can make the potential loss of the father during oedipal rivalry particularly threatening. For girls, Chused indicated that an intense preoedipal relationship with the father may be repressed retroactively at the same time the daughter represses her conflictual oedipal feelings towards her father, leaving her with no positive internal representations of her father.

The various theoretical understandings of the role of paternal nurturance in development have rarely been empirically tested. In fact, there seems to be a large gap between the theories and the recent empirical studies on

paternal nurturance. However, several paternal nurturance theories did inform the hypotheses of this study, as will be discussed in a later section.

Empirical Literature

For the purposes of this review, the paternal nurturance studies have been categorized by the type of dependent variable examined. The methodological flaws of the studies will be discussed in the section which immediately follows the review.

Quantity of Nurturance. Three studies have compared the amounts of paternal and maternal nurturance that children perceive and/or receive. The results from the studies are inconsistent. Hunter and Youniss (1982) examined the amount of paternal and maternal nurturance children perceive by administering a questionnaire on parental behavior to subjects of four age-groups ranging from fourth graders to college students. Nurturance was assessed via questions pertaining to the frequency in which parents were perceived to be responsive to their children's needs. The results revealed no significant differences between the amounts of perceived paternal and maternal nurturance, with most children in all ages groups rating both parents as being nurturant.

Heilbrun (1964) compared college students' ratings of their parents on the Parent-Child Interaction Rating Scales. This measure of nurturance assesses the degree to which

parents are perceived as being affectionate, encouraging, sharing, giving, trusting, and non-threatening. The results indicated that mothers were perceived to be more nurturant than fathers, which is in contrast to the non-significant findings of the Hunt and Youniss study.

Another study found that American and British sixth-graders viewed their mothers as being more nurturant than their fathers (Devereux, Brofenbrenner, & Rodgers, 1969). Nurturance was assessed in the study by asking children questions regarding the frequency in which their parents were helpful and responsive.

A possible explanation for the conflicting results of this type of research is that the two studies that found significant parental differences were conducted during a period of time (i.e., the 1960s) when the parental roles were more differentiated than they were when the Hunter and Youniss study was conducted (i.e., early 1980s). An alternative explanation for the inconsistent pattern of results is that it may be due to the fact that each of the studies utilized a different measure of nurturance.

Type of Nurturance. A few studies have compared the types of behavior that characterize mother-child and father-child interactions. For example, Lewis et al. (1981) reviewed the literature on parent differences regarding child-care and parent-child play. They concluded that a greater proportion of mother-child interactions than father-child

interactions consist of child-care activities, whereas the reverse is true in regards to playful activities. Pruett (1983) focused on the qualitative aspects of paternal child-care rather than the quantity of it. He observed and interviewed fathers who were the primary care-givers of their children. He found that these fathers seemed to perform their role as well as mothers typically do, though he did not attempt to substantiate his claim via quantitative analyses.

Lewis and Feiring observed the frequency of nurturant and "instrumental" parent-child interactions at the dinner table in order to test the hypothesis that mothers perform the nurturant role and fathers perform the instrumental role in the family (Lewis et al., 1981). The authors defined nurturance as the expression of warmth, whereas instrumental behavior was described as asking questions and directing behavior. The results unexpectedly revealed that there were no significant differences between mothers and fathers in the way they interacted with their children at the dinner table.

Psychological Adjustment. Another set of studies analyzed the relationship between perceived paternal nurturance and children's psychological adjustment. The studies have consistently found perceived paternal nurturance to be an influential factor in children's mental health. For example, Barnes (1984) investigated how perceived paternal nurturance and other perceived parental factors might influence adolescents' alcohol abuse. Nurturance was defined

as "parental behaviors toward the child which indicate to the adolescent that he/she is accepted, approved of, and loved" (p.335). The results of the study showed that there was a negative correlation between the level of adolescent alcohol abuse and adolescents' ratings of paternal nurturance. Barnes framed the results in a psychosocial context in which nurturing parents prevent children from developing problematic behaviors.

Humphrey (1980) postulated that bulimics binge and purge partly because they have not internalized parental nurturance. She tested this hypothesis by administering to female bulimics a modified version of the Social Analysis of Social Behavior (SASB) measure, from which she derived scores for perceived maternal nurturance, perceived paternal nurturance, and self-nurturance. She compared the nurturance ratings made by the bulimic group with the ratings from both a control group of anorexics and a "normal" control group. As expected, the results indicated that the bulimic group perceived both of their parents as being less nurturant than did either of the control groups. The group difference was particularly pronounced on the perceived paternal nurturance variable. Additionally, both bulimics and anorexics were found to be less self-nurturant than the normal control group. Humphrey concluded that these results support the psychoanalytic notion that bulimics have been unable to internalize parental nurturance because their parents were not nurturant towards

them.

The overall psychological adjustment of college students of both sexes has been found to be associated with perceived paternal nurturance. Two studies derived an index of overall psychological adjustment from college students' self-rating on the Adjective Check List (Fish & Biller, 1973; Reuter & Biller, 1973). Fish and Biller (1973) investigated the relationship between college females' personality adjustment and their perceptions of paternal nurturance, paternal rejection, and positive paternal involvement. The results showed that both perceived paternal nurturance and perceived paternal involvement scores were positively associated with adjustment scores, whereas perceived paternal rejection scores were inversely related to adjustment scores. Reuter and Biller (1973) examined the relationship between college males' personal adjustment and the variables of perceived paternal nurturance and availability. The investigators found an interesting interplay between perceived paternal nurturance and perceived paternal availability in that combinations of moderate to high levels of both variables were associated with high adjustment scores, whereas low levels of either variable were associated with low adjustment scores.

Self-Esteem. Several studies have found a positive relationship between perceived parental nurturance and self-esteem. For example, Halpin, Halpin, and Whiddon (1980) discovered that adolescents' ratings of paternal nurturance

were positively correlated with the level of their self-esteem. Moreover, this relationship between the two variables was demonstrated in both an American Indian and a Caucasian sample. The researchers also found a similar pattern of results concerning the interaction between perceived maternal nurturance and self-esteem.

Sears (1970) conducted a longitudinal study to test the hypothesis that parental warmth helps children develop a positive self-concept. He expected to find the connection between parental warmth and children's positive self concepts to be particularly strong when the child and parent are of the same sex. Parental warmth was assessed when the child was five-years-old via an interview with the mother about the child-rearing practices of the family. Self-concept scales were then administered to the children when they were 12-years-old. The results confirmed the hypothesis that both perceived paternal warmth and perceived maternal warmth are positively associated to children's positive self-concept. However, the perceived warmth of both parents was unexpectedly found to be of equal importance to children of both sexes.

Buri (1989) also found that the self esteem of college students was positively related to the students' ratings of both of their parents on the Parental Nurturance Scale. Furthermore, Buri's utilization of regression equations helped him determine that: (1) both maternal and paternal nurturance each accounted for comparable proportions of the variance in

self-esteem scores (2) when the nurturance scores of both parents are considered, they account for a greater amount of the variance in self-esteem scores than either parent alone.

The Buri study is laudable in that it is one of the few to investigate how paternal nurturance and maternal nurturance may be interacting sources of influence in children's development. The finding that perceived paternal nurturance impacts children's self-esteem even after the influences of maternal nurturance have been accounted for supports recent theoretical positions which posit that paternal nurturance may partially compensate for a lack of maternal nurturance (Chused, 1986; Abelin, 1971).

Sex-Role Development. Perhaps the most traditional line of inquiry into paternal effects has been in the area of children's sex-role development. There were numerous studies on this topic during the 1950s and the 1960s, but there has been scant attention given to it in recent years. Lynn (1976) reviewed these studies and concluded that nurturance is positively related to the development of a masculine sex-role by boys, but is often unrelated to girls' sex-role adaptations. The researchers typically explained the results by suggesting that the nurturance of the same-sex parent encourages the child to identify with the parent, which in turn facilitates the development of appropriate sex-roles. A possible reason for the moribund status of this kind of research is that the idea of appropriate sex-roles has been

under attack from both society at large and the social sciences in particular.

Locus of Control. Another research topic which has been the focus of several studies is the relationship between perceived paternal nurturance and children's locus of control. All of the pertinent studies have found a positive connection between perceived paternal nurturance and the internality of children's locus of control, though there have been some qualifications pertaining to the generality of this finding. For instance, Halpin et al. (1980) discovered a positive relationship between perceived paternal nurturance and an internal locus of control for Caucasian adolescents but not for American Indian adolescents. The authors gave no explanation for this finding. MacDonald (1971) found positive relationships between internal locus of control and both perceived maternal nurturance and perceived paternal nurturance for students at the University of West Virginia, most of whom were presumably Caucasian. Nowicki and Segal's (1974) study produced somewhat different results, though the authors state that their findings are in general agreement with those of McDonald. Specifically, Nowicki and Segal found that perceived maternal nurturance was positively associated with an internal locus of control for both adolescent females and adolescent males, whereas perceived paternal nurturance was positively related to an internal locus of control for the females but not for the males.

One aspect of the locus of control findings which is puzzling is that only the Nowicki and Segal study found any sex differences. It is possible that the lack of consensus on this finding is an artifact of the different nurturance measures employed in the studies. Nowicki and Segal utilized a fairly comprehensive measure of nurturance, whereas the other studies employed nurturance scales consisting of two items. The sex differences in the Nowicki and Segal study are also difficult to understand because the authors failed to adequately describe and explain the nature of these differences.

Cognitive Development. Norma Radin and her colleagues conducted a series of observational studies to explore the role of paternal nurturance in cognitive development (Epstein and Radin ,1975; Jordon, Radin, and Epstein, 1975; Radin, 1972, 1973, 1981). They observed father-child interactions during long interviews in which each father's preschooler inevitably needed some containment and reassurance (Epstein and Radin, 1975). The researchers coded verbal and nonverbal father-child interactions during the interviews according to 25 behavioral categories. A factor analysis of the data revealed that there were two factors for each sex that were considered by the researchers to represent nurturant interactions. Epstein and Radin described the nurturant factors for boys as being "positive response to child and cognitive stimulation" and "empathy and psychological

manipulation" (p. 281), whereas the nurturant factors for girls were given the labels "attention to the child's verbalizations" and "empathy, psychological manipulation, and cognitive stimulation" (p. 282). The results of the studies consistently demonstrated that paternal nurturance was highly correlated ($r = .48$) with the IQ of middle-socio-economic status (SES) boys, but not with the IQ of low SES boys or girls from either SES level. Radin and her cohorts posited that a possible explanation for the sex difference is that the relationship between paternal nurturance and children's cognitive development is mediated by the process of identification, a process less likely to occur for girls given that fathers are of the opposite sex (Jordon et al., 1975). Epstein and Radin (1975) also speculated that the sex differences in these studies may be partially attributable to the mixed messages fathers send to their daughters about achievement. The SES differences among boys were interpreted as reflecting that low-SES boys, in contrast to their middle-SES counterparts, may not accrue cognitive benefits via the identification process because their fathers are less likely to be involved in intellectual pursuits (Radin, 1972).

The findings of these studies are apparently quite robust. For example, a similar configuration of results emerged from a study that utilized a self-report measure of paternal nurturance rather than an observational measure (Radin, 1981). Radin (1973) also discovered that the positive relationship

between paternal nurturance and the IQ of middle-SES boys remained stable during a year-long longitudinal study.

Moral Development. Another variable which has been examined in relation to perceived paternal nurturance is moral development. The results of the pertinent studies have consistently demonstrated a connection between perceived paternal nurturance and moral development. Rutherford and Mussen (1968) hypothesized that the level of generosity displayed by boys should be positively related to perceived paternal nurturance due to the process of identification. The identification process was conceptualized as encouraging children to develop in themselves the qualities that are exhibited by a parent, which in the case of a nurturant father would likely include the qualities of warmth and generosity. The investigators tested their hypothesis by assessing four-year-old boys' perceived paternal nurturance through the use of semi-structured doll play; the boys' level of generosity was measured via teacher ratings and projective techniques. The findings supported the notion that perceived paternal nurturance is positively related to the level of boys' generosity.

A different facet of morality was explored by a study that examined the interaction among the variables of perceived parental affection, dominance of parental discipline, and the frequency in which male college students reported experiencing guilt (Moulton, Burnstein, Liberty & Altucher, 1966). The

authors considered the guilt variable to be an index of moral development. Perceived paternal affection was found to be positively related to the frequency in which students felt guilty, but only when the fathers were also perceived as being dominant disciplinarians. The same interplay among the nurturance, discipline, and guilt variables was also obtained when students rated their mothers. The researchers posited that the results show that the combination of parental affection and parental dominance in discipline encourages the internalization of the parent's moral standards, regardless of the sex of the parent.

Luft (1987) also found the impact of perceived paternal nurturance on moral development to be modulated by other paternal factors. He analyzed the relationship between three paternal variables and the degree to which the religious values of college students were similar to those of their fathers. Luft assessed the variables of paternal nurturance, paternal control, and paternal communication via scales derived from students' ratings of their parents on 77 items describing childrearing practices. The level of consensus between sons and fathers concerning religious values was determined by having the students and their fathers take the Religious Value Inventory, which is a Likert-type of scale that measures the extent one agrees with various religious beliefs. The results indicated that the lowest level of value consensus was when paternal behavior was perceived as being

low in both nurturance and control.

Interpersonal Variables. There have been only two studies that have addressed the relationship between paternal nurturance and children's interpersonal behavior. Mussen, Young, Gaddini, and Morante (1963) investigated the association between paternal affection and the affiliative behavior and interpersonal warmth of adolescent boys. The paternal affection index was extrapolated from interviews with the boys' mothers regarding the childrearing practices of the families, whereas the affiliation and warmth measures were obtained by interviews with the adolescents. The results demonstrated a positive relationship between the paternal affection measures and the measures of affiliation and warmth, which the authors interpreted as supporting the notion that paternal nurturance encourages boys to identify with the warm qualities of their fathers.

Koestner, Franz, and Weinberger (1990) conducted a longitudinal study to determine whether the level of empathy of adults is related to their interactions with their parents during childhood. Three paternal variables and eight maternal variables were coded from interviews with mothers who had five-years-old children. The father variables were warmth, involvement in child-care, and firmness of discipline. Koestner and his colleagues conducted their follow-up study on empathy 26 years after the parent data was collected. They administered the Adjective Checklist, which has an index of

empathic concern for others, to the grown-up children from the original study. The major finding was that early father involvement in child-care was more highly correlated with the empathic concern of their adult children ($r = .38$) than were any of the other parental factors. Furthermore, paternal involvement accounted for a greater proportion of the unique variance in empathy scores (13%) than the three strongest maternal predictors combined. An anomalous finding of the study was that paternal warmth was unrelated to the development of empathic concern. The authors did not address the possible issues related to the discrepancy between the findings on paternal involvement and paternal warmth.

Socialization. Several of the previously mentioned studies investigated topics relevant to the socialization process. However, only two studies have specifically focused on the relationship between socialization and paternal nurturance. Reuter and Biller (1973) administered the California Personality Inventory Socialization Scale and a retrospective questionnaire regarding perceived paternal nurturance to male college students. The findings indicated that perceived paternal nurturance was positively related to the degree of socialization. The authors did not provide a conceptualization of the results.

Parental nurturance was hypothesized by Barnes to be a vital aspect of "parental socialization practices" (Barnes, 1984, p. 329). She tested this hypothesis by examining the

interaction between a father's level of nurturance and his adolescent's level of deviance. Paternal nurturance was measured by administering a parenting questionnaire to the fathers. Deviance was assessed by questioning the adolescents about the frequency of their problem behaviors. In accordance with the hypothesis, the findings indicated that nurturant fathers were less likely than their non-nurturant counterparts to have children who engage in deviant and antisocial behaviors.

Miscellaneous. Ronald P. Rohner (1986) did a meta-analysis of the studies which have utilized the Parent Acceptance-Rejection Questionnaire and the Personality Assessment Questionnaire. These instruments assess the effects of parental warmth on children's personality development (Rohner, 1986). The meta-analysis revealed that maternal warmth is positively related to children's emotional responsiveness, self-esteem, positive world view, and emotional stability. Moreover, this pattern of results was consistent across a wide range of cultures. Rohner implied that the findings may similarly apply to paternal warmth, though there was not enough pertinent research to warrant a meta-analysis.

Overview of the Empirical Research. The outstanding feature of the literature on paternal nurturance is its diversity. The definitions of nurturance utilized by researchers have ranged from parental physical affection to

parental encouragement of children's achievement. The topics studied in conjunction with paternal nurturance have varied from bulimia to generosity. Furthermore, the array of the paternal nurturance measures employed in the studies is astounding. Paternal nurturance has been assessed using questionnaires on current paternal behavior taken by the fathers, mothers, adolescents, and children; retrospective questionnaires taken by adults; doll play by preschoolers; interviews with mothers, fathers, and children; and home observations.

The most astonishing aspect of the previous paternal nurturance research is that, despite the immense diversity of the methodologies employed and the topics examined, a majority of the studies yielded significant findings with regard to the importance of paternal nurturance. It is possible that this pattern of results is partially attributable to the bias of some journals towards accepting positive results. Nonetheless, it is noteworthy that there are so many positive results to report in the first place. Moreover, the paternal nurturance studies that also included other parental variables typically found paternal nurturance to be at least as influential as any of the other variables.

Despite the diversity of the research on paternal nurturance, there are at least six methodological and conceptual weaknesses that are common to many of the studies reviewed. One of the most salient is that many of the

researchers did not provide a clear definition or conceptualization of the term "nurturance". Given that there is no consensus in psychology regarding the meaning of the term, the failure of researchers to describe their conceptualizations of nurturance renders the results of their studies ambiguous both in meaning and in relationship to other results on nurturance.

Another methodological weakness of many studies is that the measures of nurturance that were utilized were questionable in terms of their conceptual and psychometric soundness. Several of the nurturance measures employed in the studies had minimal if any published information pertaining to their psychometric properties. Thus, it was difficult to determine the reliability and the validity of the results derived from the measures. The breadth of nurturant behavior assessed by many of the scales was also quite limited, as it was not unusual for the scales to consist of only two or three items. Another problem with some of the scales is that the items that were included did not seem to be conceptually related to each other. For example, Smith and Grenier (1975) used both the frequency of gift giving and the tendency to praise the accomplishments of children as items that measure parental nurturance. The first of these items seems to confuse nurturance with indulgence in that a parent who constantly gives their children gifts would be rated on this item as being extremely nurturant. In contrast to the

first item, the warm encouragement implied by the second item seems to be more consistent with traditional notions of nurturance. If the authors had explained their conceptualization of nurturance, the basis for item selection might have been more clear.

A third frequent limitation of the studies is the tendency to examine the effects of paternal nurturance in isolation rather than in the context of other family variables such as maternal nurturance. The studies that did assess both paternal and maternal nurturance characteristically analyzed the variables separately. This isolation of the effects of paternal nurturance prevented the studies from testing several interesting theoretical notions, such as whether or not paternal nurturance can compensate for a lack of maternal nurturance. A further testament to the worthiness of looking at the interplay between paternal and maternal nurturance is that the only study to do so found some intriguing interaction effects (Buri, 1989).

The failure of some researchers to take a developmental perspective in their conception of what constitutes nurturance is a fourth common flaw of the paternal nurturance literature. A consequence of this approach is that it has led researchers to inappropriately consider some paternal behaviors to be nurturant regardless of the age of the child. For example, Hunter and Youniss (1982) asked both fourth graders and college students to rate the following statement from 1 (not

very often) to 4 (almost always): "My father helps me to solve my problems" (p. 808). Although a rating of 4 is considered to indicate the highest level of paternal nurturance, it is certainly arguable from several developmental perspectives that a father who almost always helps his college-aged child solve his or her problems may be hindering instead of fostering healthy development.

A fifth methodological limitation which typifies paternal nurturance research is that the sex of the subject is rarely considered as an independent variable. This limitation is quite surprising given the prominence of gender issues in the initial theoretical and empirical investigations on the relationship between paternal nurturance and sex-role development (Biller, 1981).

Another problematic aspect of many of the studies reviewed here is that they primarily focused on parental factors other than paternal nurturance. Although there is nothing inherently wrong with this type of study, the contributions that such studies have made to the paternal nurturance literature have often been quite limited in scope. For instance, Halpin et al. (1980) included paternal nurturance as one of 12 parental variables they examined in relation to the locus of control of adolescents. The authors used only two questionnaire items to assess nurturance, which was not unusual for studies that included but did not focus on the variable of paternal nurturance. Additionally, the

paternal nurturance results of the study were overlooked in the discussion section despite their statistical significance.

Another important methodological issue in paternal nurturance research is the relationship between adults' recollections of paternal nurturance and "real" paternal nurturance. This relationship has not been analyzed despite the fact that many paternal nurturance measures are based on adults' retrospective reports. There is, however, some indirect evidence that supports the notion that adults' retrospective perceptions of parental nurturance are similar to their childhood experiences and childhood perceptions of parental nurturance. A pertinent study on this issue was done by Block (1971), who examined the vast amount of data derived from the Oakland Growth Study in order to determine the relationship between adults' retrospective perceptions of parental behaviors and objective measures of parental behaviors taken during childhood. He concluded that there was a general correspondence between the retrospective reports and the objective measures of parental behavior. Additionally, empirical evidence which indirectly supports the notion that children's perceptions of parental nurturance are consistent over time is that parental warmth has been found to be one of the most stable parental attributes (Hunt & Eichorn, 1972; Hunter & Youniss, 1982; Schaefer, 1961). For example, Schaefer (1961) found that the observational measures of maternal warmth taken when children were three years old were

significantly correlated ($r = .68$) with self-report measures of maternal warmth taken after the children had entered early adolescence.

Chapter 3

Purpose

Overview

The previous chapters have addressed the general reasons for investigating the topic of perceived paternal nurturance. In summary, the reasons include the increased involvement of fathers in child-care, the promising yet rudimentary results of the initial studies on the topic, and the serious methodological problems of previous perceived paternal nurturance research. The emphasis of the current chapter will be on the specific ways this study has attempted to avoid the methodological pitfalls that have hindered previous research. Also included is a discussion of the selection of the dependent variables used in the study, as well as their hypothesized relationships with perceived paternal nurturance.

Methodological Advancements

An important goal of this study was to utilize a more specific conceptualization of nurturance than was used in most previous studies. The failure of researchers to provide an explicit definition or formulation of what nurturance entails has led to ambiguous results. The conceptualization of nurturance used in this study stems from the formal definition of the word nurture, which is, according to the Webster

Collegiate Dictionary (1973), "to further the development of" (p. 789). Specifically, parental nurturance is conceptualized here as being the parental behaviors and attitudes which foster children's psychological development. This formulation of nurturance provides a developmental context previously lacking in the paternal nurturance literature. A developmental perspective of nurturance suggests that the specific behaviors which constitute parental nurturance may vary depending on the age of the child. For example, a father who forbids his two-year-old child to go outside alone may be seen as providing the type of limit-setting which fosters development, whereas the same paternal behavior directed towards an adolescent may be viewed as interfering with the adolescent's need for individuation.

Another purpose of this study was to develop a conceptually and psychometrically sound nurturance scale, which hereafter will be referred to as the Parental Nurturance Measure (PNM). The scale is unique in that its design was informed by previous research and theories on the paternal factors in child development. Another feature of the scale is that it is one of the few to adequately reflect the multifaceted nature of nurturance.

In contrast to most previous research, this study examined the interaction between perceived paternal nurturance and the variables of perceived maternal nurturance and gender. The interactions between perceived paternal and maternal

nurturance were analyzed to test the notion that paternal nurturance can help compensate for a lack of maternal nurturance (Ross, 1982a). The gender of the subject was studied in relation to perceived paternal nurturance because several theorists have proposed that the nurturance of a father may impact a son differently than a daughter (Blos, 1985; Ross, 1982a; Tessman, 1982).

Dependent Variables

This study explored the relationship between college students' perceptions of paternal nurturance and several different aspects of their interpersonal styles. No previous study has analyzed this topic in a comprehensive way. Thus, the results of this research should significantly contribute to the paternal nurturance literature.

The selection of the dependent variables for the study was guided by interpersonal theory, although aspects of object relations theory also informed the selection process. Harry Stack Sullivan's interpersonal definition of personality is that it is "the relatively enduring pattern of recurrent interpersonal situations which characterize a human life" (Sullivan, 1953, p. 110). According to Mitchell (1988), interpersonal theorists do not typically assign a causative role to paternal and maternal factors in personality development. Nevertheless, Mitchell acknowledged that interpersonal styles often get established via interactions

with one's parents. Thus, the amount of paternal nurturance individuals experienced during childhood is likely to influence their interpersonal functioning during adulthood.

All of the interpersonal variables in the study were assessed using Leary's Interpersonal Diagnostic System (Leary, 1957). According to Leary, love-hate and dominance-submissiveness represent the two orthogonal dimensions of interpersonal style. Leary also proposed that there are eight specific interpersonal styles derived from combinations of varying amounts of each dimension.

One of the eight types of dependent variables analyzed in the study was the degree to which the dimension of love characterized the students' interpersonal styles. Leary's principle of interpersonal correspondence suggests that the level of love or hostility one expresses via interpersonal interactions tends to pull for similar reactions by the recipient. People who perceive their fathers to be nurturant have had the opportunity in a critical period of their development to experience a significant relationship that is warm and loving. Thus, according to the principle of correspondence, a child's relationship with a perceived nurturant father should provide many opportunities for the child to develop an interpersonal style that is warm and loving in nature. It was therefore hypothesized that students who perceived their fathers as being highly nurturant would have a higher degree of love in their interpersonal styles

than would students who perceived their fathers as being low in nurturance.

The social acceptability of the subjects' interpersonal styles was another of the dependent measures used in the study. The selection of the variable was inspired by previous findings which suggested that perceived paternal nurturance promotes the socialization of children (Barnes, 1984; Reuter & Biller, 1973). An important aspect of the socialization process is parents teaching children the culturally sanctioned ways of relating to other people (i.e. socially acceptable interpersonal styles). Previous studies have not focused on the relationship between social acceptability and perceived paternal nurturance, so its examination here should contribute to our understanding of this facet of the socialization process. Given the previously established link between paternal nurturance and other aspects of the socialization process, it was expected that students who rated their fathers high in nurturance would be more likely than students who rated their fathers low in nurturance to have socially acceptable interpersonal styles.

The rigidity of the students' interpersonal styles was another dependent variable examined in the study. The level of interpersonal rigidity is indicated by the degree to which a person relies on the same narrow interpersonal style in all situations. Rigid interpersonal styles prevent individuals from adapting their responses to the specific nature of the

social setting. For example, a person may act extremely dependent in every interpersonal situation, regardless of the appropriateness of such behavior. Interpersonal theory suggests that rigidity tends to be associated with a person's expectations that social interactions are going to be unrewarding and threatening (Sullivan, 1953). These negative expectations stimulate a person's anxiety in social situations, which in turn mobilizes defensive maneuvers that limit his or her openness to the actual situation. Thus, a person with chronically negative interpersonal expectations relies on a habitual style that has reduced anxiety in the past instead of paying attention to the current social cues.

Consistent with interpersonal theory is the idea that children are more likely to develop rigid interpersonal styles in the context of a relationship with a father perceived to be threatening or unresponsive than in a relationship with a father perceived to be nurturant. Therefore, it was hypothesized that students who rated their fathers low in nurturance would be more likely than students who rated their fathers high in nurturance to have rigid interpersonal styles.

The interplay between paternal nurturance and the dependent variable of self-acceptance was also investigated in the study. According to object relations theory (Kernberg, 1984), children learn about themselves in the context of their relationships with their parents. Thus, children's self-acceptance is likely to be fostered via relationships with

parents who treat them with acceptance and affirmation. In contrast, children may feel worthless when their needs are not acknowledged by their parents, which is likely to be the case when parents are perceived as being non-nurturant. Accordingly, it was anticipated that students with high perceived paternal nurturance would be more likely to exhibit self-acceptance than would students with low perceived paternal nurturance.

Two dependent variables assessed how closely identified the students were with their fathers: conscious identification and assimilation. Conscious identification refers to the degree to which a person reports being similar to one or both of their parents. This form of identification is similar to the types of identification frequently discussed in the paternal nurturance literature. Numerous researchers have suggested that the process of identification accounts for the empirically proven relationship between perceived paternal nurturance and variables such as moral development and sex-role development (Lynn, 1976; Moulton et al., 1966). These claims are based on the assumption that perceived paternal nurturance facilitates identification, despite the fact that this relationship has yet to be empirically verified in ways other than the assessment of sex-role adaptations of children. One of the goals of this study was to test the hypothesis that students who rated their fathers high in nurturance would be more likely than students who rated their fathers low in

nurturance to consciously identify with their fathers. Male and female students were examined separately for this hypothesis due to previous studies which have suggested that perceived paternal nurturance facilitates the identification process of boys but not girls (Jordon et al., 1975; Lynn, 1976).

In contrast to conscious identification, parental assimilation is a deeper level of identification in that it is typically preconscious. Parental assimilation was measured by comparing the similarity between preconscious interpersonal style (i.e. characterological style) and the perceived interpersonal style of one's parents. It is thought that parental assimilation is derived from early childhood experiences (Cohen, White, and Schoolar, 1971). Erikson (1968) referred to the assimilation process as being the ego's incorporation of another's image in order to further the development of the ego. However, when one's relationship with a parent is characterized by extreme frustration, the parent is not fully assimilated into the ego. Under these circumstances, there is instead a fundamental rejection of some quality of that parent during early childhood. It is probable that children who perceive their fathers to be with highly nurturant are more likely than children who perceive their fathers to be non-nurturant to have rewarding father-child relationships which encourage the complete assimilation of the father. It was therefore expected that the incidence

of paternal assimilation would be greater for students who perceived their fathers as being highly nurturant than for students who did not.

The relationship between perceived paternal nurturance and two dependent variables pertaining to self-discrepancy were explored in the study. The dependent variables were self-deception and identity diffusion. Self-deception variable is the discrepancy between a person's perception of their own interpersonal style and how other people perceive the person's interpersonal style (Leary, 1956). A high level of self-deception indicates that a person is unaware of how they are impacting others. Identity diffusion is the inconsistency between a person's conscious description of their interpersonal style and the underlying intentionality of their interpersonal style (Cohen et al, 1971). An example of identity diffusion is when a man is quite argumentative with others and considers himself to be hostile, yet his preconscious intention for being argumentative is to feel close to people. According to Erikson (1968), persons with identity diffusion lack an inner sense of sameness and continuity.

The relevance of the two self-discrepancy variables to the topic of paternal nurturance is that the development of a sense of self is often conceptualized as occurring in the framework of a parent-child relationship (Kernberg, 1984; Sullivan, 1953). Object relations theory, as posited by

Kernberg, suggests that normal development of self-identity happens when the parent-child interactions are mutually satisfactory. In this type of parent-child relationship, the child eventually internalizes an integrated and fairly realistic image of who they are in relationship to others. However, if the parent-child relationship is particularly anxiety provoking, as would likely be the case if the parent is not nurturant, then the child's primitive defense of splitting is chronically activated so that the child never fully integrates the various positive and negative aspects of the self. Following this line of reasoning, it was hypothesized that the likelihood that students would display either of the two self-discrepancy variables would be greater for students with perceptions of low paternal nurturance than for students with perceptions of high paternal nurturance.

Description of Subsequent Chapter Sequence

The categorization of the subjects and the testing of the hypotheses could not be done until the psychometric properties of the PNM were established. Thus, a preliminary study was conducted to determine the factor structure, reliability, and validity of the scale. The method and the results of the preliminary study will be presented in the following two chapters respectively. The description of the study that investigated the hypotheses of the dissertation (i.e., the "primary study") will be subsequent to these two chapters.

Chapter 4

Method of Preliminary Study

Subjects

One hundred and seventy-six University of Tennessee undergraduate psychology students participated in the study, for which they received extra-credit. All students who placed their names on a posted sign-up sheet were allowed to participate. Fifty-two percent of the subjects were male and 48% were female. The vast majority of the subjects were Caucasian (89%), with African-Americans (7%) accounting for most of the remaining subjects.

Measures

Parental Nurturance Measure (PNM). The scale was constructed for the purposes of this dissertation because the pre-existing parental nurturance scales were conceptually and/or psychometrically unsound. The conceptual problems of the scales utilized in paternal nurturance research stem from the fact that the conceptual criteria pertaining to item selection was typically not given. This limitation is critical because several of these scales have items which diverge from conventional notions of parental nurturance. Moreover, the pre-existing nurturance scales failed to include many types of items that are specifically relevant to paternal

nurturance, such as the frequency and quality of parent-child play (Applegate, 1987). Another limitation of the scales is the paucity of published information regarding their psychometric properties.

The item construction and selection process for the PNM was guided by the developmental conceptualization of nurturance that was proposed in the previous chapter. Thus, item selection for the scale was based on the theoretical and empirical literature pertaining to the parental factors that influence child development. Seven parental factors were chosen to be represented in the scale because they have been found to be particularly salient to child development, including nonverbal affection, acceptance, companionship, responsiveness, encouragement of the separation-individuation process, mentorship, and the setting of appropriate limits. Although the factors are considered to be somewhat conceptually distinct, it is likely that there also is some overlap among them. The nonverbal affection factor was included in the scale because it has traditionally been considered to be an important aspect of parental nurturance (Carlson, 1984; Fish & Biller, 1973; Parke & Sawin, 1976; Parker, Tupling & Brown, 1979; Rohner, 1973; Sears, Maccoby & Levin, 1957). The selection of the acceptance factor for the scale was based on several criteria, including the centrality of the factor in several theories of development (Kohut, 1977; Rohner, 1986; Rogers, 1961), its empirically

proven relationship to development (Manley, 1977; Rohner, 1986), and its inclusion in previous nurturance measures (Barnes, 1984; Nowicki & Segal, 1974). Similarly, parents' responsiveness to the needs of their children was chosen to be a factor in the scale because its significance has been illustrated by developmental theories (Bowlby, 1969), developmental research (Lamb, 1984), and previous nurturance scales (Hunter & Youniss, 1982; MacDonald, 1971; Parker et al., 1979; Radin, 1972; Schaefer, 1965). The factor of the encouragement of age-appropriate individuation-separation was included in the scale due to its theoretical importance in child development (Kaplan, 1987; Mahler, 1975), as well as for its conceptual connection to paternal nurturance (Abelin, 1971; Blos, 1985). Mentorship is another factor that was selected because it has been conceptualized to be particularly salient among the paternal influences on child development (Machtlinger, 1981; Ross, 1982b). The factor of appropriate limit setting has not been included in previous conceptualizations of nurturance. Nonetheless, it was included in the PNM due to its theoretical and empirical relevance to psychological development (Baumrind, 1967; Hetherington & Parke, 1979; Youniss, 1980).

Seventy items were constructed for the scale, as can be seen in Appendix A. Each of the items assessed one of the seven aspects of nurturance (see Appendix B for a listing of the composite items for each aspect). Some of the items were

inspired by items from other nurturance scales, whereas other items were designed to reflect specific empirical findings and conceptualizations about the parental factors that impact child development. The wording and content of the items was also informed by two psychology research laboratory meetings held at the University of Tennessee that reviewed the content of the scale for face validity. Each lab was headed by a psychologist who was well versed in the area of paternal nurturance.

The Parental Nurturance Measure is retrospective in nature in that the constituent items ask one to recollect various childhood experiences and feelings. The verbs used in the items were put in the past tense in order to encourage a retrospective perspective. The items were also worded so that subjects would confine their recollections to the appropriate developmental period. For example, items which were considered to be especially relevant to early childhood development typically began with an introductory clause such as "When I was small, ...", whereas items that addressed issues pertinent to adolescence were often introduced by a clause such as "During high school, ...".

There is a mother form and a father form of the PNM that are identical except in regard to the nouns and pronouns that specify which parent is being rated. The PNM employs a Likert type rating scale that ranges from one point for "never" to five points for "almost always". A total nurturance score is

derived from the sum of the item scores, except for 16 items which are scored in the reverse direction (i.e. 1=5, 2=4, 4=2, 5=1). Please refer to Appendix A for the list of items to be recoded. The total score reflects the level of perceived nurturance, with high scores indicating a greater level of perceived nurturance than do lower scores.

Parent-Child Interaction Rating Scale. Albert Heilbrun (1964) developed this nurturance scale in order to assess eight modes of parental nurturance: affection, physical affection, approval, sharing of feelings, concrete giving, encouragement, trusting the child, and providing a secure relationship (See Appendix C). Each of these modes of nurturance is assessed by one item. All eight of the items are presented with a five-point rating scale, each point anchored by a descriptive phrase. A rating of five represents the highest degree of nurturance for each item. The scale is typically utilized by having children rate their parents.

The scale was chosen to validate the PNM for two reasons. The first reason is that it is one of the few measures of nurturance that has been utilized in numerous studies (Heilbrun, 1964; Heilbrun, Bateman, Heilbrun & Herson, 1981; Nowicki & Segal, 1974). The positive findings yielded by the use of this scale in these studies indicate that the measure has reasonably high validity. The second reason for the use of the scale in the validation of the PNM is that it is one of the few scales besides the PNM to reflect the multifaceted

nature of parental nurturance. Unfortunately, no reliability data has been published on the scale.

Parental Nurturance Scale. John Buri (1989) and his associates developed this 24-item Likert scale. The scale was selected to validate the PNM because it is one of the rare nurturance scales that has published information pertaining to its reliability. The scale has a test-retest reliability coefficient of .94 and a coefficient alpha of .93 for college students' ratings of their fathers. Similar reliability coefficients were obtained for college students' ratings of their mothers. Please refer to Appendix D for a listing of the scale items.

Procedure

Every participant attended a research session which lasted approximately an hour. Subjects received a packet of materials that included an informed consent form (See Appendix E), a demographic profile form (See Appendix F), the PNM, the Parental Nurturance Scale, and the Parent-Child Interaction Scale. The sequence of the three nurturance scales were counterbalanced so that the relative position of the PNM in a third of the packets was first, second, and last respectively. Each session began with the experimenter orally reviewing the issues presented in the informed consent form, and then requesting the subjects to read and sign the form if they still desired to participate in the study. The subjects

were then instructed to complete each of the scales in the sequence presented in their packets. The examiner was available for questions and comments from the participants immediately after the session.

Data Analyses

There were 17 subjects who left at least one item blank on the PNM. Two of these subjects were excluded from all analyses due to having more than 5 unanswered items on the scale. The remaining subjects were included in the analyses, with their missing data points filled in by the mean score for all subjects on the items in question.

One factor ANOVAs were performed on the PNM ratings to test for possible order effects based on the position of the scale (i.e., first, second, or last) in the packet of nurturance measures that the subjects received. Separate analyses were performed on the mother data and the father data.

An exploratory factor analysis was performed on the PNM father ratings for the dual purpose of determining the scale's structural properties and to discard items that were psychometrically unsound. Chronbach's Alpha was used to determine the reliability of each of the factor subscales and the total scale. The validity of the PNM was tested by obtaining Pearson correlations between the subjects' ratings of their parents on the PNM and their ratings of their parents

on the Parent-Child Interaction Rating Scale and the Parental Nurturance Scale respectively.

Chapter 5

Results of Preliminary Study

Order Effects

The results of the ANOVAS indicated that there were no significant order effects for the father ratings, $F(2, 172) = 0.470$, $p = .63$. There were also no significant order effects for the mother ratings, $F(2, 172) = 1.896$, $p = .153$.

Factor Structure of the PNM

The preliminary factor analysis revealed that there were 14 factors with eigenvalues greater than 1.00. As seen in Table 1, the analysis revealed the existence of only one strong factor, which accounted for 38% of the total variance. The second and third strongest factors accounted for 5.3% and 4.1% of the total variance respectively. Despite the disproportional strength of the first factor in comparison to the others, a three factor solution was chosen for several reasons. One reason is that the items which load highly on each of the three factors are conceptually consistent with each other and are somewhat distinct from the items loading on the other two factors. The items which load highest on the first factor can be described conceptually as assessing warm acceptance, as most of the items were from the a priori categories of nonverbal affection or acceptance. The items

Table 1

Factor Structure of the Parental Nurturance Measure

Factor	Eigenvalue	Percent of Variance	Cumulative Percent
1	26.87	38.4	38.4
2	3.69	5.3	43.7
3	2.87	4.1	47.7
4	2.16	3.1	50.8
5	1.79	2.6	53.4
6	1.75	2.5	55.9
7	1.61	2.3	58.2
8	1.45	2.1	60.3
9	1.30	1.9	62.1
10	1.23	1.8	63.9
11	1.18	1.7	65.6
12	1.17	1.7	67.2
13	1.06	1.5	68.8
14	1.03	1.5	70.2

which load highest on the second factor describe parental behaviors and attitudes that prepare the child for the outside world, with all of the items coming from the a priori categories of mentorship or appropriate limit setting. The items which load highest on the third factor are united in that all of them describe early childhood experiences. Specifically, each of these items are worded in a manner that asks the respondent to recall early childhood experiences. An example of this type of item is: "When I was small, my father comforted me when I was hurt".

Another reason for a three factor solution rather than a one factor solution is that a three factor solution better fits with the exploratory nature of this study; it allows one to examine the relative impact of various types of perceived nurturance. A three factor solution was also preferable to a solution that would have included more factors because it is considered unwise to have several factors that each account for a small yet similar amount of variance (Kim & Mueller, 1978).

A varimax rotation of the three factors was done in order to help develop factor subscales. There were several criteria that had to be met for an item to be included in a factor subscale. The first criterion was that the item had to have a loading of a least .40 on the factor in question and less than a .40 on the other two factors. The second inclusion criterion was that the item had to be conceptually consistent

with the other items in the factor subscale. The third rule for item inclusion was that the correlation between the item score and the total factor subscale score had to be at least .40. Additionally, the item-subscale correlation had to be higher than the item's correlations with the other two factor subscale scores. The final criterion for item selection was that the item could not lower the factor scale reliability coefficient by more than .03 points.

The upshot of the item analysis is that 22 items were included in a warm-acceptance factor subscale (i.e., "Accept Index"), 14 items were selected for a preparation-for-the-world factor subscale (i.e., "Prep Index"), and five items were chosen for an early-childhood-experiences factor subscale (i.e., "Early Index"). The 41 items that make up the factor subscales compose the "Total Index" of the revised version of the Parental Nurturance Measure (PNM-R). Twenty-one of the remaining items were excluded from the factor subscales and Total Index because each of the items were highly and similarly correlated with more than one of the factor subscales. These multi-factor items, however, were tentatively added to the PNM-R in order to analyze their relation to the hypothesis of this dissertation (see Appendix G for a listing of the multi-factor and subscale items). The remaining eight original items were discarded from the scale because of their psychometric and/or conceptual weaknesses.

Reliability of the PNM

Chronbach's Alpha was used to obtain reliability coefficients for the Total Index and each of the factor indexes of the PNM-R. The analyses demonstrated that each of the factor indexes and the Total Index were highly reliable for both the mother and father ratings. The reliability coefficients for the Total Index reliability was .96 for the ratings of the father and .94 for the ratings of the mother. Similarly, the analyses indicated that the Accept Index had a reliability of .95 for the father data and .93 for the mother data. For the Prep Index, the reliability coefficients were .88 for the father data and .87 for the mother data. The reliability analyses of the Early Index yielded a .81 for the father ratings and a .82 for the mother ratings.

Validity of the PNM

Moderately high validity correlation coefficients were hoped for; an extremely high validity ($r > .90$) would suggest that the PNM-R does not offer anything unique to the existing literature, whereas a non-significant validity coefficient would suggest that the scale is measuring something other than nurturance. As presented in Table 2, the correlation coefficients between the various PNM - Revised indexes with the Parent-Child Interaction Rating Scale were significant yet only moderately high. The coefficients ranged from .46 to .73, depending on the parent being rated and the subscale

Table 2

Pearson Correlations Between Parental Nurturance Measure
Indexes and Validity Measures

PNM index	Mother		Father	
	Par-Child Scale	Par-Nurt Scale	Par-Child Scale	Par-Nur Scale
Acceptance	.73***	.85***	.73***	.89***
Prepare	.64***	.71***	.60***	.70***
Early	.51***	.52***	.46***	.49***
Total	.56***	.74***	.56***	.80***

Note. Par-Child Scale = Parent-Child Interaction Rating Scale

Par-Nurt Scale = Parental Nurturance Scale

***p<.001

being analyzed. Similarly, the correlation coefficients between the PNM-R indexes and the Parental Nurturance Scale were also fairly high, ranging from .49 to .89.

Chapter 6

Method of Primary Study

Subjects

An initial sample of 251 University of Tennessee undergraduate students participated in the study, for which they received extra-credit in one of their psychology courses. The sample size was particularly large in order to increase the range of scores obtained for each variable studied. This is a particularly salient issue in regard to perceived parental nurturance, given that previous research has indicated that most college students rate their parents as being highly nurturant (Hunter & Youniss, 1982). College-aged subjects were used partially due to their availability and readiness for participation in the study. This population was also desirable for the study in that it is possible that the accuracy of college students' retrospective reports of parent-child interactions may be enhanced by the relative brevity of elapsed time between the recollection of the experience and its actual occurrence.

Subjects were assigned to one of the following four groups on the basis of their ratings of both parents on the scales of the Parental Nurturance Measure - Revised (PNM-R): (1) low paternal nurturance and low maternal nurturance group (LPN+LMN group) (2) low paternal nurturance and high maternal

nurturance group (LPN+HMN group) (3) high paternal nurturance and low maternal nurturance group (HPN+LMN group) (4) high paternal nurturance and high maternal nurturance group (HPN+HMN group). A separate categorization of the subjects into the four groups was done for each of the three factor indexes of the PNM-R (i.e. Accept Index, Prep Index, and Early Index), and also for the Total Index. The subjects were also categorized into nurturance groups on the basis of the Super Index of the PNM-R, which was derived by summing the Total Index scores with the scores on the 21 multi-factor items.

For each type of index, the rated parent was classified as being high or low in nurturance according to whether the score was above or below the median score obtained from the sample used in this study. This type of categorization system resulted in some parents being rated high in one kind of nurturance and low in another kind of nurturance. For example, a student might rate his or her father high on the Accept Index and low on the Prep Index. Nonetheless, a majority of the subjects (54%) were placed in the same group (i.e., HPN+HMN or LPN+LMN etc.,) for each type of classification. Fathers and mothers were categorized on the basis of the medians of the father and mother data respectively. The subjects who rated at least one of their parents at the median level for a given type of index were excluded from all analyses of the groups categorized by the index.

In the initial sample, the LPN+LMN and HPN+HMN groups each typically had about three times the number of subjects than did the LPN+HMN and HPN+LMN groups. Chi square analyses of the initial set of data revealed that the relative small size of the LPN+HMN and HPN+LMN groups made it impossible to examine the sexes separately due to insufficient expected frequencies in some of the chi square cells. Therefore, another 124 college students were tested in order to get an adequate number of subjects in the LPN+HMN and HPN+LMN groups. The PNM-R scores of the additional subjects were screened to see what groups they would be assigned to. If any of the five types of PNM-R index scores qualified the subject for membership in either the LPN+HMN group or the HPN+LMN group, the subject was included in the analyses of the type of index in question. A total of 37 subjects were added to at least one set of analyses by this process. The data from the remaining 87 additional subjects were not analyzed because they would have been classified into groups that were already of sufficient size.

The 37 additional subjects selected for data analyses increased the total sample size to 288 subjects. However, 27 subjects were excluded from all data analyses due to invalid test results. Another 15 subjects were excluded from the analyses because they rated their stepfathers or grandfathers instead of their fathers on the PNM-R. The remaining 246 subjects were included in at least some of the

data analyses. Please refer to the procedure section for the specific criteria used to exclude subjects.

As seen in Table 3, the number of subjects per group was dependent upon which PNM-R index was being analyzed. The table also demonstrates that the size of the LPN+LMN and HPN+HMN groups were still considerably larger than the other two groups despite the inclusion of the additional subjects. Most groups had more females than males, with a particularly small number of males being assigned to the LPN+HMN and HPN+LMN groups when categorized by the Early Index.

The following demographic statistics describe the 246 subjects that were included in the data analyses. Fifty-seven percent of the subjects were female and 43% were male. The racial composition of the sample was 93% Caucasian, 3% African-American, and 4% other races. Seventy-three percent of the subjects grew up in intact families, whereas 27% were raised in non-traditional family configurations. Most subjects (89%) were between the ages of 17- and 22-years-old inclusive, with the remaining subjects (11%) being older than this age range. Thirty-nine percent of the subjects had a GPA that was at least a 3.00, while 61% of the subjects had a GPA of less than 3.00. The majority of the parents of the subjects attended at least some college, as 79% of the fathers and 68% of the mothers were described as having done so.

Table 3

Number of Male, Female, and All Subjects Per Group

Data set	Group				N
	LPN+LMN	LPN+HMN	HPN+LMN	HPN+HMN	
Accept-all	71	38	39	70	218
Accept-males	33	21	15	27	96
Accept-fem.	38	17	24	43	122
Prep-all	71	38	39	69	217
Prep-males	36	12	26	21	95
Prep-fem.	35	26	13	48	122
Early-all	61	29	25	72	187
Early-males	35	10	10	26	81
Early-fem.	26	19	15	46	106
Total-all	74	38	42	78	232
Total-males	35	15	19	30	99
Total-fem.	39	23	23	48	133
Super-all	75	37	39	76	227
Super-males	37	14	17	30	98
Super-fem.	38	23	22	46	129

Note. LPN = low paternal nurturance; LMN = low maternal nurturance; HPN = high paternal nurturance; HMN = high maternal nurturance.

Measures

Parental Nurturance Measure - Revised (PNM-R). The scale was developed for this study for reasons that were discussed in previous chapters. The psychometric properties of the scale are adequate according to the analyses provided in Chapter 5.

Minnesota Multiphasic Personality Inventory (MMPI). The group form of this measure consists of a booklet with 566 true-false items concerning current psychological functioning. It is the most widely used and researched objective personality measure (Greene, 1980). According to Greene, the 10 clinical scales derived from the MMPI have been shown to be highly reliable and valid. Moreover, the inventory includes several validity scales which detect unreliable test responses. The details pertaining to the usage of the MMPI in this study will be discussed in the section on the Leary Scoring System.

Interpersonal Check List (ICL). The scale was devised by several psychologists at the Kaiser Foundation in order to assess a person's "public" interpersonal style (Leary, 1957). The measure is composed of 128 items that are adjectives or adjective phrases, each describing an interpersonal trait such as "easily led" or "friendly". The ICL requires that an examinee rate a particular person or persons on the scale by darkening the circles adjacent to the traits which describe the person being rated. For the purposes of this study, the

subjects rated themselves, their mothers, their fathers, and their ideal selves. Armstrong (1957) found that the scale has a high level of internal consistency ($r = .95$). The validity of the scale has also been demonstrated in that it has been found to be related in a predictable fashion to the diagnosis of narcissism (Raskin & Terry, 1988), hypnotic susceptibility (Bentler, 1963), and incest victims' interpersonal choices (Van Buskirk & Cole, 1983).

Leary System of Interpersonal Assessment. Leary (1957) and his colleagues at the Kaiser Foundation developed a system of interpersonal diagnosis that was based on the interpersonal theory of personality. The construction of the Leary System was informed by Harry Stack Sullivan's notion that personality is best understood by focusing on the interpersonal styles that people develop in order to minimize anxiety (Sullivan, 1953). Leary defined personality as being "a multilevel pattern of interpersonal responses (overt, conscious, or private) expressed by the individual" (Leary, 1957, p.15). Accordingly, the Leary System assesses several levels of personality, which gives it a breadth and depth that few other assessment systems can match. There are over 50 indices that one can derive from the Leary System, eight of which were utilized in this study.

Leary's diagnostic system is characterized by its circular grid representation of eight interpersonal styles, each represented by an octant (see Figure 1). Every style is

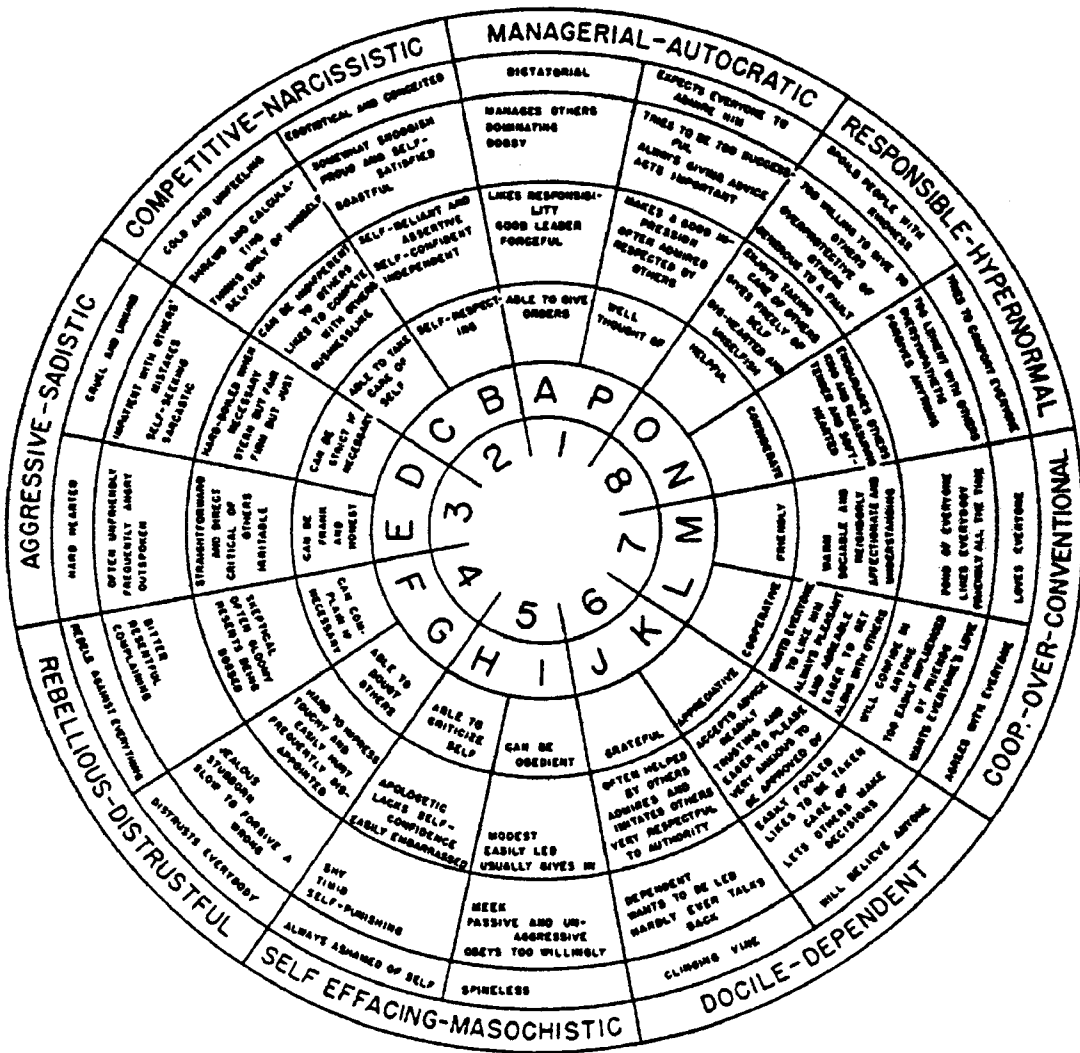


Figure 1

Leary's Interpersonal Circle

Source: Multilevel Measurement of Interpersonal Behavior

(p. 2) by Timothy Leary, 1956, Berkley, CA:

Psychological Consultation Service.

derived from a unique combination of the orthogonal dimensions of love-hate and dominance-submission, the former being represented by the horizontal axis of the circle and the latter by the vertical axis. For example, the responsible-hypernormal style is characterized by high levels of both love and dominance. Leary proposed that there is a positive relationship between the similarity of two interpersonal styles and the degree of adjacency of the styles on the interpersonal circle. For instance, the responsible-hypernormal interpersonal style is conceptualized as being similar to the managerial-autocratic style and opposite of the rebellious-distrustful style. The interpersonal circle also depicts the intensity of any given interpersonal diagnosis; the further from the center, the stronger the style. Leary's circular grid model of interpersonal behavior has been validated in several studies (LaForge & Suczek, 1955; Lyons, Hirschberg, & Wilkinson, 1980; Truckenmiller & Schaie, 1979; York, Scruggs, & Shaker, 1986).

The Leary System was used in this study to examine four levels of interpersonal style. The levels are listed in Table 4. The first level of interpersonal style (Level I) is the level of "public communication", which is primarily how a person's behavior is experienced by others. Level I communication is reflexive and is primarily expressed via nonverbal channels, such as gestures, tone of voice, and external appearance. Level I diagnoses have been shown to

Table 4

Interpersonal Levels of the Leary System

Level	Description	Measure
I	Public communication	MMPI
II	Self-report	ICL
III-MM	Underlying character	MMPI
V	Ideal self	ICL

Note. MMPI = Minnesota Multiphasic Personality Inventory

ICL = Interpersonal Check List

have predictive validity (Leary, 1956; Leary & Harvey, 1956). The assessment of subjects' Level I interpersonal styles was a multi-step process (Leary, 1956). First, Level I dominance ("Dom") scores and love ("Lov") scores were calculated from MMPI scale scores using the following equations: $Dom = (Ma - D) + (Hs - Pt)$ and $Lov = (K - F) + (Hy - Sc)$. The obtained values of Dom and Lov were then converted to standard scores, which in turn were graphed onto the interpersonal circle in the form of a diagnostic summary point.

The second level of interpersonal style (Level II) is one's conscious communication and/or descriptions about one's self. As mentioned previously, Level II ICL scores have been validated in numerous studies. This level was assessed in a method similar to the one described for Level I except that the Level II Lov and Dom scores were derived from the subjects' self-descriptions on the ICL (Leary, 1956).

The third level of interpersonal style (Level III-MM) is preconscious in nature in that it reflects a person's characterological style. Cohen, Johnson, and Hanson (1971) described this level as being the expressive aspects of a communication that are not consciously attended to by the communicator. This level taps the basic intentionality of interpersonal communications as opposed to what a person's stated motives are for a given behavior. Level III-MM diagnoses were derived by graphing the subjects' Pd and Mf scale scores of the MMPI onto a rotated interpersonal circle

in a manner suggested by Leary (Leary, 1956). Level III-MM diagnoses have been found to discriminate among various groups of people in clinically expected ways (Gynther & McDonald, 1961; Scribner & Handler, 1987).

Interpersonal diagnoses at Level V were also assessed in this study. Leary referred to Level V as being primarily "concerned with consciously reported ideals" (Leary, 1957, p.200). Level V diagnoses were obtained by asking subjects to rate their ideal selves on the ICL. The validity data on Level V diagnoses will be addressed in a subsequent section.

There are several variables in the Leary System that are derived from the discrepancies between two interpersonal diagnoses. The level of discrepancy is determined by both the distance between the interpersonal octants and the intensity levels of the diagnoses. Diagnoses that are opposite each other on the interpersonal circle and those that have significantly different intensity levels are considered the most discrepant.

Operational Definitions of Dependent Variables

The eight types of dependent variables that were used in the study were all derived from Leary's Interpersonal System. The first dependent variable in the study was the degree to which love characterized the subjects' interpersonal styles. The love-hate dimension is represented by the horizontal axis of the interpersonal circle; the more loving an interpersonal

style is, the further to the right its depiction will be in the circle (see Figure 1). The love variable was assessed by obtaining the subjects 'Lov' scores on Levels I and II. The validity of Lov scores has been clearly established in the previously mentioned research pertaining to Level I and Level II diagnoses. There are no Level III Lov scores in the Leary System, so the hypothesis could not be tested at this level.

The second dependent variable was the level of social acceptability of a given interpersonal style. The interpersonal circle was divided into octants that reflect socially acceptable styles (octants 7, 8, 1, 2) and those that represent relatively socially unacceptable styles (octants 3 - 6). This distinction was made for the subjects' Level I, Level II, and Level III interpersonal diagnoses. Previous research has provided evidence of the construct validity of the social acceptability variable in the Leary system (Cohen et al., 1971; Schoolar, White, & Cohen, 1972.)

Interpersonal rigidity was the third dependent variable utilized in the study. Leary (1956) considered any diagnostic summary points that fell approximately one standard deviation from the mean in distance from the center of the circle to be maladaptively rigid. The operational definition of interpersonal rigidity for this study was diagnostic summary points that fell at least one standard deviation from the sample mean in regards to either the love dimension or the dominance dimension. Interpersonal rigidity was assessed for

Levels I and II. The rigidity of Level III diagnoses was not analyzed, in accordance with Leary's position that intense unconscious fantasies are not necessarily maladaptive (Leary, 1957). There are not any published studies concerning the validation of the rigidity variable, though one study did validate Leary's notion that intense interpersonal styles are represented further from the center of the interpersonal circle than are more moderate styles (Lyons, Hirschberg, & Wilkinson, 1980). Nonetheless, the rigidity variable seemed conceptually relevant to paternal nurturance. Thus, it was selected for exploratory purposes as a dependent measure in the study despite the lack of pertinent validity data.

The fourth dependent measure examined in the study was self-acceptance. It is defined in the Leary System as the degree of similarity between one's self-ratings (Level II) and one's ratings of the ideal self (Level V). The validity of this measure has been fairly well established, as it has been used to discriminate between highly and moderately narcissistic persons (Raskin & Terry, 1988), between repressors and sensitizers (Altrocchi, Parsons, & Dickoff, 1960), and between psychologically adjusted and maladjusted high school boys (Lockwood & Guerny, 1962). Wylie (1974) offers a dissenting view of the measure's validity.

The fifth dependent variable in the study was the subjects' level of conscious identification with their fathers. Identification was operationally defined by the

level of correspondence between the subjects' Level II- Self diagnoses and the diagnoses of their fathers. The father diagnoses were derived from the subjects' ratings of them on the ICL. The significance of discrepancies was determined according to Leary's discrepancy tables (Leary, 1956). Significant discrepancies between the two types of diagnoses indicated that the subjects were "disidentified" with their fathers, whereas relatively moderate discrepancies indicated that the subjects were identified with their fathers (Leary, 1956). The identification variable is one of the most validated indices of the Leary System (Cohen et al., 1971; Leary, 1956; Sipova & Brzek, 1983; Van Burskirk & Cole, 1983).

The subjects' assimilation of their fathers was the sixth dependent variable in the study. The operational definition of this variable is the discrepancy between the subjects' ratings of their fathers on the ICL (i.e. father diagnoses) and the subjects' Level III-MM (i.e., characterological) diagnoses. Nonsignificant discrepancies between these two indices represent assimilation of the father, while significant discrepancies indicate a rejection of some quality of the father (Cohen et al., 1971). The only previous study which utilized this variable found that it revealed striking and meaningful differences between drug-abusing and non-drug-abusing therapy patients (Cohen et al., 1971).

The seventh dependent variable was self-deception. It

was assessed by determining the amount of discrepancy between a subjects's Level I (i.e., public self) and Level II - Self diagnoses, with significant discrepancies indicating the presence of self-deception. The measure has been found to be valid, as it has successfully differentiated between drug abusing and non-drug abusing therapy patients (Schoolar et al, 1972), as well as between extreme and moderate Type A behavioral styles (Roemer, 1987).

Identity diffusion was the eighth dependent variable employed in the study. It was derived by determining the discrepancy between Level II - Self diagnoses and Level III-MM (i.e., characterological) diagnoses, with significant discrepancies indicating the presence of identity diffusion. Cohen et al. (1971) found the variable to be helpful in discriminating between drug-abusing and non-drug-abusing patients. Unfortunately, there is no other available data regarding its validity.

Procedure

Each subject attended one of several group research sessions, where they received a packet of materials that included an informed consent form, a demographic profile sheet, mother and father forms of the Parental Nurturance Measure - Revised, the Interpersonal Check List, and the MMPI - Group Form. The experimenter began the session by orally summarizing the concepts covered in the informed consent form.

The subjects were then encouraged to read and sign the form if they desired to participate in the study. The experimenter also orally reviewed the instructions for the ICL, as it became clear in the first session that this was a potential source of confusion for some of the subjects. The subjects were then directed to sequentially complete each form and scale in their packets. The experimenter was available for questions and comments after the session.

The validity of the primary subjects' MMPI scores was examined in order to identify and exclude invalid data sets. The carelessness scale and the test-retest index were utilized to detect which subjects had a careless test-taking style and/or answered at least some of the questions in a random fashion. The indexes were used because the subjects were considered to be particularly vulnerable to utilizing these types of response styles given that the research sessions could be quite time consuming. Greene (1980) concluded from his review of the research on the two indexes that they are both useful in detecting invalid MMPI profiles. If either the carelessness scale or the test retest index indicated that the subject's MMPI was invalid according to the criteria listed by Greene, the entire packet of the subject's data was excluded from all analyses. A total of 27 subjects were excluded from the study for this reason. Some of the remaining subjects were excluded from particular types of analyses for reasons that will be discussed in the results

section.

Data Analyses

Mean PNM-R item scores were used to replace missing data when subjects left an item blank. Chronbach's Alpha was employed to obtain reliability coefficients for the PNM-R indexes. A sex of subject X parent ANOVA was done for each PNM-R index to see if either variable influenced the PNM-R ratings.

Nurturance group (4) X sex ANOVAs were done on the Level I and Level II "Lov" scores for each of the five data sets. Chi square analyses were used to compare the four nurturance groups (i.e. LPN+LMN, LPN+HMN, HPN+LMN, HPN+HMN) on the remaining seven dependent variables because the respective measures yielded frequency data (Leary, 1957; Siegel, 1956). The level of significance for all analyses was set at .05 and the degrees of freedom was 3. Separate chi square analyses were done for each of the five sets of groups derived from the PNM-R indexes in order to compare the relative predictive power of the indexes. Separate analyses were also done on males and females whenever there was sufficient expected cell frequencies to do so. It was impossible to examine the males separately for any of the chi square analyses of the early nurturance groups due to inadequate expected frequencies.

Summary of Hypotheses

(1) Subjects in the high perceived paternal nurturance groups (HPN+LMN and HPN+HMN) were anticipated to have higher Lov scores at Levels I and II than the subjects in the low perceived paternal nurturance groups (LPN+HMN and LPN+LMN).

(2) Subjects in the high perceived paternal nurturance groups were expected to be more likely to have socially acceptable interpersonal styles at levels I, II, and III than were the subjects in the low perceived paternal nurturance groups.

(3) Subjects in the high perceived paternal nurturance groups were predicted to be less likely than the subjects in the low perceived paternal nurturance groups to exhibit rigid interpersonal styles at Levels I and II.

(4) The subjects of the high perceived paternal nurturance groups were anticipated to be more likely than the subjects of the low perceived paternal nurturance groups to show self-acceptance.

(5) The high perceived paternal nurturance groups were expected to have a higher proportion of subjects who consciously identified with their fathers than were the low perceived paternal nurturance groups.

(6) The subjects of the high perceived paternal nurturance groups were hypothesized to be more likely than the subjects in the low perceived paternal nurturance groups to have assimilated their father.

(7) The subjects of the high perceived paternal nurturance groups were expected to be less likely to exhibit self-deception than were the subjects of the low paternal nurturance groups.

(8) The high perceived paternal nurturance groups were hypothesized to have a lower proportion of subjects with identity diffusion than were the low perceived paternal nurturance groups.

Chapter 7

Results of Primary Study

Analyses of the Factor Indexes of the PNM-R

The results revealed that the reliability coefficients obtained in the primary study were quite similar to those obtained in the preliminary study, as illustrated in Table 5. All of the factor indexes and the Total Index were highly reliable, with coefficients ranging from a low of .86 for the father ratings on the Early Index to a high of .97 for the father ratings on the Total Index.

Correlations between each item of the three factor indexes and the total scores of the indexes were done to further verify the applicability of the original PNM-R factor structure to the data of the primary study. The results indicated that 38 of the 41 items in the factor indexes were correlated higher with the index to which they had been assigned than with either of the other two indexes. The remaining three items were correlated highly with the appropriate index, but were correlated even higher with another index by a slight margin of .03 or less.

Analyses of Independent Variable Effects on PNM-R Scores

A sex of subject X parent (mother or father ratings) ANOVA was performed on each of the five PNM-R indexes to determine

Table 5

Reliability Coefficients of the Parental Nurturance Measure
Indexes

Scale	Preliminary Subjects (n = 174)		Primary Subjects (n = 246)	
	Father	Mother	Father	Mother
	form	form	form	form
Acceptance	.95	.93	.96	.95
Prepare	.88	.87	.91	.87
Early	.81	.82	.86	.88
Total	.96	.97	.97	.96

if either variable influenced the ratings. The ANOVA summaries presented in Table 6 show that there were significant main effects for the parent variable on all of the indexes except the Prepare Index. As can be seen in Table 7, the nature of these differences is that the mothers were rated significantly higher in nurturance than were the fathers. For instance, the mean Accept Index scores were 96.98 for the mothers and 92.31 for the fathers, $F(1,491) = 12.21, p < .01$. There were no significant sex main effects found. However, there was a significant sex X parent interaction found on the Early Index, $F(1,491) = 3.90, p < .05$. Tukey tests done on the various combinations of the parent and sex variables revealed that the interaction was due to the fathers being rated higher on the Early Index by the females (19.65) than by the males (18.17).

There was considerable similarity in the mother and father data despite the above-mentioned differences. The mean PNM-R scores suggest that most subjects rated both of their parents as being high in nurturance. For example, the mean item rating was a 4.02 for fathers and a 4.20 for mothers on a 5-point Likert scale. The median scores provide further evidence of the similarity of the mother and father data, as the largest discrepancy between the median mother and father ratings on any of the PNM-R indexes was three points.

Median split analyses of the ratings for both parents on each of the PNM-R indexes were utilized to categorize the

Table 6

ANOVA Summaries of Sex and Parent Effects For Each PNM-R Index

Source of variation	Sum of squares	DF	Mean Square	F	Prob.
Accept Index					
Parent	2691.983	1	2691.983	12.208	.001
Sex	180.969	1	180.969	0.821	.365
Parent x Sex	481.717	1	481.717	2.185	.140
Residual	107609.817	488	220.512		
Total	110964.486	491	225.997		
Prep Index					
Parent	6.209	1	6.209	0.066	.798
Sex	220.803	1	220.803	2.339	.127
Parent x Sex	320.267	1	320.267	3.329	.066
Residual	46076.664	488	94.419		
Total	46623.943	491	94.957		
Early Index					
Parent	668.524	1	668.524	33.747	.000
Sex	56.478	1	56.478	2.851	.092
Parent x Sex	77.211	1	77.211	3.898	.049
Residual	9667.217	488	19.810		
Total	10469.430	491	21.323		

Table 6 (continued)

Source of variance	Sum of squares	DF	Mean square	F	Prob.
Total Index					
Parent	6437.160	1	6437.160	9.365	.009
Sex	79.604	1	79.604	0.116	.734
Parent x Sex	164.841	1	164.841	0.240	.625
Residual	335437.280	488	687.371		
Total	342118.885	491	696.780		
Super Index					
Parent	17027.779	1	17027.779	10.510	.001
Sex	172.226	1	172.226	0.106	.745
Parent x Sex	228.345	1	228.345	0.141	.708
Residual	790616.676	488	1620.116		
Total	808045.024	491	1645.713		

Table 7

Median and Mean Ratings of Fathers and Mothers on PNM-R Indexes

Index	Medians		Means		F ratio ^a
	Fathers	Mothers	Fathers	Mothers	
Accept ^b	99.00	101.00	92.31	96.98	12.21**
Prep ^c	56.00	55.00	54.20	54.42	0.07
Early ^d	21.00	22.00	19.00	21.33	33.75***
Total ^e	174.00	177.00	165.51	172.74	9.36**
Super ^f	263.00	266.00	248.84	260.61	10.51**

^aF values were derived from comparisons of mother and father means.

^bHighest possible Accept score = 110.

^cHighest possible Prep score = 70.

^dHighest possible Early score = 25.

^eHighest possible Total score = 205.

^fHighest possible Super score = 310.

p<.01 *p<.001

subjects into the four nurturance groups (i.e. LPN+LMN, LPN+HMN, HPN+LMN, and HPN+HMN). The medians employed in the categorization are listed in Table 7. An illustration of the classification process is that the subjects who rated their fathers higher than a 56 and their mothers higher than a 55 on the Prep Index were assigned to the HPN+HMN nurturance group, whereas the subjects who rated both of their parents below these cutoff scores were assigned to the LPN+LMN nurturance group. The groups derived from the analyses of each of the five indexes of the PNM-R will correspondingly be referred to hereafter as the "accept nurturance groups", "prep nurturance groups", "early nurturance groups", "total nurturance groups" and "super nurturance groups". Likewise, the dependent variable data gathered for each set of groups will be referred to as the "accept data set", the "prep data set", and so forth.

It was important for there not to be any sex differences in the level of perceived paternal nurturance within any of the four groups, as this type of difference could potentially be a confounding factor in the results of the study. Thus, a sex (2) X group (4) ANOVA was performed on the father ratings for each of the five PNM-R indexes. The results yielded no significant sex main effects or sex X group interaction effects, as can be seen in the ANOVA summaries presented in Table 8. The analyses did reveal highly significant group main effects on each of the indexes, as one

Table 8

Anova Summaries of Group and Sex Effects on Father Ratings For
Each PNM-R Index

Source of variation	Sum of squares	DF	Mean square	F	Prob.
Accept Index					
Group	29618.369	3	9872.790	82.181	.000
Sex	5.303	1	5.303	0.044	.834
Group X Sex	344.391	3	114.797	0.956	.415
Residual	25228.184	210	120.134		
Total	55196.247	217	254.361		
Prep Index					
Group	14030.776	3	4676.925	93.269	.000
Sex	12.819	1	12.819	0.256	.614
Group X Sex	315.052	3	105.017	2.094	.102
Residual	10480.241	209	50.145		
Total	24838.888	216	114.994		

Table 8 (continued)

Source of variation	Sum of squares	DF	Mean square	F	Prob.
Early Index					
Group	3251.326	3	1083.775	127.329	.000
Sex	11.258	1	11.258	1.323	.252
Group X Sex	32.707	3	10.902	1.281	.282
Residual	1523.581	179	8.512		
Total	4818.872	186	25.908		
Total Index					
Group	99690.902	3	33230.301	89.629	.000
Sex	51.473	1	51.473	0.139	.710
Group X Sex	1073.408	3	357.803	0.965	.410
Residual	83048.994	224	370.754		
Total	183864.777	231	795.951		
Super Index					
Group	229029.956	3	77343.319	85.582	.000
Sex	5.699	1	5.699	0.006	.936
Group X Sex	3887.533	3	1295.844	1.453	.228
Residual	195357.923	219	892.045		
Total	428281.111	226	1895.049		

would expect given that the groups were categorized in accordance with the subjects' index scores. Refer to Table 9 for a listing of all of the pertinent group means and F ratios. Tukey tests were performed on the group means of each index to clarify the nature of the differences. The results indicated that, for each index, the father ratings by the two high perceived paternal nurturance groups (HPN+LMN and HPN+HMN) were significantly higher than the father ratings by the two perceived low paternal nurturance groups (LPN+HMN and LPN+LMN). For example, the mean father ratings on the Super Index was 276.72 for the HPN+LPN group and 286.23 for the HPN+HMN group, whereas the comparable ratings for the LPN+LMN and LPN+HMN groups were 218.68 and 214.68 respectively; $F(3,226) = 85.58, p < .001$.

Overview of the Data Pertaining to the Hypotheses

The raw frequency data from which the dependent variables were derived are listed in Tables A-1 to A-6. These tables can be found in Appendix H. More pertinent to the hypotheses are the tables interspersed throughout this chapter. It is important to remember while reading the tables that the sizes of the LPN+HMN and HPN+LMN groups were considerably smaller than the sizes of the LPN+LMN and HPN+HMN groups, which gave the former two groups relatively less power in the chi square analyses.

Table 9

Group Means of Father Ratings on PNM-R Indexes

Index	Group				F ratio ^a
	LPN+LMN	LPN+HMN	HPN+LMN	HPN+HMN	
Accept	79.86	82.16	103.79	105.52	88.42***
Prep	47.18	44.05	60.53	63.83	93.17***
Early	14.56	14.28	22.33	23.38	126.08***
Total	144.69	144.15	183.24	189.54	92.84***
Super	218.68	214.28	276.72	286.23	89.45***

Note. LPN low paternal nurturance; LMN = low maternal nurturance; HPN = high paternal nurturance; HMN = high maternal nurturance.

^aTukey tests showed that the father ratings by both the HPN+LMN and HPN+HMN groups were significantly higher than the ratings by the LPN+LMN or LPN+HMN groups.

Analyses of Lov scores

Hypothesis #1 predicted that the subjects in the high perceived paternal nurturance groups (HPN+HMN and HPN+LMN) would be more likely than subjects in the low paternal nurturance groups (LPN+LMN and LPN+HMN) to have loving interpersonal styles at Level I and Level II. This was the only dependent variable which was not analyzed by chi squares, as the interval nature of the Lov scores allowed for group x sex ANOVAs to be done for each data set. As summarized in Table 10, the results of each of the analyses of the Level I Lov scores indicated significant group main effects. The magnitude of the group main effect was particularly striking for the early nurturance groups, $F(3,186) = 7.88$, $p < .001$. Tukey tests were performed on the group means to help clarify the nature of the group differences. The results revealed that the HPN+HMN group had significantly higher Level I Lov scores than did the LPN+LMN group for each data set, which is consistent with the hypothesis. For example, the mean Level I Lov score of the HPN+HMN group in the accept data set was -0.86, whereas the corresponding score for the LPN+LMN group was -15.44. The Tukey tests of the early nurturance groups revealed another group difference that supported the hypothesis, which was that the HPN+HMN group had a higher mean Level I Lov score (-0.35) than did the LPN+HMN group (-14.59). There was also a group difference found between the two high paternal nurturance groups of the super data set, with the

Table 10

ANOVA Summaries of Group and Sex Effects on Level I (Public Self) Lov Scores

Source of variation	Sum of squares	DF	Mean square	F	Prob.
Accept Data Set					
Group	7511.213	3	2503.738	6.514	.000
Sex	196.879	1	196.879	0.512	.475
Group X Sex	2318.380	3	772.793	2.011	.114
Residual	80717.373	210	384.368		
Total	90743.845	217	418.174		
Prep Data Set					
Group	6400.394	3	2133.465	5.359	.001
Sex	205.553	1	205.553	0.516	.473
Group X Sex	441.513	3	147.171	0.370	.775
Residual	83197.172	209	398.073		
Total	90244.632	216	417.799		

Table 10 (continued)

Source of variation	Sum of squares	DF	Mean square	F	Prob.
Early Data Set					
Group	8854.829	3	2951.610	7.878	.000
Sex	1969.409	1	1969.409	5.257	.023
Group X Sex	411.191	3	137.064	0.366	.778
Residual	67063.452	179	374.656		
Total	78298.881	186	420.962		
Total Data Set					
Group	6006.964	3	2002.321	5.087	.002
Sex	845.945	1	845.945	2.149	.144
Group X Sex	259.673	3	86.558	0.220	.883
Residual	88178.014	224	393.652		
Total	95290.596	231	412.513		
Super Data Set					
Group	6217.959	3	2072.653	5.626	.001
Sex	767.315	1	767.315	2.083	.150
Group X Sex	570.859	3	190.286	0.517	.671
Residual	80679.627	219	368.400		
Total	88235.760	226	390.424		

mean Level I Lov score of the HPN+HMN group (-1.46) being significantly higher than was the mean score of the HPN+LMN group (-11.45).

A clearer picture of the pattern of results emerges when one looks at the group means as listed in Table 11. For each type of analyses, the LPN+LMN group always had the lowest mean Level I Lov scores and the HPN+HMN group always had the highest mean scores. The two groups of subjects with only one parent rated high in nurturance (i.e., HPN+LMN and LPN+HMN groups) were characteristically intermediate in their Level I Lov scores, with neither group demonstrating consistently higher mean scores across analyses than the other.

The analyses of the Level I Lov scores of the early nurturance groups yielded a significant sex main effect, $F(1,186) = 5.275$, $p < .05$, as females had higher scores (-5.58) than did males (-14.00). There were no other significant sex main effects or sex X group interactions found in the analyses of the Level I Lov scores.

The analyses of Level II Lov scores did not find any significant group effects or group x sex effects, as can be seen in Table 12. There were, however, significant sex main effects found in each type of Level II analyses, with F ratios ranging from 6.217 ($df = 3$, $p < .05$) for the analyses of the early nurturance groups to 12.152 ($df = 3$, $p < .01$) for the accept nurturance groups. The essence of the sex differences was that females had higher Level II Lov scores than did males

Table 11

Group Means of Level I (Public Self) Lov Scores

Data set	Group				F ratio ^a
	LPN+LMN	LPN+HMN	HPN+LMN	HPN+HMN	
Accept	-15.44	-9.76	-8.46	-0.86	6.51***
Prep	-15.23	-6.05	-11.05	-1.68	5.36**
Early	-17.30	-14.59	-8.92	-0.35	7.88*** ^b
Total	-14.19	-6.53	-11.21	-1.91	5.09**
Super	-14.31	-7.24	-11.54	-1.46	5.63*** ^c

Note. LPN = low paternal nurturance; LMN = low maternal nurturance; HPN = high paternal nurturance; HMN = high maternal nurturance.

^aTukey tests revealed that the means of the HPN+HMN group were significantly higher than the means of the LPN+LMN group for each data set.

^bHPN+HMN group mean significantly higher than LPN+HMN group mean.

^cHPN+HMN group mean significantly high than HPN+LMN group mean.

p<.01 *p<.001.

Table 12

Group Means of Level II (Self-Reported) Lov Scores

Data set	Group				F ratio
	LPN+LMN	LPN+HMN	HPN+LMN	HPN+HMN	
Accept	3.55	5.30	3.26	4.63	0.86
Prepare	3.83	4.45	4.84	5.22	0.57
Early	3.18	4.34	7.53	4.69	1.34
Total	2.64	6.89	4.78	4.28	2.36
Super	3.01	6.46	5.36	4.14	1.59

Note. LPN = low paternal nurturance; LMN = low maternal nurturance; HPN = high paternal nurturance; HMN = high maternal nurturance.

across all groups. For instance, the females and males of the accept groups had mean Level II Lov scores of 5.85 and 1.99 respectively.

In summary, the overall profile of the results for Level I Lov scores supported the hypothesis. However, the hypothesis was not confirmed by the findings for Level II.

Analyses of the Social Acceptability Variable

Hypothesis #2 stated that subjects in the high perceived paternal nurturance groups would be more likely than subjects in the low perceived paternal nurturance groups to have socially acceptable interpersonal styles at Levels I, II, and III. The interpersonal styles that are typically considered to be socially acceptable include the managerial-autocratic, competitive-narcissistic, cooperative-overconventional, and responsive-hypernormal styles. The socially unacceptable interpersonal styles include ones which are aggressive-sadistic, rebellious-distrustful, self-effacing-masochistic, and docile-dependent. Chi Square analyses compared the four nurturance groups in regard to the frequency of socially acceptable interpersonal styles at each level.

The results pertaining to the social acceptability of the Level I (i.e., public self) diagnoses were complicated by the fact that 25% of the chi square cells had expected frequencies of less than five, which goes against a general rule of thumb that only 20% of the chi square cells can have

expected frequencies of less than five (Hays, 1981). However, this convention is seen as overly conservative by some statisticians (Camilli & Hopkins, 1978), especially when there is more than one degree of freedom in the analyses (Minium, 1970). Thus, the analyses were run, with the primary focus being on the raw data rather than the chi square values. The sexes were not analyzed separately on the social acceptability variable given the already low expected frequencies.

As can be seen in Table 13, the analyses of the Level I data demonstrated that a majority of the subjects in all groups had socially acceptable interpersonal styles at this level. This finding accounts for the low expected frequencies in the chi square cells pertaining to the socially unacceptable styles. The analyses also indicated that there were significant group differences for each data set, with chi square values ranging from 8.02 ($p < .05$) for the total data set to 15.01 ($p < .01$) for the accept data set. The most salient group difference was that the LPN+LMN group had a considerably lower proportion of subjects with social acceptable styles than did the other three groups, regardless of the data set being analyzed. Hence, both of the high perceived paternal nurturance groups (HPN+LMN and HPN+HMN) had a higher percent of subjects with socially acceptable styles than did the LPN+LMN group, which was as predicted. The results for the groups categorized by the Super Index are representative of the overall data, as 80% of the LPN+LMN

Table 13

Percent of Subjects with Socially Acceptable Level I (Public)
Interpersonal Styles Per Group

Data set	Group				Chi square value ^a
	LPN+LMN	LPN+HMN	HPN+LMN	HPN+HMN	
Accept	79%	92%	98%	94%	13.07**
Prep	82%	95%	82%	96%	9.77*
Early	77%	90%	92%	94%	9.98*
Total	80%	95%	91%	94%	9.38*
Super	80%	97%	92%	95%	12.50**

Note. LPN = low paternal nurturance; LMN = low maternal nurturance; HPN = high paternal nurturance; HMN = high maternal nurturance.

^aThe chi square analyses were done with low expected frequencies in 25% of the cells.

*p<.05 **p<.01

subjects had socially acceptable interpersonal styles at Level I, while at least 92% of their counterparts in the LPN+HMN, HPN+LMN, and HPN+HMN groups did.

The analyses of the Level II (i.e., self-reported) interpersonal styles also produced significant results, albeit in a somewhat more complex pattern than those obtained for Level I. The chi square values and the percent of subjects per group with socially acceptable styles at Level II are shown in Table 14. Significant group differences were found in the analyses of the total data set ($X^2 = 13.55$, $p < .01$) and the super data set ($X^2 = 12.87$, $p < .01$). Moreover, the findings for the accept and prep data sets approached significance. For both of the significant data sets, the most pronounced group difference was that 100% of the subjects in the LPN+HMN groups versus 77% of the subjects in the LPN+LMN groups were discovered to have socially acceptable styles at Level II. A group difference that was more relevant to the hypothesis was that the LPN+LMN group had a lower proportion of subjects with socially acceptable styles than either of the two high perceived paternal nurturance groups (HPN+LMN and HPN+HMN) across all of data sets, with the differences typically being about 10 percentage points.

The Level III analyses indicated that a majority of subjects in all groups had socially acceptable styles, as can be seen in Table 15. Nonetheless, the Level III diagnoses were somewhat more likely to be socially unacceptable than the

Table 14

Percent of Subjects With Socially Acceptable Level II (Self-Reported) Interpersonal Styles Per Group

Data set	Group				Chi Square value
	LPN+LMN	LPN+HMN	HPN+LMN	HPN+HMN	
Accept	79%	92%	87%	91%	6.10 ^a
Prep	80%	82%	90%	94%	7.05 ^b
Early	82%	86%	84%	89%	1.34 ^c
Total	77%	100%	90%	90%	13.55**
Super	77%	100%	87%	91%	12.87**

Note. LPN = low paternal nurturance; LMN = low maternal nurturance; HPN = high paternal nurturance; HMN = high maternal nurturance.

^a_p = .107.

^b_p = .070.

^c The square analyses were run with insufficient cell frequencies in 25% of the cells.

*p<.05 **p<.01.

Table 15

Percent of Subjects With Socially Acceptable Level III
(Characterological) Interpersonal Styles Per Group

Data set	Group				Chi square value
	LPN+LMN	LPN+HMN	HPN+LMN	HPN+HMN	
Accept	56%	76%	74%	84%	14.34**
Prep	65%	58%	77%	86%	12.37**
Early	67%	72%	68%	79%	2.72
Total	64%	74%	76%	80%	5.25
Super	61%	76%	74%	82%	8.11*

Note. LPN = low paternal nurturance; LMN = low maternal nurturance; HPN = high paternal nurturance; HMN = high maternal nurturance.

* $p < .05$ ** $p < .01$

diagnoses at the other two levels. There were significant group differences found for the accept data set ($\chi^2 = 14.34$, $p < .01$), the prep data set ($\chi^2 = 12.37$, $p < .01$), and the super data set ($\chi^2 = 8.11$, $p < .05$). For each data set, the HPN+HMN group had the highest proportion of subjects with socially approved interpersonal styles, whereas the LPN+LMN group always had the lowest proportion of subjects with socially acceptable styles. This pattern of results generally supports the hypothesis in that the subjects of the two high perceived paternal nurturance groups (HPN+HMN and HPN+LMN) were more likely than were the subjects of the LPN+LMN group to have socially sanctioned interpersonal styles at Level III. For instance, the Level III results for the accept data set indicated that 84% of the HPN+HMN subjects and 74% of the HPN+LMN subjects had socially acceptable styles, in contrast to only 56% of the LPN+LMN subjects. Additional support for the hypothesis came from the analyses of the prep data set, which found that the proportion of subjects with socially acceptable styles at Level III was considerable lower for the LPN+HMN group (58%) than either the HPN+LMN group (74%) or the HPN+HMN group (86%). There were no other substantial differences found between the LPN+HMN and HPN+LMN groups for any of the data sets.

In conclusion, the social acceptability results were generally in the expected direction. The findings for Levels I and III were slightly more supportive of the hypothesis than

those for Level II.

Analyses of the Interpersonal Rigidity Variable

Hypothesis #3 posited that subjects in the two high perceived paternal nurturance groups would be less likely to show interpersonal rigidity at Levels I and II than would the subjects of the two low perceived paternal nurturance groups. As shown in Table 16, the chi square analyses of the Level I styles found a significant group difference for the early data set, $\chi^2 = 8.91$, $p < .05$, but no other group differences. The significant results for the early data set was primarily due to the finding that the proportion of subjects in the LPN+HMN group with rigid interpersonal styles (24%) was much lower than the corresponding proportions for the LPN+LMN group (52%), the HPN+LMN group (44%), and the HPN+HMN group (56%).

An interesting sidenote pertaining to the Level I findings is that the reasons for subjects being classified as having rigid styles differed for the HPN+HMN and LPN+LMN groups. The proportion of rigid subjects who were designated as such due to having unusually high Lov scores was typically more than 40% for the HPN+HMN groups and only 20% for the LPN+LMN groups. Conversely, the proportion of subjects whose rigidity was attributable to extremely low Lov scores was about 12% for the HPN+HMN groups and 35% for the LPN+LMN groups.

The analyses of the interpersonal rigidity variable for

Table 16

Percent of All, Male, and Female Subjects With Rigid Level I
(Public) Interpersonal Styles Per Group

Data set	Group				Chi square value
	LPN+LMN	LPN+HMN	HPN+LMN	HPN+HMN	
Accept-all	55%	37%	56%	49%	4.02
Accept-males	48%	43%	67%	41%	2.89
Accept-fem.	60%	29%	50%	54%	4.65
Prep-all	60%	37%	44%	49%	6.45
Prep-males	56%	17%	42%	52%	5.98
Prep-fem.	66%	46%	46%	48%	3.48
Early-all ^a	52%	24%	44%	56%	8.91*
Total-all	57%	32%	55%	47%	7.03
Total-males	54%	33%	47%	43%	2.02
Total-fem.	59%	30%	61%	50%	5.80
Super-all	54%	30%	49%	49%	6.29
Super-males	51%	36%	47%	43%	1.12
Super-fem.	58%	26%	50%	52%	6.23

Note. LPN = low paternal nurturance; LMN = low maternal nurturance; HMN = high mat. nurt.; HPN = high pat. nurt. HMN

^aEarly data were not analyzed by sex due to low group n's.

*p<.05.

Level II yielded no significant results. The relevant data is presented in Table 17. The extremely low percentage of rigid styles (17%) listed in both Table 16 and Table 17 for the LPN+HMN males in the prep data set may be confusing to the reader, given the non-significance of the analyses of the prep data. The explanation for this anomaly is that the LPN+HMN in the prep data set had a much smaller sample of males ($n = 12$) than did any of the other prep nurturance groups, which diluted the overall impact of the group in the chi square analyses.

In conclusion, the results on Level I and Level II rigidity did not support the hypothesis. However, there were some unexpected qualitative differences among the groups regarding the frequencies of various types of Level I rigidity.

Analyses of the Self-Acceptance Variable

Hypothesis #4 predicted that self-acceptance would be more prevalent among the subjects of the high perceived paternal nurturance groups than among the subjects in the low perceived paternal nurturance groups. As shown in Table 18, the analyses did not find any significant group differences. Nevertheless, there was a non-significant trend that was consistent with the hypothesis; the group which had the highest percent of subjects with self-acceptance was either the HPN+LMN or HPN+HMN group for all data sets except the

Table 17

Percent of All, Male, and Female Subjects with Rigid Level II
(Self-Reported) Interpersonal Styles Per Group

Data set	Group				Chi square value
	LPN+LMN	LPN+HMN	HPN+LMN	HPN+HMN	
Accept-all	58%	42%	44%	51%	3.33
Accept-males	54%	38%	47%	56%	1.86
Accept-fem.	60%	47%	42%	49%	2.40
Prep-all	54%	42%	59%	51%	2.35
Prep-males	58%	17%	54%	52%	6.53
Prep-fem.	49%	54%	69%	50%	1.81
Early-all ^a	64%	41%	52%	53%	4.35
Total-all	58%	40%	57%	49%	4.26
Total-males	60%	27%	58%	47%	5.26
Total-fem.	56%	48%	56%	50%	0.71
Super-all	59%	40%	51%	53%	3.29
Super-males	59%	36%	47%	50%	2.48
Super-fem.	58%	44%	54%	54%	1.25

Note. LPN = low paternal nurturance; LMN = low maternal nurturance; HPN = high pat. nurt.; HMN = high mat. nurt.

^aEarly data were not analyzed by sex due to small group n's.

Table 18

Percent of All, Male, and Female Subjects With Self-Acceptance
Per Group

Data set	Group				Chi square value
	LPN+LMN	LPN+HMN	HPN+LMN	HPN+HMN	
Accept-all	43%	65%	72%	63%	2.59
Accept-males	52%	65%	80%	56%	3.87
Accept-fem.	61%	65%	67%	67%	0.31
Prep-all	51%	60%	62%	71%	5.59
Prep-males	44%	67%	65%	67%	4.29
Prep-fem.	58%	58%	54%	72%	2.96
Early-all ^a	63%	64%	52%	61%	1.12
Total-all	60%	58%	58%	65%	1.05
Total-males	51%	53%	68%	57%	1.53
Total-fem.	67%	61%	48%	70%	0.29
Super-all	59%	57%	59%	66%	1.17
Super-males	54%	50%	65%	61%	0.97
Super-fem.	64%	61%	54%	69%	1.39

Note. LPN = low paternal nurturance; LMN = low maternal nurturance; HPN = high pat. nurt.; HMN = high mat. nurt.

^aEarly data were not analyzed by sex due to low group n's.

early data. This type of difference did not transcend the basic similarity among all of the groups, however, as a majority of subjects in each group demonstrated self-acceptance. Thus, the hypothesis was not confirmed.

Analyses of the Identification Variable

Hypothesis #5 stated that the subjects in the high perceived paternal nurturance groups (HPN+HMN and HPN+LMN) would be more likely than the subjects of the low perceived paternal nurturance groups (LPN+LMN and LPN+HMN) to be positively identified with their fathers. The results of the chi square analyses are summarized in Table 19. The findings of 13 of the 14 analyses were either significant or approaching significance, with the sole exception being the analyses of the males in the prep nurturance groups. As seen in Table 19, the results for every data set supported the hypothesis; the proportion of subjects who identified with their fathers was nearly twice as high for the high perceived paternal nurturance groups than for the low perceived paternal nurturance groups. A serendipitous finding across almost all of the data sets was that the subjects of the LPN+HMN group were less likely than the subjects in the LPN+LMN group to positively identify with their fathers. The discrepancy between the two groups in terms of the percent of subjects who were identified with their fathers was frequently greater than 10 percentage points. Another surprising finding was that the

Table 19

Percent of All, Male, and Female Subjects Positively Identified With Their Fathers Per Group

Data set	Group				Chi Square value
	LPN+LMN	LPN+HMN	HPN+LMN	HPN+HMN	
Accept-all	54%	42%	80%	81%	23.89***
Accept-males	64%	52%	93%	73%	7.42 ^b
Accept-fem.	46%	29%	71%	86%	23.22***
Prep-all	54%	47%	67%	81%	16.67***
Prep-males	60%	67%	77%	86%	4.84
Prep-fem.	47%	38%	46%	79%	15.31**
Early-all ^a	60%	39%	64%	75%	11.14*
Total-all	55%	42%	79%	77%	19.86***
Total-males	57%	53%	90%	80%	9.24*
Total-fem.	53%	35%	70%	75%	12.37**
Super-all	54%	40%	80%	76%	20.63***
Super-males	62%	50%	88%	76%	6.75 ^c
Super-fem.	46%	35%	73%	76%	15.49**

Note. LPN = low paternal nurturance; LMN = low maternal nurturance; HPN = high pat. nurt.; HMN = high mat. nurt.

^aEarly data were not analyzed by sex due to small group n's.

^bp=.06 ^cp=.08 *p<.05 **p<.01 ***p<.001.

analyses of the females tended to produce more highly significant results than the analyses of the males. Nevertheless, the group differences found for both males and females conformed to the same pattern.

The results of the accept data set will be given here as a numerical representation of the overall pattern of findings. The accept data revealed that a positive identification with the father had been achieved by 80% of the subjects in the HPN+LMN Group and 81% of the subjects in the HPN+HMN, whereas only 54% of the subjects in the LPN+LMN group and 42% of the subjects in the LPN+HMN group had done so ($\chi^2 = 23.89$, $p < .001$). The analyses of the females of the accept nurturance groups were highly significant ($\chi^2 = 23.22$, $p < .001$), while the analyses of the males of the accept groups only approached significance ($\chi^2 = 7.42$, $p = .06$).

The Level II interpersonal styles of the disidentified subjects in the low perceived paternal nurturance groups were compared with the perceived styles of their fathers in order to help determine which qualities of the fathers were being rejected by these subjects. The focus was on Level II because it is the level used to assess identification. The sexes were not examined separately here due to low cell n's. As shown in Table 20, there were some striking differences in the types of styles of these subjects and the perceived styles of their

Table 20

Frequencies of Level II (Self-Reported) Interpersonal Styles of Disidentified Subjects^a and the Perceived Styles of Their Fathers

Population	Interpersonal Circle Octant							
	1	2	3	4	5	6	7	8
Accept Data Set								
Subjects	10	4	1	3	3	3	14	16
Fathers	8	21	14	3	4	1	0	3
Prep Data Set								
Subjects	9	4	1	5	4	2	14	13
Fathers	8	19	13	3	4	0	0	5
Early Data Set								
Subjects	6	4	0	5	2	1	13	10
Fathers	6	15	8	3	4	0	0	5
Total Data Set								
Subjects	10	4	1	4	2	2	14	18
Fathers	6	25	13	2	4	1	0	4

Table 20 (continued)

Interpersonal Circle Octant								
Population	1	2	3	4	5	6	7	8
Super Data Set								
Subjects	10	4	1	4	2	2	14	19
Fathers	7	25	13	2	4	1	0	4

Note. Octant 1 = managerial-autocratic
 Octant 2 = competitive-narcissistic
 Octant 3 = aggressive-sadistic
 Octant 4 = rebellious-distrustful
 Octant 5 = self-effacing-masochistic
 Octant 6 = docile-dependent
 Octant 7 = cooperative-overconventional
 Octant 8 = responsible-hypernormal

^aSubjects from the low perceived paternal nurturance groups only.

fathers. The subjects were much more likely to perceive their fathers than themselves as having interpersonal styles that were either competitive-narcissistic (octant 2) or aggressive-sadistic (octant 3), whereas the subjects perceived themselves as being much more likely than their fathers to display styles that were either cooperative-overconventional (octant 7) or responsible hypernormal (octant 8). These differences were robust across data sets. The accept data set will be presented here as an example of the numerical differences between the subjects and their fathers. A majority (55%) of the disidentified subjects in the low perceived paternal acceptance groups had interpersonal styles that were either cooperative-overconventional or responsible-hypernormal, while only 6% of their fathers were rated as having one of these styles. Conversely, 65% of the fathers, as opposed to 9% of the subjects, were rated as having either a competitive-narcissistic or aggressive-sadistic style.

Further examination of the identification variable was done by comparing the Level II interpersonal styles of the father-identified subjects in the high perceived paternal nurturance groups with the perceived styles of their fathers. The purpose of this comparison was to establish the ways in which these subjects were similar to their fathers. The frequency data given in Table 21 demonstrates that the majority of these subjects rated both themselves and their fathers as having interpersonal styles that were either

Table 21

Frequencies of Level II (Self-Reported) Interpersonal Styles
of Identified Subjects^a and the Perceived Styles of Their
Fathers

Population	Interpersonal Circle Octant ^b							
	1	2	3	4	5	6	7	8
Accept Data Set								
Fathers	55	21	0	0	0	0	2	9
All sub.	34	22	1	0	0	1	2	27
Male sub.	12	11	1	0	0	0	0	9
Fem. sub.	22	11	0	0	0	1	2	18
Prep Data Set								
Fathers	47	23	1	0	0	0	0	11
All sub.	33	22	2	0	0	0	1	24
Male sub.	15	12	2	0	0	0	0	9
Fem. sub.	18	10	0	0	0	0	1	15
Early Data Set								
Fathers	40	16	0	1	0	0	1	11
All sub.	32	13	3	0	0	0	2	19
Male sub.	13	6	2	0	0	0	0	5
Fem. sub.	19	7	1	0	0	0	2	14

Table 21 (continued)

Interpersonal Circle Octant								
Population	1	2	3	4	5	6	7	8
Total Data Set								
Fathers	55	26	0	0	0	0	1	10
All sub.	38	24	1	0	0	1	1	27
Male sub.	16	14	1	0	0	0	0	9
Fem. sub.	22	10	0	0	0	1	1	18
Super Data Set								
Fathers	52	25	0	0	0	0	1	10
All sub.	38	20	2	0	0	1	1	26
Male sub.	16	12	2	0	0	0	0	7
Fem. sub.	22	8	0	0	0	1	1	19

^aSubjects from the high perceived paternal nurturance groups only.

^b Octant 1 = managerial-autocratic; Octant 2 = competitive-narcissistic; Octant 3 = aggressive-sadistic; Octant 4 = rebellious-distrustful; Octant 5 = self-effacing-masochistic; Octant 6 = docile-dependent; Octant 7 = cooperative-overconventional; Octant 8 = responsible-hypernormal

managerial-autocratic (octant 1) or competitive-narcissistic (octant 2). Many of the subjects also rated themselves as having a responsible-hypernormal (octant 8) interpersonal style, despite the fact that only a few of the fathers were rated as having this style. However, it is important to note that octant 8 is adjacent to octant 1 on the interpersonal level, reflecting a high degree of similarity between the styles. Thus, a subject with an octant 8 diagnosis could be considered to be positively identified with a father with an octant 1 diagnosis. The total data set will serve here as a representative of the above-mentioned results, as 67% of the relevant subjects in the data set and 88% of their fathers were rated as having either managerial-autocratic or competitive-narcissistic interpersonal styles, whereas 29% of the subjects and 11% of the fathers were diagnosed as having a responsible-hypernormal style. The only apparent sex difference pertaining to these subjects was the order of the three most frequently diagnosed interpersonal styles. For the females, the most frequent style was managerial-autocratic (42%), followed by the responsible-hypernormal (35%) and competitive-narcissistic (19%) styles. The most common style for the males was also of the managerial-autocratic type (40%), but in contrast to the females, the competitive-narcissistic style was second in frequency (35%) and the responsible-hypernormal style was third (22%).

For exploratory purposes, the relationship between

perceived maternal nurturance and subjects' identifications with their mothers was analyzed in order to determine whether the relationship was analogous to the one found between perceived paternal nurturance and father identification. The identification measure was the same as the one used for the fathers. Chi square analyses were executed on the variables of nurturance group and mother identification. As can be seen in Table 22, the results for all data sets were significant or approaching significance except for the males of the accept data set. The configuration of the results corresponded to the father identification results in that the two high perceived maternal nurturance groups (LPN+HMN and HPN+HMN) had significantly higher proportions of subjects who identified with their mothers than did either of the two low maternal nurturance groups (LPN+LMN and HPN+LMN). A finding that diverged from the father results was that there were no discernable differences between the two low maternal nurturance groups. The analyses of the males and females combined generally yielded stronger findings than did the separate analyses of the males and females. The super data set provides an illustration of the overall results, as 76% of the subjects in both the LPN+HMN and HPN+HMN identified with their mothers, as opposed to only 49% of the HPN+LMN subjects and 51% of the LPN+LMN subjects who did so ($\chi^2 = 15.72$, $p < .01$).

Further exploration of the mother data was done to find

Table 22

Percent of All, Male, and Female Subjects Positively Identified With Their Mothers Per Group

Data set	Group				Chi square value
	LPN+LMN	LPN+HMN	HPN+LMN	HPN+HMN	
Accept-all	51%	68%	56%	78%	12.17**
Accept-male	52%	62%	53%	69%	2.16
Accept-fem.	51%	76%	58%	84%	11.14*
Prep-all	48%	84%	46%	78%	24.61***
Prep-males	49%	100%	42%	81%	17.22***
Prep-fem.	47%	77%	54%	75%	9.29*
Early-all ^a	52%	64%	44%	76%	12.17**
Total-all	47%	79%	52%	75%	16.03**
Total-males	46%	87%	53%	69%	8.84*
Total-fem.	55%	74%	52%	79%	8.32*
Super-all	51%	76%	49%	76%	15.72**
Super-males	51%	86%	47%	66%	6.55 ^b
Super-fem.	51%	70%	50%	83%	11.76**

Note. LPN = low paternal nurturance; LMN = low maternal nurturance; HPN = high pat. nurt.; HMN = high mat. nurt.

^aEarly data were not analyzed by sex due to small group n's.

^bp = .088

*p<.05. **p<.01 ***p<.001.

out if there were any trends in the types of perceived maternal traits that were either identified with or rejected by the subjects. The pertinent data is listed in Tables A-7 and A-8 respectively, which can be found in Appendix I. An examination of the styles of the identified subjects in the high perceived maternal nurturance groups and the perceived styles of their mothers revealed a pattern of results that were analogous to the results for father identification. Specifically, an overwhelming majority (about 99%) of these identified subjects and their mothers were rated as having socially acceptable styles. Additionally, the three most frequent interpersonal styles of these subjects were the same as ones found for the father-identified subjects. According to the total data set, the most frequent styles of the mother-identified females were responsible-cooperative (44%), managerial-autocratic (38%), and competitive-narcissistic (9%). The most common styles for the mother-identified males were managerial-autocratic (54%), responsible-hypernormal (27%), and competitive-narcissistic (18%).

Another kind of comparison focused on the styles of the mother-disidentified subjects of the low perceived maternal nurturance groups and the perceived styles of their mothers. The sexes were not examined separately due to low cell n's. As demonstrated in Table A-8, there were no clear trends in regard to the manner in which disidentified subjects differed from their mothers. For example, the styles of the

disidentified subjects were not differentiated from the perceived styles of their mother in terms of social acceptability; 27% of the disidentified subjects in the total data set and 31% of their mothers were rated as having socially unacceptable styles.

In conclusion, the father identification findings strongly supported the hypothesis. Moreover, the findings pertaining to mother identification generally corresponded with the father results.

Analyses of the Assimilation Variable

Hypothesis #6 posited that the high perceived paternal nurturance groups would have a higher proportion of subjects who had assimilated their fathers than would the low perceived paternal nurturance groups. Table 23 presents the percent of subjects per group who had assimilated their fathers, and the respective chi square values. The table shows that there were no significant results. The only noteworthy trend found across data sets was that the subjects in the HPN+HMN group almost always had the highest assimilation rates, which was typically at about 70%. Nonetheless, the overall results failed to confirm the hypothesis.

Analyses of the Self-Deception Variable

Hypothesis #7 predicted that the subjects of the two high perceived paternal nurturance groups would be less likely than

Table 23

Percent of All, Male, and Female Subjects Who Have Assimilated
Their Fathers Per Group

Data set	Group				Chi square value
	LPN+LMN	LPN+HMN	HPN+LMN	HPN+HMN	
Accept-all	56%	55%	67%	72%	5.44
Accept-males	61%	52%	73%	77%	3.84
Accept-Fem.	51%	59%	62%	70%	2.90
Prep-all	58%	47%	69%	71%	7.19
Prep-males	60%	50%	73%	71%	2.69
Prep-fem.	56%	46%	62%	71%	4.68
Early-all ^a	67%	46%	56%	63%	3.73
Total-all	63%	53%	57%	69%	3.40
Total-males	63%	60%	68%	69%	0.53
Total-fem.	63%	48%	48%	69%	4.52
Super-all	60%	57%	56%	68%	2.24
Super-males	62%	64%	65%	69%	0.33
Super-fem.	57%	52%	50%	67%	2.58

Note. LPN = low paternal nurturance; LMN = low maternal nurturance; HPN = high pat. nurt.; HMN = high mat. nurt.

^aEarly data were not analyzed by sex due to low group n's.

their counterparts in the low perceived paternal nurturance groups to have self-deceptive interpersonal styles. As shown in Table 24, the chi square analyses indicated that there were significant or near significant group differences in 11 of the 13 data sets analyzed, despite the finding that the incidence of self-deception was usually less than 50% for all of the groups. The group differences seemed to stem more from the perceived maternal nurturance factor than the perceived paternal nurturance factor. The impact of the perceived maternal nurturance variable was evident in the finding that the two high perceived maternal nurturance groups (LPN+HMN and HPN+HMN) consistently had lower percentages of subjects with self-deceptive interpersonal styles than did either of the two low perceived maternal nurturance groups (LPN+LMN and HPN+LMN), with the differences often being by about 20 percentage points. For instance, the analyses of the accept data set revealed that only 14% of the subjects in the HPN+HMN group and 24% of the subjects in the LPN+HMN group had self-deceptive styles, in contrast to the relatively high proportions of self-deceptive subjects found in the HPN+LMN group (36%) and in the LPN+LMN group (39%) ($X^2 = 12.69$, $p < .01$). This pattern of results was obtained for both males and females, though the analyses of the females tended to produce higher chi square values than did the analyses of the males.

There were no significant group differences in self-

Table 24

Percent of All, Male, and Female Subjects With Self-Deceptive Interpersonal Styles Per Group

Data set	Group				Chi square value
	LPN+LMN	LPN+HMN	HPN+LMN	HPN+HMN	
Accept-all	39%	24%	36%	14%	12.69**
Accept-male	33%	14%	20%	7%	6.82 ^b
Accept-fem.	45%	36%	46%	19%	7.95*
Prep-all	41%	26%	36%	20%	7.76 ^c
Prep-males	33%	17%	23%	14%	3.15
Prep-fem.	49%	31%	62%	23%	9.95*
Early-all ^a	43%	24%	44%	21%	9.82*
Total-all	39%	18%	33%	19%	9.89*
Total-males	34%	7%	21%	10%	7.96*
Total-fem.	44%	26%	44%	25%	4.90
Super-all	43%	13%	38%	17%	18.15***
Super-males	35%	7%	29%	10%	8.45*
Super-fem.	50%	17%	46%	22%	11.62**

Note. LPN = low paternal nurturance; LMN = low maternal nurturance; HPN = high pat. nurt.; HMN = high mat. nurt.

^aEarly data were not analyzed by sex due to low group n's

^bp = .08 ^cp = .05 *p<.05. **p<.01. ***p<.001.

deception that could be ascribed solely to the perceived paternal nurturance variable. Thus, the results were examined in order to determine whether there were any meaningful interactions between perceived paternal and maternal nurturance. The interactions which were found tended to be small in magnitude and inconsistent across data sets. Nevertheless, there was a slight trend for the subjects who rated both parents high in nurturance to be the least likely to have self-deceptive styles, whereas the subjects who rated both parents low in nurturance tended to be the most likely to have self-deceptive styles. In other words, when both parents were perceived as being similar in nurturance, the relationship between parental nurturance and self-deception tended to be somewhat more pronounced than it was for other configurations of paternal and maternal nurturance.

Overall, the results did not support the hypothesis. Instead, the results suggested that perceived maternal nurturance was more related to the incidence of self-deception than was perceived paternal nurturance.

Analyses of the Identity Diffusion Variable

Hypothesis #8 stated that the subjects of the high perceived paternal nurturance groups would be less likely than the subjects of the low perceived paternal nurturance groups to have diffuse identities. As can be seen in Table 25, the analyses did not demonstrate any significant results except

Table 25

Percent of All, Male, and Female Subjects With Identity
Diffusion Per Group

Data set	Group				Chi square value
	LPN+LMN	LPN+HMN	HPN+LMN	HPN+HMN	
Accept-all	49%	32%	38%	29%	7.17
Accept-males	42%	33%	20%	30%	2.59
Accept-fem.	56%	29%	50%	28%	7.99*
Prep-all	42%	50%	36%	26%	7.11
Prep-males	42%	50%	27%	24%	3.80
Prep-fem.	43%	50%	54%	27%	5.59
Early-all ^a	43%	45%	36%	33%	1.81
Total-all	40%	37%	43%	32%	1.80
Total-males	34%	33%	32%	30%	0.15
Total-fem.	46%	39%	52%	33%	2.80
Super-all	54%	35%	51%	32%	4.88
Super-males	35%	29%	35%	33%	0.22
Super-fem.	50%	39%	64%	30%	7.66

Note. LPN = low paternal nurturance; LMN = low maternal nurturance; HPN = high pat. nurt.; HMN = high mat nurt.

^aEarly data were not analyzed by sex due to small group n's.

*p<.05.

for the females in the accept data sets ($\chi^2 = 7.99$, $p < .05$). The essence of the significant finding was that identity diffusion was less characteristic of the females in the HPN+HMN group (28%) and the LPN+HMN group (29%) than either the HPN+LMN group (50%) or the LPN+LMN group (56%). There was generally not much variation between groups in most of the data sets, as typically less than half the subjects in each group had identity diffusion. A nonsignificant trend was that the subjects in the HPN+HMN group were the least likely to have identity diffusion according to the results on 11 of the 13 data sets. Nevertheless, the overall results did not support the hypothesis.

Chapter 8

Discussion

Perspective of Discussion

The findings of the study will be integrated in this chapter in terms of how college students' perceptions of paternal nurturance may be related to their present functioning. The implications of the results for developmental psychology will also be addressed. The justification for including a developmental perspective is grounded in empirical findings which suggest that college students' retrospective perceptions of parental nurturance are similar to their childhood experiences and childhood perceptions of parental nurturance (Block, 1971; Hunt & Eichorn, 1972; Hunter & Youniss, 1982; Schaefer, 1961).

Parental Nurturance Measure - Revised

The findings of the preliminary and primary studies establish the psychometric soundness of the PNM-R indexes for both father and mother ratings. The high reliabilities of the indexes were attested by the findings from two different samples of college students. The validity of the instrument was shown by the significant correlations between the PNM-R indexes and two other nurturance scales. Additional evidence for the validity of the scale comes from the finding that

differences in PNM-R ratings (i.e., the nurturance groups) were significantly and meaningfully related to the interpersonal styles of the college students who participated in this project.

The results of the factor analyses of the PNM-R did not support the original conceptualization that there were seven different types of paternal nurturance. Instead, there seems to be a very strong "warm-acceptance" factor, a moderately strong "preparation for the world" factor, and a somewhat tenuous factor pertaining to "perceptions of early childhood". The uniqueness of the three factors is questionable, as will be discussed below. However, the inclusion of the "preparation for the world" factor did help achieve the original goal of constructing a scale which was more relevant to paternal nurturance than were pre-existing scales. Support for this idea comes from the finding that fathers were rated as high as mothers were on the Prep Index, whereas fathers were rated lower than mothers on the more traditional nurturance scale items of the Accept and Early indexes.

The usefulness of having several PNM-R index scores rather than just a total score remains unclear. Much of the evidence from this study suggests that the indexes are not particularly distinct from each other. The overlap among the indexes can be seen by the high proportion of subjects (54%) who were categorized into the same nurturance group by each of the indexes. Additionally, there was rarely anything

distinguishable about the relationships between each of the indexes and any given dependent measure used in the study. Specifically, there was usually close to complete agreement among the various index-derived data sets in regard to the significance or non-significance of a particular dependent variable. The analyses that combined the sexes generally produced a higher consensus among the indexes than when the analyses pertained to only males or females. The greater amount of variation among the single-sex results is probably attributable to the diminished power of the analyses when the groups being compared are relatively small in size.

There were some deviations from the general uniformity among the indexes. For example, the nurturance groups derived from the Early Index were the only ones not to show significant differences in the social acceptability of Level II interpersonal styles. Similarly, there were no significant differences found for the early data set and total data set in regard to the social acceptability of Level III styles. Another type of difference among the indexes pertained to the degree of significance of the findings for a particular dependent variable (i.e., $p < .05$ versus $p < .001$). Nevertheless, no meaningful patterns in the differences among indexes emerged across dependent variables.

The extreme homogeneity of the subjects in this study may have made it more difficult to distinguish between the indexes. Thus, the PNM-R needs to be further validated on a

wide range of samples before the relative utility of the various indexes can be determined. The fact that there were so many significant differences between groups classified by the PNM-R indexes despite the homogeneity of the sample suggests that each index has the potential to be a powerful research and clinical instrument.

Perceived Paternal Nurturance and Identification

The conscious identification variable utilized in the study assessed whether or not the students viewed themselves as being similar to their parents. The relationship between this measure of identification and the unconscious forms of identification delineated by psychoanalytic theory and object relations theory is unclear; this relationship has yet to be addressed on either an empirical or a theoretical level. Thus, the discussion will be confined to conscious identification unless otherwise indicated.

Perhaps the most noteworthy finding of the study is the strong relationship between the students' perceptions of paternal nurturance and the likelihood that they identified with their fathers. As seen in Table 19, about 80% of the subjects in the high perceived paternal nurturance groups were positively identified with their fathers, as opposed to approximately 55% of the subjects in the LPN+LMN group and less than 50% of the subjects in the LPN+HMN group. This type of finding is consistent with the commonly held notion

that paternal nurturance encourages children to identify with their fathers (Jordon et al., 1975; Lynn, 1976; Rutherford & Mussen, 1968). However, most of the researchers who have commented on the relationship between paternal nurturance and identification have assumed that it primarily pertains to the father-son relationship, an assumption which is clearly contradicted by the strong findings for the females in this study. These findings suggest that perceived paternal nurturance is as important for females as it is for males.

There are several possible explanations for the relationship between perceived paternal nurturance and identification. For example, both Abelin (1971) and Ross (1982) suggested that a nurturing father helps boys tolerate and eventually overcome intense feelings that are associated with the oedipal rivalry, which in turn leads them to identify with their fathers (Abelin, 1971; Ross, 1982). A limitation of this position is that it does not account for the findings of this study that females were highly identified with their perceived nurturant fathers.

Social learning theory offers another type of explanation for the identification findings. A tenet of social learning theory is that children are more likely to imitate parents who are perceived as being rewarding (Bandura & Walters, 1963). Perceived nurturant fathers are probably viewed by their children as being particularly rewarding, and therefore are likely to be frequently imitated. However, social learning

theory's position that children are more likely to imitate the parent of the same-sex does not correspond to the findings of this study.

The explanation for the relationship between perceived paternal nurturance and identification that will be proposed here is informed by Sullivan's interpersonal theory (Sullivan, 1953). Sullivan's conceptualization about the influence of interpersonal anxiety in child development is especially relevant to the identification findings, despite the fact that his theory did not specifically address the nature of the identification process. He postulated that the most critical factor in development is how anxiety is managed in the context of parent-child relationships. He suggested that children experience anxiety when their interactions with parents do not satisfy their biological and security needs. Children also become anxious during interactions with parents who have typically been highly frustrating in the past. Sullivan considered infants and young children to be particularly vulnerable to these types of interpersonal anxieties because their welfare is almost completely dependent on their parents' abilities to recognize and meet their needs. The experience of anxiety is also extremely threatening in itself because there are no actions that the infant can do to alleviate it. However, children eventually develop a "self-system" in order to avoid anxiety provoking experiences (Sullivan, 1953). The self-system becomes activated when children perceive

interpersonal signs, such as gestures and tone of voice, that have been associated in the past with frustrating and anxiety-inducing outcomes.

According to Sullivan, the two primary types of security operations of the self-system are selective inattention and dissociative processes. Selective inattention is a perceptual scanning process which limits one's focus to non-threatening stimuli. For instance, hungry children may divert their attention away from physiological cues of hunger if they expect that their mothers will not feed them in response to their cries. Dissociation is an active process that involves keeping from awareness aspects of experience that would otherwise elicit extreme anxiety. Experiences that are dissociated are blocked from awareness in a much more intensive and continuous fashion than are experiences avoided via selective inattention. An example of this difference is that selective inattention may be involved when children divert their attention away from interpersonal stimuli which make them feel angry, whereas dissociative processes may be implicated when children are completely unaware of ever having angry feelings.

Interpersonal theory suggests that the more a parent-child relationship is imbued with anxiety, the more the child's self-system is activated to defend against the anxiety. One would expect that children who perceive their fathers as being unresponsive to their needs (i.e., perceived

non-nurturant fathers) would be particularly anxious while in the presence of their fathers. Hence, the self-systems of children should be more mobilized in interactions with perceived non-nurturant fathers than with perceived nurturant fathers.

The perceived responsiveness of nurturant fathers enhances rather than threatens the well-being of their children, which means that children should be able to remain relatively open in their interactions with them. Moreover, the receptiveness that children feel in relationships with perceived nurturant fathers allows them to fully experience and embrace the essential qualities of their fathers. The relative inactivity of the self-system also permits children to stay open to their inner experiences in the context of this type of relationship. Thus, children's relationships with perceived nurturant fathers enables them to be open to the traits of their fathers and also to the experiences of self in relation to their fathers. These interpersonal circumstances should facilitate the identification process.

In contrast with fathers who are perceived to be nurturant, perceived non-nurturant fathers may often fail to consider the needs of their children. Therefore, children's interactions with perceived non-nurturant fathers are characteristically infused with frustration and anxiety. Children are likely to react to the anxiety inherent in this type of relationship by constantly maintaining a defensive

stance towards their fathers. There are several types of defensive activities that children might use in the context of frustrating father-child interactions. For example, some children may constrict their attention while in interactions with their perceived non-nurturant fathers so that they only notice the aspects of their fathers that are not particularly threatening. Additionally, children may completely dissociate from their feelings while in the presence of their non-nurturant fathers, as it may be too threatening for children to become aware of the rage and rejection that they feel in reaction to their fathers' unresponsiveness. The commonality among the defensive activities is that they restrict children's self-awareness when they interact with their fathers. Another outcome of children's defensiveness is that it distorts their perspectives about who their fathers are. This type of interpersonal context is likely to impede the identification process.

Sullivan's interpersonal perspective is also congruent with two sets of identification findings of the study that are inconsistent with many other theoretical perspectives: (1) the similarity between the male and female results (2) the fact that a positive relationship between perceived parental nurturance and identification was found for both the fathers and the mothers. Interpersonal theory does not make distinctions on the basis of the gender of the child or parent. Hence, the theory implies that a defensive posture

taken in relation to a perceived non-nurturant father should interfere with the identification process for both boys and girls. Following this line of thought, children should react just as defensively when their psychological security is threatened by interactions with perceived non-nurturant mothers as they would in similar situations with perceived non-nurturant fathers. A child's defensive stance towards his or her mother would hinder the identification process in the same manner as in the father-child relationship. Thus, the proposed interplay between children's perceptions of low parental nurturance, children's defensive reactions, and low rates of identification is as applicable to mother-child relationships as it is to father-child relationships.

Perceived Paternal Nurturance and Social Functioning

Another set of findings that were generally consistent with the hypotheses is that the subjects' perceptions of paternal nurturance were related to the likelihood that they had socially acceptable interpersonal styles at Levels I, II, and III. As illustrated in Tables 13 - 15, the subjects who rated both parents low in nurturance were the least likely to have socially sanctioned interpersonal styles. Conversely, the subjects who rated both parents high in nurturance were the most likely to have socially approved styles at Levels I and III. This pattern of results suggests that the interaction between perceived parental nurturance and

students' interpersonal styles is intensified when both parents are perceived as being similar in the dimension of nurturance.

The social acceptability of an individual's interpersonal style may be viewed as an indication of the individual's level socialization (Hetherington & Parke, 1979). Accordingly, the meaning of the social acceptability findings is clarified when one considers the widely held view that the effectiveness of the socialization process is enhanced when children form positive identifications with their parents (Jordon et al, 1975; Lynn, 1976; Moulton et al, 1966). More specifically, an aspect of the socialization process involves children learning about cultural mores by identifying with the values of their parents. Given the connection between perceived parental nurturance and identification that was found in this study, it follows that children who perceive their parents as being nurturant should be more highly socialized than are children who perceive their parents as being non-nurturant. Consistent with this notion is that among the participants in the study, the students who rated both parents high in nurturance were the ones most likely to be identified with at least one parent and to have socially acceptable interpersonal styles. Conversely, the subjects who rated both of their parents low in nurturance were the most likely to be disidentified with both parents and to have socially unacceptable interpersonal styles.

A close inspection of the Level II interpersonal styles of the students who identified with perceived nurturant fathers provides further evidence for the idea that identification is the intervening variable between paternal nurturance and socialization. As shown in Table 21, almost all of the students of both sexes who identified with perceived nurturant fathers had socially acceptable interpersonal styles. For example, 85 of 87 of these subjects in the accept data set had Level II interpersonal traits that were congruent with cultural values. Indeed, the three most frequent styles of these students--managerial-autocratic, competitive-narcissistic, and responsible-hypernormal--seem to be particularly well-suited for academic success. The fact that an astoundingly high proportion of these subjects had socially adaptive styles is harmonious with the idea that perceived paternal nurturance fosters identification with the father, which in turn may facilitate the socialization process.

Although the implications of the connection between perceived paternal nurturance and social acceptability are generally positive in regard to social functioning, it is noteworthy that the social acceptability variable may also be seen as a measure of conformity. That is, persons who are highly conforming are particularly likely to adapt interpersonal styles that are socially acceptable. Thus, it is probable that at least a portion of the subjects with

socially acceptable styles were conformists, which in turn would make them prone to be intolerant of dissent, have external moral standards, and have minimal self-direction (Kohn, 1969). The point being made here is that due to the issue of conformity, it is too simplistic to view the relationship between perceived paternal nurturance and social acceptability as absolutely being a positive one.

The pattern of findings pertaining to the subjects who identified with perceived nurturant mothers generally corresponded to the father identification findings. As can be seen in Table A-7, virtually all of these mother-identified subjects had socially acceptable styles. Nonetheless, there was a slight difference in the types of socially acceptable interpersonal styles that characterized the father-identified subjects and the mother-identified subjects. The father-identified subjects of both sexes were more likely than were the mother-identified subjects to have a competitive-narcissistic style (26% vs. 12% for the total data set). Conversely, the mother-identified subjects of both sexes were somewhat more likely than their father-identified counterparts to have a responsible-hypernormal style (38% vs. 29% for the total data set). These discrepancies stem from the fact that perceived nurturant mothers, in contrast with perceived nurturant fathers, were more likely to be viewed as having a responsible-hypernormal style (36% vs. 11%) and less likely to be viewed as having a competitive-narcissistic style

(8% vs. 28%). The differences in the frequencies of the two styles for both the parents and the subjects who were identified with them may reflect disparities between the traditional maternal and paternal roles. The behaviors which constitute the competitive-narcissistic style, such as "businesslike" and "independent", are more in line with conventional ideas of fatherhood than of motherhood. In contrast, the behaviors which comprise the responsible-hypernormal style, such as "tender and soft-hearted" and "tries to comfort everyone", are somewhat more congruent with traditional views of the maternal role. The developmental implication of these discrepancies is that children who are identified with the opposite-sexed parent may be somewhat less likely to conform to traditional sex-roles than are children identified with the same-sexed parent. That is, mother-identified males may be more likely than father-identified males to be particularly concerned about the feelings of other people (i.e., have responsible-hypernormal styles), whereas father-identified females may be somewhat more likely than mother-identified females to be especially assertive and self-sufficient (i.e. have a competitive-narcissistic style).

An examination of the Level II interpersonal styles of the disidentified subjects who rated their fathers low in nurturance (refer to Table 20) suggests that the relationship between the identification variable and social functioning was quite complex for these subjects. On the one hand, some of

the findings imply that the relatively poor social functioning of these subjects was related to their disidentification status. An example of this type of finding is that the disidentified subjects were more likely than the subjects identified with nurturant fathers to have socially unacceptable styles (22% vs. 0% according to the prep data set). On the other hand, there was a surprisingly high frequency (78%) of socially acceptable styles found among these disidentified subjects. A possible reason for this finding is that at least some of the subjects may have been socialized via close relationships with nurturant authority figures other than their fathers. A finding that supports this notion is that virtually all of the LPN+HMN subjects who were identified with their mothers, but not with their fathers, had socially acceptable interpersonal styles. This finding underscores the point that the crucial aspect of the socialization process is that children identify with a parental figure who is perceived to be nurturant. The issue of whether the child identifies with the mother or the father seems to be considerably less significant.

It is also important to note that the benefits of identifying with a father perceived to be non-nurturant are dubious. This supposition is based on the findings that many of the disidentified subjects in the low perceived paternal nurturance groups had interpersonal styles which were more socially adaptive than the perceived styles of their fathers

(see Table 20). For instance, 14 of the these subjects in the prep data set had cooperative-overconventional styles, whereas none of their fathers were perceived as having this type of socially sanctioned style. Conversely, only one of these disidentified students was rated as having an aggressive-sadistic style, as opposed to 13 of their fathers. The implication of this pattern of findings is that the styles of these disidentified subjects would have been less socially appropriate had they identified with their fathers.

Perceived Paternal Nurturance and Loving Interpersonal Styles

The hypothesis that perceived paternal nurturance would be positively related to Level I Lov scores was confirmed by the results. An additional finding was that perceived maternal nurturance was also a positive factor in the subjects' Level I Lov scores. The subjects who rated both parents high in nurturance had much higher Level I Lov scores than the subjects who rated both parents low in nurturance, while subjects who rated only one of their parents high in nurturance had Lov scores that were intermediate.

The configuration of the Level I Lov findings is in agreement with Leary's principle of correspondence, which states that the amount of love or hostility that individuals demonstrate in their social interactions tends to elicit reactions from the recipients which are similar in kind. The principle of correspondence suggests that children who

typically interact with warm and loving parents (i.e., nurturant) are likely to respond likewise, whereas hostile parents are more likely to provoke hostile responses from their children. Given that children's incipient interpersonal styles are grounded in their earliest interactions with their parents, their emerging styles should be high in the love dimension if they perceive their parents to be nurturant and low in love if they perceive their parents to be hostile.

An extrapolation from this line of reasoning to the findings of the study is that the group differences in Level I love may be explained by disparities in the amount of parental love that subjects perceived while they were growing up. An inherent assumption in this kind of explanation is that the subjects' retrospective perceptions of parental nurturance were at least somewhat related to their childhood perceptions of parental nurturance. The subjects who had the highest amount of love in their Level I interpersonal styles (i.e., HPN+HMN subjects) were probably the most likely to have perceived parental love during childhood. Conversely, the subjects who had the lowest amount of love in their Level I styles (i.e., LPN+LMN subjects) were probably the least likely to have had childhood perceptions of parental love. The intermediate levels of Level I love demonstrated by the subjects who rated one parent high and one parent low in nurturance is not surprising in that these subjects were probably in the mid-range of the sample regarding the amount

of parental love perceived during childhood.

Another factor which may partially account for the Level I Lov findings is the group differences in parental identification. The subjects who perceived their fathers (or mothers) as being highly nurturant were typically identified with them. Moreover, the subjects who were identified with their parents were by definition similar to them, which in the case of a perceived nurturant parent is likely to include being warm and loving towards others. Thus, it is not surprising that subjects who perceived their fathers and/or mothers as being nurturant tended to have more loving Level I styles than subjects who perceived neither parent as being nurturant.

In contrast to the findings for Level I, there were no significant group differences in the Level II Lov scores. The disparity between the Level I and Level II results indicates that the groups were not differentiated in terms of the subjects' self-reports of their tendency to engage in loving interpersonal behavior (Level II), despite the fact that there were group differences in how loving the subjects are likely to be perceived by other people (Level I). This kind of discrepancy suggests that there is a greater degree of self-deception (i.e. differences between Level I and II diagnoses for the same person) for some groups than others, which is precisely what was found in the analyses of the self-deception variable. The self-deception results showed that the LPN+LMN

group often had the highest rate of self-deception and the HPN+HMN group typically had the lowest rates of self-deception. The incongruity of the Level I and Level II Lov scores suggests that the nature of the self-deception of the LPN+LMN subjects may be that they were over-estimating the warmth and friendliness of their interpersonal styles.

Self-Deception

The only dependent variable of the study that was found to be more related to perceived maternal nurturance than to perceived paternal nurturance was self-deception. As can be seen in Table 24, typically less than 20% of the subjects in the high perceived maternal nurturance groups had interpersonal styles that were considered to be self-deceptive, whereas more than 40% of the subjects in the low perceived maternal nurturance groups had self-deceptive styles. In contrast, there were no consistent differences in the rates of self-deception between the high and low perceived paternal nurturance groups once the perceived maternal nurturance factor was accounted for.

The unique pattern of results obtained for the self-deception variable suggests that it is influenced by a different set of parent-child dynamics than were any of the other dependent variables. Self-deception, as defined in the Leary System, refers to individuals who characteristically misperceive the way in which they impact other people. Self-

deceptive individuals' inability to accurately assess the nature of their interpersonal communications suggests that they are unaware of what feelings they are expressing. For example, some passive-aggressive individuals may be self-deceptive in that they perceive themselves as being loving despite the inherent hostility of their actions. Self-deceptive individuals also apparently lack empathy in regard to what other people think and feel during social interactions; otherwise, they would be able to anticipate more accurately the interpersonal effects of their behavior. These descriptions of Leary's self-deception variable suggest that severe forms of self-deceptive interpersonal behavior may be indicative of character pathology. For example, narcissistic individuals can be viewed as being self-deceptive in that they typically fail to recognize their tendency to either demean or idealize other people (Masterson, 1981). Individuals with borderline personality disorders may also be self-deceptive in that they are unable to realistically evaluate their impact on others (Chatham, 1989). It is beyond the parameters of this dissertation to fully discuss the nature of these types of character pathology. The point being made here is that the self-deceptive variable may, in part, assess character pathology, which differentiates it from the other dependent variables.

A plausible explanation for the finding that perceived maternal nurturance was more related to self-deception than

was perceived paternal nurturance is that character pathology may primarily stem from harmful interactions between infants and their non-nurturing mothers. This line of thinking is consistent with many theories of character development. For example, Kohut (1977) suggested that mothers' lack of empathy with their young children may be a factor in the development of pathological narcissism. Similarly, Masterson (1981) posited that the emotional withdrawal of mothers from their infants during the separation-individuation process contributes to the formation of borderline personalities. Implicit in many theories is that the primacy of the mother-infant relationship accounts for the relative importance of maternal factors in character development. However, the salience of the mother-infant relationship may have more to do with the fact that mothers are much more likely than fathers to be the primary person who interacts with infants (Lewis et al., 1981), rather than due to any qualitative differences between mother-infant and father-infant relationships. If so, then the increasing participation of fathers in the childrearing of their infants should increase their influence in the character development of their children.

Nonsignificant Findings

The findings pertaining to rigidity of interpersonal styles, self-acceptance, assimilation of the father, and

identity diffusion were generally nonsignificant. Furthermore, the few exceptions can be attributable to chance findings, given the large number of analyses performed for each hypothesis. There are three types of plausible explanations for the nonsignificant findings; these include the psychometric problems of the relevant dependent measures, the homogeneity of the sample, and the fallacy of the unconfirmed hypotheses.

Some or all of the nonsignificant findings may be due to the questionable validity of the associated dependent measures. In keeping with the exploratory approach of the study, some of the dependent variables were included for their conceptual significance to paternal nurturance even though they had not been frequently used in previous research. The dependent measures with the least amount of relevant validity data were interpersonal rigidity, assimilation, and identity diffusion. It is noteworthy that these three measure were among the four which did not produce significant findings. The other nonsignificant dependent measure, self-acceptance, has been found in a few studies to differentiate among groups in a predictable fashion (Altroochi et al, 1950; Lockwood & Guerny, 1962; Raskin & Terry, 1988). Nonetheless, Wylie (1974) reviewed all of the literature on Leary's self-acceptance measure and concluded that it has inadequate convergent and discriminant validity.

Another possible reason for the nonsignificant results

with these variables is based on the homogeneity of the sample utilized in the study. There was only limited variance in the sample in regard to race, age, and socio-economic status. The uniformity of the sample, and also the fact that it was selected from a nonpathological population, probably account for the finding that most of the subjects rated both of their parents high in nurturance. The homogeneity of the PNM-R ratings resulted in some subjects being classified, via the median split analyses, into the low perceived paternal nurturance groups despite the fact that they had actually rated their fathers fairly high in nurturance. Consequently, the nurturance groups in the study may not have been differentiated enough in regard to perceived paternal nurturance to provide an ideal test of some of the hypotheses. If the groups had been more distinct from each other, it is possible that there would have been fewer nonsignificant findings.

An alternative explanation of the nonsignificant results is that the associated hypotheses may have been erroneous. In other words, these results may reflect that perceived paternal nurturance is truly unrelated to interpersonal rigidity, self-acceptance, assimilation of the father, and identity diffusion. Furthermore, this line of reasoning implies that perceived maternal nurturance is also unrelated to these four variables, given that the nurturance groups were selected in a manner to reflect differences attributable to

either perceived maternal or perceived paternal nurturance.

The nonsignificance of the assimilation results were surprising given the strong findings pertaining to the identification variable. However, the assimilation and identification variables are differentiated in that they reflect preconscious and conscious identification respectively. One reason for the disparity in the results is that the subjects in the low perceived paternal nurturance groups were somewhat more likely to assimilate their father than to identify with him. For instance, of the subjects who rated their fathers low in nurturance on the Super Index, 59% had assimilated their fathers and 50% were identified with their fathers. In other words, there were some subjects who considered themselves to be different from their non-nurturant fathers, but were essentially quite similar to them. This type of finding is reminiscent of the common clinical phenomenon of patients rejecting any suggestion that they might be similar in some way to an abusive or hostile parent, yet at the same time, be considered a high risk for abusing or mistreating their own children. Thus, it is not necessarily the same thing for individuals to believe that they are different from their fathers and to actually live the difference.

The lack of significant findings for the Level I rigidity was partially an artifact of the method used to classify subjects for this variable. The reader may recall that the

subjects were classified as having rigid styles if they had Level I Lov scores that were at least one standard deviation from the sample mean. The outcome was that a disproportionate number of the HPN+HMN subjects were considered to be rigid due to their high Lov scores and a disproportionate number of the LPN+LMN subjects were categorized as being rigid due to their low Lov scores. For example, the proportion of rigid subjects designated as such due to their extremely high Lov scores was usually more than 40% for the HPN+HMN groups and only 20% for the LPN+LMN groups, whereas the proportion of subjects whose rigidity was attributable to atypically low Lov scores was about 12% for the HPN+HMN groups and 35% for the LPN+LMN groups. Consequently, the HPN+HMN and LPN+LMN groups had similar rates of rigidity even though the nature of the rigidity was quite different. Moreover, the social implications of these modes of rigidity are strikingly disparate; one would predict that the subjects who are experienced by others as being very loving would typically have much more success in their interpersonal relationships than would the subjects who are viewed as being unusually hostile.

Perceived Paternal versus Perceived Maternal Nurturance

The overall pattern of findings of the study suggests that traditional views of parenthood which place more emphasis on maternal nurturance than on paternal nurturance need to be

modified. Indeed, the self-deception findings were the only ones relevant to the eight hypotheses which suggested that perceived maternal nurturance was a more critical factor in development than perceived paternal nurturance. Furthermore, perceived paternal nurturance was found to be highly related to the likelihood that subjects had socially acceptable interpersonal styles at all levels, high Level I Lov scores, and positive identifications with their fathers.

There were numerous interactions found between perceived paternal and perceived maternal nurturance. These findings signify the importance of studying paternal nurturance in the context of other family variables. The most common pattern of the interactions was that the subjects who rated both parents high in nurturance were the most likely to have dependent measure scores that were indicative of positive social adjustment (i.e., socially acceptable and loving interpersonal styles, accurate self-perceptions, etc.), while the subjects who rated both parents low in nurturance were the least likely to have scores in this direction. The two groups with subjects who rated one parent high and one parent low in nurturance typically had intermediate scores on the dependent measures, with no clear trend emerging in regard to differences between the groups. This configuration of results suggests that there is a linear relationship between the amount of parental nurturance perceived by subjects and their ability to be involved in positive relationships with others.

An interesting aspect of the above-mentioned pattern of results is that the subjects in the HPN+LMN nurturance group exhibited better social adjustment than did the subjects in the LPN+LMN group. This finding supports the notion posited by Ross (1982a, 1982b) that having a nurturant father partially compensates for the deleterious effects of having a non-nurturant mother. One way that a perceived nurturant father may have a salutary influence on his children's development in the HPN+LMN situation is that he may provide the children with a parental figure with whom they can identify. In this type of family context, the availability of a nurturant father would be particularly important, given the difficulties that children have in identifying with mothers perceived to be non-nurturant. The children who identify with their fathers in the HPN+LMN situation would be expected to accrue the benefits of identifying with a perceived nurturant parent.

Another implication of the apparent linear trend in many of the findings is that the positive effects of perceived paternal nurturance are not merely compensatory in nature. Specifically, the particularly high level of social functioning demonstrated by the HPN+HMN subjects indicates that a perceived nurturant father may be a positive influence on their children in family settings in which there is also a perceived nurturant mother. The father in this type of family apparently enriches a home environment that is already

conducive for child development.

A unique interaction between perceived paternal nurturance and perceived maternal nurturance was found for the identification variable. The subjects in the LPN+HMN group were less likely than were the subjects in the LPN+LMN group to be identified with their fathers. The results for the super data set provide an illustration of the trend, as 40% of the LPN+HMN subjects and 54% of the LPN+LMN subjects were identified with their fathers. A plausible explanation for the trend is that perceived nurturant mothers provide children with a relatively safe and accessible alternative to perceived non-nurturant fathers in terms of potential identification figures, whereas there is no contrast between parents when both of them are low in nurturance. Evidence for this supposition comes from the finding that about 76% of the LPN+HMN subjects were identified with the mother, as opposed to approximately 51% of the LPN+LMN subjects.

Another way perceived paternal nurturance and perceived maternal nurturance were examined in the study was by comparing the students' ratings of their parents on the PNM-R. The results indicated that the father ratings were lower than the mother ratings on most of the PNM-R indexes, as can be seen in Table 7. These findings are consonant with two other studies which found that mothers were characteristically perceived as being more nurturant than fathers (Devereux et al, 1969; Heilbrun, 1964). It is unclear whether this kind

of discrepancy is due to actual disparities in parental behavior, or due to a social desirability bias that skews the ratings of parents in the direction of conforming to cultural stereotypes of mother and father roles. Interestingly, the Prep Index, which is the index that seems the most congruent with traditional notions of the paternal role, was the only one that did not produce lower ratings for the father than for the mother.

Gender Differences

There were only a few clear gender differences discovered in the results, and most of them were of negligible relevance to the hypotheses of the study. An exception was the apparent gender difference revealed in the father identification findings. When the females were analyzed separately, the relationship between perceived paternal nurturance and identification was always found to be highly significant. In contrast, this relationship typically only approached significance when the males were analyzed separately. The disparity in the findings may be more attributable to the discrepancies in sample sizes than to actual gender differences. As shown in Table 3, there were at least 26 more females than males in every data set analyzed. For instance, there were 129 females and 98 males in the super data set. The difference in sample sizes gave the chi square analyses a better chance to detect group differences for the females

than the males (Siegel, 1956). Other evidence which suggests that there were no meaningful sex differences pertaining to the identification variable is that the pattern of findings for males and females were striking in their resemblance. As can be seen in Table 19, the separate analyses done for each sex similarly revealed that the two high perceived paternal nurturance groups had a substantially higher proportion of subjects who were identified with their fathers than did either of the two low perceived paternal nurturance groups. Moreover, the analyses which combined the sexes generally yielded higher chi square values than did the analyses of males or females separately, which further confirms that the nature of the nurturance group differences in identification were similar for each sex.

Another sex difference was that females consistently had higher Level II Lov scores than did males. A related finding was that females were more likely than their male counterparts to have a responsible-cooperative interpersonal style at Level II, which is a style that is considered to be characterized by a high degree of love (Leary, 1957). These findings are reminiscent of the finding that the subjects rated their mothers higher than their fathers in nurturance; females in each case were rated as being more loving than were males. As discussed previously, it is unclear whether these findings reflect either a bias in the ratings towards conformity with sex-role prescriptions or genuine differences. The aspect of

the findings that is most relevant to the study is that the sex differences did not interact with the nurturance group variable, and therefore did not influence the results pertaining to the hypotheses.

Implications For Future Research

A limitation of this study is that all the variables were derived from self-report measures. This type of psychological measure is particularly susceptible to the social desirability bias (Paulhus, 1991), which is a bias that is due to a stylistic tendency to answer test items in a direction considered culturally approved rather than in terms of honest self-appraisal. It is important for future research to verify the findings of this study with assessment measures that are not prone to be influenced by social desirability. For example, future investigations could test the robustness of the findings pertaining to Level I (i.e., public) interpersonal styles by assessing Level I via peer rating on the ICL instead of by self-report. Additionally, an alternative measure of Level III (i.e. characterological) functioning that could be used in future research is the Thematic Apperception Test, which may be less affected by social desirability than is the MMPI-derived measure of Level III.

The findings of this study provide further evidence that perceived paternal nurturance is a topic that should no longer

be neglected in clinical and empirical research. There is a need for research that examines perceived paternal nurturance in relation to almost every important aspect of children's development, as there have been very few studies to do so. The findings here indicate that an especially productive area of research might be the interplay between perceived paternal nurturance and the development of children's interpersonal traits. For instance, a longitudinal study could determine the developmental sequence of perceived paternal nurturance, children's identification with their fathers, and the emergence of loving or hostile interpersonal styles.

Another implication of the findings of the study is that paternal nurturance should not be studied in isolation from other variables in the family system. Perceived maternal nurturance was clearly implicated as a factor that can potentially modulate the impact of perceived paternal nurturance. Future research needs to be directed at exploring the other variables that might interact with the effects of perceived paternal nurturance, such as marital satisfaction, paternal dominance, and the amount of time that fathers spend with their children.

The significant findings for the females in this study indicate that it is important for researchers and theorists to start placing more attention on the relationship between perceived paternal nurturance and the psychological and social functioning of females. There is little known about this

topic due to the traditional bias of the social sciences to emphasize father-son relationships instead of the father-daughter relationships. Thus, any well-designed study which examines the interactions between paternal nurturance and female development is likely to make a substantial contribution to the field.

Another type of inference that may be drawn from the findings of this research is that further validation is needed for many of the variables derived from the Leary System. This study did provide evidence for the validity of the Leary System measures of love-hate, social acceptability, identification with parents, and self-deception. However, the meaning of several of the other measures in the Leary System, such as identity diffusion and interpersonal rigidity, can not be fully comprehended until the nature of their relationships with variables outside the system has been delineated.

As mentioned previously, more research is needed on the PNM-R to determine its validity for populations other than white college-students. The applicability of the PNM-R indexes to persons of other races and socioeconomic backgrounds is especially important to establish, as the view of which behaviors and attitudes constitute paternal nurturance is likely to vary across cultures. Another worthwhile endeavor would be to examine the PNM-R ratings of clinical populations, as it may broaden our understanding of the relationship between perceived paternal nurturance and

psychopathology.

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Appendixes

Appendix A

Parental Nurturance Measure - Father

Instructions: Rate your father or father substitute on each item using the following scale: 1=never 2=seldom 3=sometimes 4=usually 5=almost always. Your rating should be the one which most closely typifies your father while you were growing up. Put the appropriate rating number in the space provided immediately following each item.

If you are not rating your father for this scale, please write in the space provided the relationship between you and the person you are rating - _____.

1. During high school, my father discouraged me from dating.
2. Made me feel as if my needs were not important.
3. Made me feel I wasn't wanted.
4. Checked whether or not I did my homework.
5. Could make me feel better when I was upset.
6. Believed in showing his love to me.
7. Taught me how to manage money.
8. Was a good companion.
9. Taught me things I wanted to learn.
10. Did not appreciate my masculinity (femininity if girl).
11. Was clear about the things I should and should not do.
12. Understood what it was like to be a teenager.
13. Was neither too strict nor too permissive in his discipline of me.
14. Set appropriate limits on my behavior when I was growing up.
15. Discouraged me from becoming my own person.
16. Was not affectionate towards me.
17. We enjoyed spending time together.
18. I could not count on my father to be there when I needed him.
19. Explained different aspects of human relationships to me.
20. Seemed emotionally cold to me.
21. Smiled at me.
22. Found fault with me more than I deserved.
23. Approved of me and the things I did.
24. Felt strong affection for me.
25. Was responsive to my needs.
26. Tried to control everything I did.
27. When I was small, my father comforted me when I was hurt.
28. Was overly critical of me.
29. Did not help me as much as I needed.
30. Was physically affectionate towards me.
31. I felt appreciated by my father.
32. Liked to be with me.
33. Hugged and kissed me goodnight when I was small.

Appendix A (continued)

34. Praised me for my accomplishments.
35. Allowed me a sense of freedom in my personal life.
36. Read me stories when I was little.
37. Introduced me to his friends.
38. Was glad that I was a boy (girl).
39. When I was small, my father let me get away with doing anything despite the risks involved.
40. Allowed me to make my own friends.
41. Accepted my friends.
42. Spoke to me in a warm and friendly voice.
43. Gave me what I needed.
44. Laughed with me.
45. Made me feel better after talking over my worries with him.
46. Calmly helped me with my homework.
47. Enjoyed playing with me when I was small.
48. Made me feel that I would never be able to do things on my own.
49. Refused to help me with projects.
50. Helped me understand that some rules are more important than my own desires.
51. Helped me understand what he did for work.
52. Encouraged me to pursue my own personal goals.
53. Did things which prepared me for being out in the world.
54. Did not seem to enjoy my company.
55. Served as a mentor to me.
56. Taught me the things in which he was interested.
57. Was fair in his discipline of me.
58. Thought that children should be seen but not heard.
59. When I was little, he made me feel secure when I was frightened.
60. We played games together.
61. I felt alone even when I was with my father.
62. Accepted me.
63. Understood what I was feeling and experiencing.
64. Did not seem interested in helping me learn the things I needed to learn.
65. Understood what it was like to be a child.
66. Taught me the rules of the games and sports I played.
67. Made sure I was reasonably punished when appropriate.
68. Took me places.
69. In recent years, I have felt that my father does not want me to grow up.
70. Helped me learn new skills when I was growing up.

Note. Items that are to be recoded (1=5) (2=4) (4=2) (5=1) for scoring purposes are: #s 1, 2, 3, 10, 15, 16, 18, 20, 22, 26, 28, 29, 39, 48, 49, 54, 58, 61, 64, and 69.

Appendix B

Seven Initial Factors of the Parental Nurturance Measure

Nonverbal Affection

1. Hugged and kissed me goodnight when I was small.
2. Smiled at me.
3. Was physically affectionate towards me.
4. Spoke to me in a warm and friendly voice.
5. Felt strong affection for me.
6. Believed in showing his love for me.
7. Seemed emotionally cold to me.
8. Was not affectionate towards me.
9. Laughed with me.

Companionship

1. Enjoyed playing with me when I was small.
2. Read me stories when I was little.
3. We enjoyed spending time together.
4. I felt alone even when I was with my father.
5. Did not seem to enjoy my company.
6. Liked to be with me.
7. We played games together.
8. Took me places.
9. Introduced me to his friends.
10. Was a good companion.

Approval/Acceptance

1. Was glad that I was a boy (girl).
2. Did not appreciate my masculinity (femininity if girl).
3. Found fault with me more than I deserved.
4. Made me feel I wasn't wanted.
5. Was overly critical of me.
6. Approved of me and the things I did.
7. I felt appreciated by my father.
8. Accepted me.
9. Understood what I was feeling and experiencing.
10. Thought that children should be seen but not heard.
11. Understood what it was like to be a child.
12. Understood what it was like to be a teenager.
13. Accepted my friends.

Responsiveness to Needs

1. Could make me feel better when I was upset.
2. Gave me what I needed.
3. Did not help me as much as I needed.
4. I could not count on my father to be there when I needed him.

Appendix B (continued)

5. Made me feel better after talking over my worries with him.
6. When I was small, my father comforted me when I hurt myself.
7. Made me feel as if my needs were not important.
8. When I was little, he made me feel secure when I was frightened.
9. Was responsive to my needs.

Encourage Individuation/Separation

1. Praised me for my accomplishments.
2. Encouraged me to pursue my own personal goals.
3. Discouraged me from becoming my own person.
4. During high school, my father discouraged me from dating.
5. Allowed me to make my own friends.
6. In recent years, I have felt that my father does not want me to grow up.
7. Made me feel that I would never be able to do things on my own.
8. Allowed me a sense of freedom in my personal life.

Mentorship

1. Helped me learn new skills when I was growing up.
2. Calmly helped me with my homework.
3. Taught me things I wanted to learn.
4. Did things which prepared me for being out in the world.
5. Did not seem interested in helping me learn the things I needed to learn.
6. Refused to help me with projects.
7. Checked whether or not I did my homework.
8. Taught me the things he was interested in.
9. Taught me how to manage my money.
10. Taught me the rules of the games and sports I played.
11. Helped me understand what he did for work.
12. Explained different aspects of human relationships to me.
13. Served as a mentor to me.

Appropriate Limit Setting

1. Was clear about the things I should and should not do.
2. Tried to control everything I did.
3. When I was small, my father let me get away with doing anything despite the risks involved.
4. Set appropriate limits on my behavior when I was growing up.
5. Was neither too strict nor too permissive in his discipline of me.
6. Was fair in his discipline of me.

Appendix B (continued)

7. Made sure I was reasonably punished when appropriate.
8. Helped me understand that some rules are more important than my own desires.

Appendix C

Parent-Child Interaction Rating Scales

Directions:

It is known that there are differences in affectional give and take between members of various families within American cultures. We are interested here in your impressions regarding the way your parents (or parent substitutes) related to you during your formative years from the age of earliest recall until you graduated from high school. You will be asked to rate the way your parents related to you along several dimensions and even though a parent may have changed during your formative years it still should be possible to find some rating point which best typifies this parent over most of these years. If you cannot recall a parent or parent substitute of a given sex, no ratings for a parent of that sex are expected. Remember, these ratings should reflect only the way you feel your parents related to you. If you are rating a parent substitute rather than a parent, please indicate in the following space your relationship with the person to be rated

_____. Turn to the next page and begin.

Appendix C (continued)

1. Affection I

Please place an X in the space which best represents the degree of affection which your father and your mother felt for you.

Father

Mother

_____	This parent felt little affection for me. Raising me was a social requirement only.	_____
_____	This parent probably felt some affection for me, but I was often uncertain of it.	_____
_____	This parent definitely felt some affection for me, but it was not strong nor often expressed.	_____
_____	This parent felt a fairly strong affection for me which I was certain of most of the time. There were times though when I wished to be reassured.	_____
_____	This parent felt a strong affection for me, and I rarely felt uncertain of it.	_____

Appendix C (continued)

2. Affection II

Please place an X in the space which best represents the degree of affection which was physically expressed toward you by your father and mother. Physically-expressed affection would include kissing, hugging, holding hands, holding on his (her) lap, stroking, etc.

Father

Mother

- | | | |
|-------|--|-------|
| _____ | 1. This parent was highly affectionate physically. | _____ |
| _____ | 2. This parent quite often expressed affection physically. | _____ |
| _____ | 3. This parent fairly often expressed physical expression. | _____ |
| _____ | 4. This parent occasionally expressed affection physically but, generally speaking, was reticent to do so. | _____ |
| _____ | 5. This parent rarely showed any physical signs of affection. | _____ |

Appendix C (continued)

3. Approval

Please place an X in the space which best represents the degree of approval of you which your father and your mother felt.

Father

Mother

- | | | |
|-------|--|-------|
| _____ | 1. This parent rarely seemed to approve of me or the things that I did. | _____ |
| _____ | 2. This parent occasionally seemed to approve of me or the things I did, but, in general, there was clear disapproval. | _____ |
| _____ | 3. This parent sometimes approved of me or the things I did, but at times there was clear disapproval. | _____ |
| _____ | 4. This parent usually showed approval of me or the things I did, and only rarely was there clear disapproval. | _____ |
| _____ | 5. This parent almost always seemed to approve of me or the things I did; it is difficult to recall any clear disapproval. | _____ |

Appendix C (continued)

4. Sharing of experiences

Please place an X in the space which best represents the degree to which you and your father and you and your mother discussed personal feelings and experiences with each other.

Father

Mother

- | | | |
|-------|--|-------|
| _____ | 1. There was an almost complete freedom of discussion of personal feelings and experiences between this parent and me; I rarely felt that a matter could not be discussed. | _____ |
| _____ | 2. Personal feelings and experiences were usually discussed between this parent and me and only occasionally did it seem necessary to keep matters to ourselves. | _____ |
| _____ | 3. Personal feeling and experiences were often discussed between this parent and me but just about as often we kept these matters to ourselves. | _____ |
| _____ | 4. Occasionally there was a discussion of personal feelings and experiences between this parent and me, but mostly we kept these matters to ourselves. | _____ |
| _____ | 5. There was little discussion of personal feelings and experiences between this parent and me. | _____ |

Appendix C (continued)

5. Concrete giving

Please place an X in the space which best represents the amount of concrete giving (e.g., gifts, money, clothing) done by your father and your mother.

Father

Mother

- | | | |
|-------|---|-------|
| _____ | 1. This parent rarely gave me things beyond the minimum necessary to meet everyday requirements of living. | _____ |
| _____ | 2. This parent occasionally gave me things beyond the necessary requirements of living but only on special occasions like birthdays. | _____ |
| _____ | 3. This parent was fairly generous in giving me things beyond the necessary requirements of living, but many times I was denied extra things I felt I should have. | _____ |
| _____ | 4. This parent was quite generous in giving me things beyond the necessary requirements of living and only occasionally was I denied extra things I felt I should have. | _____ |
| _____ | 5. This parent was extremely generous in giving me things beyond the necessary requirements of living and only rarely was I denied things I felt I should have. | _____ |

Appendix C (continued)

6. Encouragement

Please place an X in the space which best represents the amount of positive encouragement which your father and your mother expressed in your attempts to meet responsibilities in school, around the home, in social relationships, etc., or in pursuing personal interests such as sports, hobbies, clubs, etc.

Father

Mother

- | | | |
|-------|--|-------|
| _____ | 1. This parent was almost always positively encouraging in my attempts to meet responsibilities or in my pursuit of personal interests, and I have difficulty remembering when I ever was left too much on my own. | _____ |
| _____ | 2. This parent quite often expressed positive encouragement in my attempts to meet responsibilities or in my pursuit of personal interests, and I seldom was left too much on my own. | _____ |
| _____ | 3. This parent fairly often expressed positive encouragement in my attempts to meet responsibilities or in my pursuit of personal interests, but occasionally I was left too much on my own. | _____ |
| _____ | 4. This parent occasionally expressed positive encouragement in my attempts to meet responsibilities or in my pursuit of personal interests, but I was usually left too much on my own. | _____ |
| _____ | 5. This parent rarely expressed any positive encouragement in my attempts to meet responsibilities or in my pursuit of personal interests. | _____ |

Appendix C (continued)

7. Trust

Please place an X in the space which best represents the degree of trust which your father and your mother placed in you. Examples suggesting a lack of trust would be an undue number of reminder to do (or not to do) something, doing things for you which children of a give age should do for themselves, or obvious concern and worry over your success in most ventures.

Father

Mother

- | | | |
|-------|---|-------|
| _____ | 1. This parent rarely seemed to trust me to do what was expected. | _____ |
| _____ | 2. This parent occasionally seemed to trust me to do what was expected, but most of the time there was a lack of trust. | _____ |
| _____ | 3. This parent often seemed to trust me to do what was expected, but many times there was a lack of trust. | _____ |
| _____ | 4. This parent usually trusted me to do what was expected, and there seldom was a lack of trust. | _____ |
| _____ | 5. This parent almost always seemed to trust me to do what was expected. | _____ |

Appendix C (continued)

8. Security

Please place an X in the space which best represents the degree of security you experienced with your father and with your mother. Security refers to a feeling of being loved, wanted, and protected by the parent in question.

Father

Mother

- | | | |
|-------|--|-------|
| _____ | 1. It is difficult for me to remember any time when I was not secure in my relationship with this parent. | _____ |
| _____ | 2. I almost always experienced a feeling of security in my relationship with this parent, and only occasionally was I somewhat insecure. | _____ |
| _____ | 3. I usually experienced a feeling of security in my relationship with this parent, but at times I was somewhat insecure. | _____ |
| _____ | 4. I occasionally experienced a feeling of security in my relationship with this parent, but I usually was somewhat insecure. | _____ |
| _____ | 5. I rarely experienced feelings of security in my relationship with this parent, and I usually was quite insecure. | _____ |

Note. Score questions #s 2,4,6, and 8 in the reverse direction: (1=5) (2=4) (3=3) (4=2) (1=5).

Appendix D

Parental Nurturance Scale - Father

Instructions: Rate your father or primary father-figure on each item using the following rating scale:

- 1 = strongly disagree
- 2 = disagree
- 3 = neither agree nor disagree
- 4 = agree
- 5 = strongly agree.

Place your rating score in the space provided following each item.

If you are not rating your father, please specify in the space provided the relationship between you and the person you are rating. _____

1. My father seldom says nice things about me. ____
2. I am an important person in my father's eyes. ____
3. My father often acts as if he doesn't care about me. ____
4. My father enjoys spending time with me. ____
5. My father expresses his warmth and affection for me. ____
6. My father is easy to talk to. ____
7. I am tense and uneasy when my father and I are together. ____
8. I feel that my father finds fault with me more often than I deserve. ____
9. My father takes an active interest in my affairs. ____
10. I feel very close to my father. ____
11. My father does not understand me. ____
12. My father believes in me. ____
13. I don't feel that my father enjoys being with me. ____
14. My father doesn't really know what kind of person I am. ____
15. My father is a warm and caring individual. ____
16. My father does not feel that I am important and interesting. ____
17. My father is very interested in those things that concern me. ____
18. My father is often critical of me and nothing I do ever seems to please him. ____
19. My father seldom shows me any affection. ____
20. My father consoles me and helps me when I am unhappy or in trouble. ____
21. My father is generally cold and removed when I am with him. ____
22. I receive a lot of affirmation from my father. ____
23. My father is understanding and sympathetic. ____
24. My father does not really care what happens to me. ____

Appendix E

Informed Consent Form

The purpose of this study is to analyze different measures of students' perceptions of their parents. Participation in the study will require approximately one hour of your time. Each participant will be given three measures which ask questions pertaining to one's perceptions about one's mother and father. Participants will also will be asked some questions pertaining to their age, sex, race, and family characteristics. There are no known risks of this procedure, as it is likely that most students will find the tests interesting and possibly even enjoyable.

Participation in this research may increase one's knowledge about the content of frequently utilized psychological tests. For participants who plan to have a career in psychology, the experience of taking psychological tests may serve as a basis for empathy when you administer tests to others in the future. Participants will also receive 2 points of extra-credit in the class from which they were recruited.

Your identity will be kept confidential. The consent forms will be kept in a locked file in Room 310C of the Austin Peay Building. This file is only accessible to the investigator, and school and federal authorities who review research documentation. The consent forms will remained in the locked file for three years after completion of the project, upon which time the documents will be shredded and discarded. The names of participants will be erased from all testing materials, and will be replaced by a numerical identity code in order to disguise your identity. Thus, any reference to individual performance will be reported in a way which protects your identity.

If you have any questions about this study and/or the consent form, please contact William Richards. You should also contact Mr. Richards if you would like to express your feelings about your participation in the research. Mr. Richards will be available for questioning during and immediately after the testing sessions.

Participation in this research project is strictly on a volunteer basis. Accordingly, there will be no penalties for persons who decide not to participate. Furthermore, any participant may discontinue their participation at any time without penalty.

I have read and understood the explanation of this study and agree to participate.

Name

Date

Appendix F

Demographic Profile

Instructions: Please answer the questions in the space provided.

- 1) Sex: _____
- 2) Age: _____
- 3) Race: _____
- 4) Years of education completed: _____
- 5) College GPA: _____
- 6) Major: _____
- 7) Occupation: _____
- 8) Father's Occupation: _____
- 9) Mother's Occupation: _____
- 10) Highest level of education attained by father (place check next to correct answer)
 - Never graduated from high school
 - High school graduate
 - Some college but never graduated
 - College graduate
 - Went to graduate school
- 11) Highest level of education attained by mother
 - Never graduated from high school
 - High School graduate
 - Some college but never graduated
 - College graduate
 - Went to graduate school
- 12) Please indicate which of the following people live in your current household (Place check where appropriate):
 - ___ friend(s)
 - ___ spouse
 - ___ father
 - ___ mother
 - ___ sister(s)
 - ___ brother(s)
 - ___ boyfriend or girlfriend
 - ___ grandfather
 - ___ grandmother
 - ___ other (please specify - _____)
- 13) Current Status of parents' relationship (Check where appropriate):

Appendix F (continued)

- ☐ still married
- ☐ never married, but still living together
- ☐ divorced (specify your age when they divorce - _____)
- ☐ separated (specify your age when they separated - _____)
- ☐ never married and not living together -(your age when they broke-up - _____)
- ☐ father deceased (specify your age when he died - _____)
- ☐ mother deceased (specify your age when she died) - _____)
- ☐ other (please specify - _____)

14) Who lived in your household for most or all of the years when you were between the ages of 0 - 18 yrs? (check where appropriate):

- ☐ mother
- ☐ father
- ☐ sister(s)
- ☐ brother(s)
- ☐ grandmother
- ☐ grandfather
- ☐ stepmother
- ☐ stepfather
- ☐ other (please specify - _____)

15) While you were growing up, was there someone besides your father who served as the primary father-figure in your life?
___yes ___no

If yes, please specify your relationship to this father-figure
(e.g. grandfather, uncle, stepfather, etc.)?

16) While you were growing up, was there someone besides your mother who served as the primary mother-figure in your life?

___yes ___no

If yes, please specify your relationship to this mother-figure
(e.g. grandmother, aunt, stepmother, etc.)?

Appendix G

Three Factors of the Parental Nurturance Measure

Instructions:

Rate your father or father substitute on each item using the following scale: 1=never 2=seldom 3=sometimes 4=usually 5=almost always. Your rating should be the one which most closely typifies your father while you were growing up. Put the appropriate rating number in the space provided immediately following each item.

If you are not rating your father for this scale, please write in the space provided the relationship between you and the person you are rating - _____.

Factor 1: Warm Acceptance and Support

- 2. Made me feel as if my needs were not important.
- 3. Made me feel I wasn't wanted.
- 6. Believed in showing his love to me.
- 16. Was not affectionate towards me.
- 20. Seemed emotionally cold to me.
- 21. Smiled at me.
- 22. Found fault with me more than I deserved.
- 23. Approved of me and the things I did.
- 24. Felt strong affection for me.
- 25. Was responsive to my needs.
- 28. Was overly critical of me.
- 31. I felt appreciated by my father.
- 34. Praised me for my accomplishments.
- 35. Allowed me a sense of freedom in my personal life.
- 40. Allowed me to make my own friends.
- 41. Accepted my friends.
- 42. Spoke to me in a warm and friendly voice.
- 43. Gave me what I needed.
- 44. Laughed with me.
- 58. Thought that children should be seen but not heard.
- 61. I felt alone even when I was with my father.
- 62. Accepted me.

Factor 2: Preparation for the World

- 7. Taught me how to manage money.
- 11. Was clear about the things I should and should not do.
- 14. Set appropriate limits on my behavior when I was growing up.
- 19. Explained different aspects of human relationships to me.
- 46. Calmly helped me with my homework.

Appendix G (continued)

- 50. Helped me understand that some rules are more important than my own desires.
- 51. Helped me understand what he did for work.
- 53. Did things which prepared me for being out in the world.
- 55. Served as a mentor to me.
- 56. Taught me the things in which he was interested.
- 64. Did not seem interested in helping me learn the things I needed to learn.
- 66. Taught me the rules of the games and sports I played.
- 67. Made sure I was reasonably punished when appropriate.
- 70. Helped me learn new skills when I was growing up.

Factor 3: Perceptions of Early Childhood

- 27. When I was small, my father comforted me when I was hurt.
- 33. Hugged and kissed me goodnight when I was small.
- 36. Read me stories when I was little.
- 47. Enjoyed playing with me when I was small.
- 59. When I was little, he made me feel secure when I was frightened.

Multi-Factor Items

- 5. Could make me feel better when I was upset.
- 8. Was a good companion.
- 9. Taught me things I wanted to learn.
- 12. Understood what it was like to be a teenager.
- 13. Was neither too strict nor too permissive in his discipline of me.
- 15. Discouraged me from being my own person.
- 17. We enjoyed spending time together.
- 29. Did not help me as much as I needed.
- 30. Was physically affectionate towards me.
- 32. Liked to be with me.
- 37. Introduced me to his friends.
- 45. Made me feel better after talking over my worries with him.
- 48. Made me feel that I would never be able to do things on my own.
- 49. Refused to help me with projects.
- 52. Encouraged me to pursue my own personal goals.
- 54. Did not seem to enjoy my company.
- 57. Was fair in his discipline of me.
- 60. We played games together.
- 63. Understood what I was feeling and experiencing.
- 65. Understood what it was like to be a child.
- 68. Took me places.

Appendix H

Table A-1

Frequencies of Subjects' Level I Interpersonal Styles Per Group

Interpersonal Style	Group ^a				Total (n=232)
	LPN+LMN (n=72)	LPN+HMN (n=38)	HPN+LMN (n=42)	HPN+HMN (n=78)	
Managerial	22	21	20	46	109
Competitive	22	9	9	12	55
Aggressive	9	1	3	4	17
Rebellious	3	0	0	0	3
Self-effacing	1	1	1	1	1
Docile	2	0	0	0	2
Cooperative	2	0	1	1	4
Responsible	10	5	9	14	38

Note. LPN = low paternal nurturance; LMN = low maternal nurturance; HPN = high paternal nurturance; HMN = high maternal nurturance

^aGroups categorized by Total Index scores of the Paternal Nurturance Measure - Revised.

Appendix H (continued)

Table A-2

Frequencies of Subjects' Level II Interpersonal Styles Per Group

Interpersonal styles	Group ^a				Total (n=232)
	LPN+LMN (n=72)	LPN+HMN (n=38)	HPN+LMN (n=42)	HPN+HMN (n=78)	
Managerial	22	14	10	28	64
Competitive	19	5	10	18	52
Aggressive	8	0	1	1	10
Rebellious	5	0	1	2	8
Self-effacing	2	0	1	3	6
Docile	2	0	1	2	5
Cooperative	12	5	6	3	26
Responsible	14	14	12	21	61

Note. LPN = low paternal nurturance; LMN = low maternal nurturance; HPN = high paternal nurturance; HMN = high maternal nurturance

^aGroups categorized by Total Index scores on the Parental Nurturance measure - Revised.

Appendix H (continued)

Table A-3

Frequencies of Subjects' Level III Interpersonal Styles Per Group

Interpersonal style	Group ^a				Total (n=232)
	LPN+LMN (n=72)	LPN+HMN (n=38)	HPN+LMN (n=42)	HPN+HMN (n=78)	
Managerial	17	9	9	22	57
Competitive	20	6	13	23	62
Aggressive	9	1	3	11	24
Rebellious	11	1	4	2	18
Self-effacing	3	1	2	0	6
Docile	4	7	1	3	15
Cooperative	6	3	5	9	23
Responsible	4	10	5	8	27

Note. LPN = low paternal nurturance; LMN = low maternal nurturance; HPN = high paternal nurturance; HMN = high maternal nurturance

^aGroups categorized by Total Index scores of the Paternal Nurturance Measure - Revised.

Appendix H (continued)

Table A-4

Frequencies of Subjects' Level V (Ideal) Interpersonal Styles Per Group

Interpersonal style	Group ^a				Total
	LPN+LMN (n=72)	LPN+HMN (n=38)	HPN+LMN (n=42)	HPN+HMN (n=75) ^b	
Managerial	13	7	8	17	45
Competitive	16	6	8	5	35
Aggressive	4	3	1	8	16
Rebellious	8	1	3	7	19
Self-effacing	7	3	3	5	18
Docile	3	3	2	4	12
Cooperative	8	8	4	6	26
Responsible	13	7	13	23	56

Note. LPN = low paternal nurturance; LMN = low maternal nurturance; HPN = high paternal nurturance; HMN = high maternal nurturance

^aGroups categorized by the Total Index Scores of the Parental Nurturance Measure - Revised.

^bThree subjects of the HPN+HMN group were excluded from the analyses of Level V due to incomplete data

Appendix H (continued)

Table A-5

Frequencies of the Perceived Interpersonal Styles of the Mothers Per Group

Interpersonal styles	Group ^a				Total
	LPN+LMN (n=73) ^b	LPN+HMN (n=38)	HPN+LMN (n=42)	HPN+HMN (n=77) ^b	
Managerial	24	17	15	35	91
Competitive	13	1	8	6	28
Aggressive	4	0	6	0	10
Rebellious	1	0	1	1	3
Self-effacing	1	2	0	0	3
Docile	4	0	1	0	5
Cooperative	6	6	3	5	20
Responsible	20	12	8	30	70

Note. LPN = low paternal nurturance; LMN = low maternal nurturance; HPN = high paternal nurturance; HMN = high maternal nurturance

^aGroups categorized by the Total Index Scores of the Parental Nurturance Measure - Revised.

^bA subject of this group was excluded from the analyses of the mother due to incomplete data

Appendix H (continued)

Table A-6

Frequencies of the Perceived Interpersonal Styles of the Fathers Per Group

Interpersonal styles	Group ^a				Total
	LPN+LMN (n=73) ^b	LPN+HMN (n=38)	HPN+LMN (n=42)	HPN+HMN (n=77) ^b	
Managerial	22	6	22	39	89
Competitive	28	19	12	25	84
Aggressive	10	9	0	1	20
Rebellious	2	1	2	1	6
Self-effacing	3	1	0	1	5
Docile	2	0	0	0	2
Cooperative	2	0	1	0	3
Responsible	4	2	5	10	21

Note. LPN = low paternal nurturance; LMN = low maternal nurturance; HPN = high paternal nurturance; HMN = high maternal nurturance

^aGroups categorized by the Total Index Scores of the Parental Nurturance Measure - Revised.

^bA subject of this group was excluded from the analyses of the mother due to incomplete data

Appendix I

Table A-7

Frequencies of Level II Interpersonal Styles of Mother-Disidentified Subjects^a and the Perceived Styles of Their Mothers

Population	Interpersonal Circle Octant							
	1	2	3	4	5	6	7	8
Accept Data Set								
Subjects	10	10	5	4	3	2	10	7
Mothers	6	12	9	1	2	4	8	9
Prep Data Set								
Subjects	9	14	6	5	2	2	14	5
Mothers	12	10	7	0	1	3	9	15
Early Data Set								
Subjects	6	7	3	5	3	1	13	5
Mothers	8	9	8	0	1	3	7	7
Total Data Set								
Subjects	9	12	6	5	3	2	11	8
Mothers	11	12	8	1	1	4	7	12

Appendix I (continued)

Table A-7 (continued)

Interpersonal Circle Octant								
Population	1	2	3	4	5	6	7	8
Super Data Set								
Subjects	9	12	6	5	3	2	12	7
Fathers	11	12	9	1	1	3	7	12

Note. Octant 1 = managerial-autocratic
 Octant 2 = competitive-narcissistic
 Octant 3 = aggressive-sadistic
 Octant 4 = rebellious-distrustful
 Octant 5 = self-effacing-masochistic
 Octant 6 = docile-dependent
 Octant 7 = cooperative-overconventional
 Octant 8 = responsible-hypernormal

^aSubjects from the low perceived maternal nurturance groups only.

Appendix I (continued)

Table A-8

Frequencies of Level II Interpersonal Styles of Mother-Identified Subjects^a and the Perceived Styles of Their Mothers

Population	Interpersonal Circle Octant ^b							
	1	2	3	4	5	6	7	8
Accept Data Set								
Mothers	41	6	0	0	0	1	3	29
All sub.	32	12	0	0	0	0	5	31
Male sub.	13	7	0	0	0	0	0	11
Fem. sub.	19	5	0	0	0	0	5	20
Prep Data Set								
Mothers	47	8	1	1	0	0	1	27
All sub.	36	13	3	1	0	0	3	29
Male sub.	16	5	1	0	0	0	0	7
Fem. sub.	20	8	2	1	0	0	3	22
Early Data Set								
Mothers	32	6	1	1	0	0	3	29
All sub.	31	8	1	1	0	0	4	27
Male sub.	13	4	0	0	0	0	0	6
Fem. sub.	18	4	1	1	0	0	4	21

Appendix I (continued)

Table A-8 (continued)

Interpersonal Circle Octant								
Population	1	2	3	4	5	6	7	8
Total Data Set								
Mothers	45	7	0	1	0	0	3	32
All sub.	39	11	0	1	0	0	4	33
Male sub.	18	6	0	0	0	0	0	9
Fem. sub.	21	5	0	1	0	0	4	24
Super Data Set								
Mothers	44	6	0	1	0	0	3	31
All sub.	37	13	0	1	0	0	2	32
Male sub.	16	6	0	0	0	0	0	9
Fem. sub	21	7	0	1	0	0	2	23

^aSubjects from the high perceived paternal nurturance groups only.

^b Octant 1 = managerial-autocratic; Octant 2 = competitive-narcissistic; Octant 3 = aggressive-sadistic; Octant 4 = rebellious-distrustful; Octant 5 = self-effacing-masochistic; Octant 6 = docile-dependent; Octant 7 = cooperative-overconventional; Octant 8 = responsible-hypernormal

Vita

William Allan Richards Jr. was born in Baton Rouge, Louisiana on April 13, 1958. He was raised in Baton Rouge, where he graduated from Robert E. Lee High School in May, 1976. The following August he entered Louisiana State University, and in December, 1980, he received the degree of Bachelor of Arts in Psychology. He enrolled in the University of New Orleans in January, 1982, and subsequently received the degree of Master of Science in Psychology in December, 1985.

In August, 1987, he entered the Doctoral Program in Clinical Psychology at the University of Tennessee. He did a one year internship in professional psychology at Vanderbilt University/Veterans Administration Medical Center, which ended in August, 1992. He will receive the degree of Doctor of Philosophy with a major in Psychology in May, 1993.