This critical review examines 16 empirical studies applicable to 4 areas of parenting: (1) Nurturance; (2) Parenting Style; (3) Parents as role-models; and (4) Parenting in regard to individual differences in children. The studies were examined in the context of how each one supported Biblical principles. Each study was critiqued in terms of internal validity, external validity, construct validity, and statistical conclusions. Among the findings, the studies which examined nurturance showed that children receiving adequate nurturance were better adjusted than children given inadequate nurturance. For parenting styles, studies showed that children raised under an authoritative style of parenting were better adjusted than children reared with permissive or authoritarian parenting styles. Role model studies revealed that children look to adults for guidance on how to behave and children tend to repeat the behavior they see adults perform. The review of research on individual differences indicated that parents should respond to children as individuals with unique needs. Research results affirmed the hypothesis that Biblical principles for parenting result in healthier, better adjusted children. It is argued that adequate nurturance, authoritative discipline, positive role modeling, and treating children according to their individual differences are all important to the overall process of healthy parenting. (RJM)
PARENTING: DOES RESEARCH SUPPORT BIBLICAL PRINCIPLES
A REVIEW OF THE LITERATURE

by

Andrea Drew Ganahl

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ABSTRACT

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Studies investigating parenting principles including nurturance, discipline, role modeling, and individual differences, are reviewed and their methodology critiqued. The research essentially affirms that Biblical principles for parenting result in healthier, better adjusted children. Providing adequate nurturance, authoritative discipline, positive role modeling and treating children according to their individual differences are all important in raising a child according to God's standards. The research presented provides support that these standards support Biblical revelation.
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PARENTING:
DOES RESEARCH SUPPORT BIBLICAL PRINCIPLES

Introduction

Parenting has existed since Adam and Eve conceived their first child Cain (Genesis 4:1; New International Version 1985). However, it has not been until relatively recently that parents began asking questions about their parenting behaviors. There are numerous books and/or articles on parenting. Authors such as Dobson (1970 & 1974), Narramore (1972), Chartier (1978) and many others have contributed a body of literature to assist parents in the task of parenting.

God's Principles

Many of these authors provide Scripture verses to support their views on parenting. Dobson (1970) cites Proverbs 29:17 to underpin his position on discipline. Dobson (1970) also cites Hebrews 12:5-9, 11 to demonstrate that a parent's relationship with his/her child should be modeled after God's relationship with man. Narramore (1972) cites Ephesians 6:4 as a way of encouraging parents to raise their children in a way that the Lord approves. Both Narramore (1972) and Dobson (1970) draw insight from Proverbs 23:13-14 to support their views on discipline. Chartier (1978) cites First Peter 5:7 ("He cares for you"), as well as many other verses, to demonstrate a Biblical model for parenting.

Chartier's (1978) approach to parenting is of particular interest to the author. He describes his approach as follows:
Parenting and all that it entails is a theological problem because it involves the nature and function of persons as parents and their role or duty as God's image representative in the world. Theology, in its simplest understanding, is the study of God. It seeks to analyze and describe God's nature and behavior in relation to his creation. Can we learn anything from the nature and action of God that will help us in the enterprise of parenting? I think so. (p. 54)

Chartier (1978) proposes that Christian parenting should reflect the seven dimensions of the Father's love: care, response, discipline, giving, respect, knowing, and forgiveness. For the purpose of this paper, Chartier's seven dimension will be reduced to the following four areas: nurturance (care, response, and forgiveness), discipline (parenting style), individual differences (respecting and knowing one's child), and modeling (the importance of parents as role models, including giving and forgiveness).

There are numerous Scriptural references for each of these four dimensions of parenting. A common theme throughout the Bible is love. From Genesis through Revelation God's love for His children is revealed. The ultimate revelation of God's love for his people is shown when the Heavenly Father sent His only begotten Son to die for the sinners of the world (John 3:16). God calls His people to love each other as He has loved them (John 15:12). Chartier (1978) cites Hosea 11:1-11 and Luke 15:11-32 to describe the love a father has for his child. In Isaiah 66:13 the Lord says He will comfort His people as a mother comforts her child. In this passage God is using a mother's love and care for her child as an example of His love and care for His people.

There are several aspects of loving/nurturing a child. Nurturance includes comforting, encouraging, caring for, etc. It is revealed in the Scriptures that God calls us to encourage one another (I Thessalonians 4:18, 5:11, Hebrews 3:13, 10:25). Fathers are admonished in Colossians 3:21 not to embitter their children otherwise they will
discourage them. Parents have an important role in the nurturing of their children. They are not to discourage their children but rather to lift them up. Chartier (1978) cites John 1:17 and Titus 3:3-7 to demonstrate how God responds to His children (through grace and truth).

There are numerous Scripture verses that describe God's act of disciplining His children, as well as verses that exhort parents to discipline their children. Christians know that they are children of the Heavenly Father and are loved by Him because He exercises discipline over them (Proverbs 3:11-12, Hebrews 12:5-8, Revelation 3:19). His discipline is purifying so "that we may share His holiness" (Hebrews 12:10). Chartier (1978) references Proverbs 13:24; 22:15; and 23:13-14 to provide a Biblical perspective that true parental love always includes within its definition the parents' willingness to discipline their children.

It has been stated that parents who believe in the sin nature of human beings, which includes most Christians, are relatively authoritarian in their child-rearing attitudes (Clayton, 1985). "He who spares the rod hates his son, but he who loves him is careful to discipline him" (Proverbs 13:24). Many believe that "using the rod" reflects an authoritarian parenting style. However, this is not necessarily the case. Narramore (1972) describes several aspects of legitimate biblically-based discipline. He states that the proper attitude for correcting your child is one of love rather than anger. Biblically-based discipline is an approach which has a future focus and emphasizes nurturance, warmth, growth, and involvement within the context of structure, guidance, limits, and control. When punishment focuses on the past, hatred, anger, and retribution are often the primary motivators (Narramore, 1972).

The Bible provides verses relating to other parenting concepts as well. Proverbs 22:6 instructs parents to raise up their children in the way they should go and they will not
depart from it. Throughout Scriptures we are encouraged to be witnesses, or models of the word of God. Paul states in II Thessalonians 3:9 that he behaved accordingly so as to be a model for others to follow. Parents are to teach godly principles to their children (Deuteronomy 4:9, 6:7). In Ephesians 6:4 parents are told to train and instruct their children. Chartier (1978) cites Galatians 5:22 to describe the qualities we are to demonstrate and/or model (love, joy, peace, patience, kindness, goodness, faithfulness, humility, and self-control).

Not only does the Bible provide guidelines for modeling but it also provides examples of how parents influence their children through their modeling. In Genesis 12:10-20 we see Abraham represent his wife Sara as his sister, in order to protect himself. Then in Genesis 26:7-11 we see Abraham's son, Isaac, represent his wife, Rebekah, as his sister, also out of fear for his life. Isaac behaved in the same manner that his father had. We see another example of a child replicating his parent's behavior in Genesis 25:28 and then in Genesis 37:3. Here, Rebekah favors her son Jacob over her son Esau (Genesis 25:28). Then when Jacob becomes a parent he favors his son Joseph over his other sons (Genesis 37:3). In both of these stories we see how a child behaved very much like his parent.

The last of the four areas being considered is the importance of parenting in regards to their children's individual differences. Chartier (1978) cites verses such as Philippians 2:5-8 and Hebrews 2:17-18 to describe how God demonstrated to us that He knows each of us. It is seen throughout the Gospels that Jesus treated each person He came in contact with differently. He met individuals where they were. For instance, in the Gospel of John (20:19-31), Jesus appears before His disciples and provides Thomas with more than just His physical appearance. He said to Thomas, "put your finger here; see my hands. Reach out your hand and put it into my side". Jesus knew that Thomas needed
more than the others, Thomas needed to touch Jesus' wounds in order to believe. Parents need to consider their children's differences and adjust their responses according to their child's needs.

Empirical Research

Although there is an enormous amount of information on parenting and child rearing, the actual amount of empirical research directed at specific parenting techniques is astonishingly low. Repeated literature searches were conducted in order to obtain the necessary studies for this review. In this process, it was determined that surprisingly little empirical research has been conducted which applies to the four areas of parenting discussed. Although empirical studies were found regarding parenting style and parental nurturance, few were found which considered parents as role models. There were also very few studies found addressing parenting in regards to individual differences among children.

One possible explanation for the lack of empirical research found may be the difficulty of accessing studies from the existing literature. Hoffman and Hoffman (1964) stated that practitioners may at times have difficulty finding studies that pertain to their work because the studies are often titled in ways that give little or no hint of their relevance. For instance, studies on parental nurturance are not necessarily found under the word nurturance in the Psychological Abstracts. Instead, they may be listed under other words such as caring or bonding. Because there have been numerous studies done in regard to parenting in general, there is considerable difficulty in accessing specific areas of interest.

This critical review is based on 16 empirical studies applicable to the four areas of parenting discussed: nurturance, parenting style, parents as role-models, and parenting in regard to individual differences in children. This review analyzes and critiques these 16
studies in terms of four types of validity: internal, external, statistical conclusion, and construct validity.

Internal validity refers to the approximate validity with which we infer that a relationship between two variables is causal, or that the absence of a relationship implies the absence of cause (Cook & Campbell, 1979). There are many possible threats to the internal validity of any given study. One possible threat is mortality. Mortality occurs when an "experimental" effect is due to subject attrition from a particular treatment group during the course of an experiment (Cozby, 1985). Therefore, the effect of the treatment was biased by the type of subjects who chose to drop out of the experiment.

Selection represents another possible threat to internal validity. Selection refers to the possibility that the treatment groups were not equivalent (Cook & Campbell, 1979). Therefore, the effects of the treatment may be due to the differences between treatment groups rather than the actual treatment.

The second type of validity being critiqued is external validity. External validity refers to the degree that we can infer that the presumed causal relationship can be generalized to and across different types of persons, settings, and times (Cook & Campbell, 1979). A large amount of diversity among subjects in a study allows for broad generalization of findings.

Statistical conclusion validity is the third type of validity being analyzed. Statistical conclusion validity refers to the degree that we can infer that the study was sensitive enough to discover differences between treatment groups (Cook & Campbell, 1979). For instance, we look to see if there were enough subjects in each group to provide sufficient data in order to conclude that the differences were due to treatment rather than chance.

The fourth and final type of validity being analyzed is construct validity. Construct validity looks to see if there were any confounding variables that affected the results of a
study (Cook & Campbell, 1979). When looking at the construct validity of a given study we will look at how the data was gathered (i.e., self-reports, parent reports, interviews, direct observations, and testing). Although there are advantages and disadvantages to each of the data gathering approaches it is important to note that self-report measures used alone can provide insufficient data (Nisbett & Wilson, 1977). One cannot necessarily assume the subjects responded truthfully to the questions provided.

It is important to note that although each article presented will be both critiqued as to its experimental rigor, and analyzed in terms of proving important information regarding parenting issues. There is no such thing as a perfect study. Therefore, we are looking for cumulative patterns to emerge across the 16 articles reviewed.

Review of the Literature

Nurturance

The first aspect of parenting to be considered is nurturance. No aspect of the social environment is so frequently cited as critical to child development as parental responsibility or parental nurturance (Bradley, 1987). Nurturance is considered a key element in the infant's development of a "basic trust" in the environment (Erickson, 1963).

Although nurturance can be defined in a number of ways, most definitions include parental warmth and affection or involvement with their children. Baumrind (1967) in her study on parental discipline, provided the following definition for nurturance.

The term nurturance is used to refer to the caretaking functions of the parent; that is, to those parental acts and attitudes that express love and are directed at guaranteeing the child's physical and emotional well-being. Nurturance is expressed by warmth and involvement. By warmth is meant the parent's personal love and compassion for the child expressed by means of sensory stimulation,
verbal approval, and tenderness of expression and touch. By involvement is meant pride and pleasure in the child's accomplishments, manifested by words of praise and interest, and conscientious protection of the child's welfare. (p. 57)

There are many different ways in which parental nurturance can be studied. For the purpose of this critique, the aspects of parental nurturance that will be examined are: the effects of parental nurturance on children's problem-solving strategies, the effects of parental nurturance on adult children, the effects of parental nurturance on the social-emotional adjustment of children, the effects of parental nurturance in regards to a child's competence, and self-esteem, and the lack of parental nurturance in regards to depression.

The first study examined was conducted by Jones, Rickel, and Smith (1980). They examined the relationship of nurturant and restrictive maternal childrearing practices and maternal education to the types of problem-solving strategies used by 72 preschoolers. The subjects were from urban and suburban nursery schools. There was an equal number of boys and girls in each group and they represented a broad range of socio-economic levels and races. This diversity among subjects provided the study with fairly broad external validity.

The researchers administered a modified version of the Preschool Interpersonal Problem Solving Test (PIPS) to the children. The children were given stories with peer problems and mother problems. The children were encouraged to come up with as many solutions to the dilemmas as possible. The solutions were categorized to determine the child's level of interpersonal problem solving skills. The PIPS interrater reliability was .91. Test-retest reliability was not provided.

The mothers of the children were given a Child Rearing Practice Report (CRPR). The mothers were to provide their perceptions of their degree of nurturance with their child. The CRPR consists of two factors; maternal restrictiveness and maternal
nurturance. High scores on the maternal restrictiveness factor suggested a concern with the child's adherence to a set of adult-imposed rules and expectations. High scores on the maternal nurturance factor indicated warmth, involvement and recognition of the child's desires and emotional needs. The correlation between the two factors for this sample was not significant (r = .02, p < .46). Maternal education (highest school grade completed) was significantly related to restrictiveness (r = -.72, p < .001) and nurturance (r = .29, p < .02).

The researchers' attempted to assess nurturance in terms similar to those discussed by Baumrind (1967). There is some concern about how the data was gathered (self-report measure). It is possible some mothers may perceive themselves as being quite nurturing but in fact are more restrictive.

To assess the relationship between the maternal variables and the child strategies, a canonical correlation was computed (r = .68, p < .04). The researchers found that restrictiveness was positively associated with the use of evasion, which the authors defined as a focus on escape, (F(1,56) = 8.46, p < .05) and negatively associated with personal appeal (F(1,56) = 11.08, p < .02), which was defined as an attempt to mollify the mother's anger with affective appeals or with verbal compensation, and negotiation strategies (F(1,56) = 5.54, p < .02), which is defined by the child proposing to obtain a toy by reciprocal recognition of each child's rights and wishes. Maternal nurturance was negatively related to reliance on authority (F(1,56) = 6.92, p < .01), which refers to resolving a problem by turning to some authority figure to obtain the desired object. In addition, a child's ability to delay gratification (waiting for a desired object rather than making any direct appeal) was significantly predicted by the level of the mother's education (F(1,56) = 5.04, p < .03). Years of education completed was also positively related to maternal nurturance and negatively related to maternal restrictiveness.
Truant, Donaldson, Herscovitch, and Lohrenz (1987) also studied parental nurturance, but from a different perspective from the previous examiners. They looked at parental representations of 124 general practice patients and 439 psychiatric out-patients. Unfortunately, the writers failed to provide a definition for parental representations. The researchers compared the two groups using Parker’s Parental Bonding Instrument (PPBI), which measures care versus indifference/rejection and protection versus encouragement of independence. The PPBI is a self-report measure in which subjects are asked to rate each parent on a 4-point Likert scale for 25 items. Test-retest and split-half reliabilities were .76 and .88, respectively, for the care scale and .63 and .74, respectively, for the overprotection scale. The test-retest interval was not provided, nor was the internal consistency estimate.

The results of this study indicate that the psychiatric out-patient population reported lower maternal care (M = 21.9, p < .001) and paternal care (M = 18.8, p < .05), and higher maternal protection (M = 16.2, p < .001) and paternal protection (M = 13.7, p < .05) than did the general practice population (maternal care, M = 27.1; paternal care, M = 24.3; maternal protection, M = 12.1; and paternal protection, M = 11.7).

There are a few possible threats to the validity of this study. The attrition rate among subjects was quite high. Only 62% of those from the general practice population, who were approached and asked to complete the self-report measure, actually completed and returned it. Therefore, out of the 198 subjects who were suitable for the study, twelve refused and 62 failed to return the form. Those subjects who were approached from the second population (psychiatric out-patients) had a 72% response rate. Out of 611 assessments of those from the psychiatric out-patient population pool, 138 failed to return the form, 10 refused, and 24 of the returned forms were incomplete. The response rate between the two groups was generally similar, but the out-patient population was slightly
better. With the high attrition rate there is concern regarding the external validity. Did the examiners actually study the targeted population?

With respect to construct validity, the means of data acquisition for this study was also questionable. The only instrument used in gathering data was a self-report measure. As mentioned above, self-report measures, when used alone, can provide insufficient and/or inaccurate information. Not only was the data gathering via a self-report measure, but it was a retrospective self-report measure. There is concern about the time frame for recall (Ericsson & Simon, 1980). Because the self-report measure was the only source of information for this study, the results are questionable. The subjects from the psychiatric out-patient population may have experienced pre-existing conditions which influenced the way they answered the questions on the self-report measure. For example, the psychiatric out-patients may have experienced more depression or rage than the general practice population, and therefore, they may have exaggerated their responses. Or, they may have experienced less bonding with their parent(s), than did the general practice population subjects.

Another question which should be considered, in regard to the construct validity of this study, is how the researchers measured parental care and parental protection. It is difficult to determine if the PPBI does in fact measure parental care and protection. Unfortunately, the authors did not provide adequate information on the measure.

There are a few issues to consider in regards to the external validity of this study. All subjects came from the same geographical area. Therefore, there is some question as to the ability to generalize to other geographical areas. Although all the subjects came from one specific location, there were a number of other factors which provided diversity between subjects. Both populations came from both lower and middle social classes. The populations consisted of both married and single individuals. Additionally, there was a
broad range of ages between subjects (18 to 65 years of age). Therefore, although all subjects came from the same geographical area, there was a significant amount of diversity among subjects on other variables, which should contribute to adequate external validity.

Even though a number of concerns have been identified regarding the validity of this study, it still provides some valuable information. When the results of this study are considered along with the results of the other studies presented on parental nurturance, one can see their common themes. Therefore, it is important not to discard this study, since its results are supported by other research.

Atlas and Rickel (1988) also looked at parental nurturance. However, they chose to examine children and their mothers rather than looking at adults and their perceptions of the nurturance they received as children. Atlas and Rickel studied parental nurturance by examining children's social-emotional adjustment as related to maternal coping styles. The subjects were 186 black mothers from lower-income families, and their children who were enrolled in a preschool program in Detroit. Due to the fact that all the subjects in this study were from a specific geographic area and were all low-income black mothers, there is concern about the generalizability of this study. Therefore, it is important to be cautious when generalizing these results to other geographic or ethnic populations.

Atlas and Rickel used several measures to assess their subjects. The first child instrument used in this study was the Aggressive, Moody, Learning Difficulties Scale (AML), which is a quick screening device for the detection of school maladaptation in young children. The AML consists of three scales: (A) aggressive-acting out behavior, (M) moody-internalized behavior, and (L) learning difficulties. The test-retest reliability of the A scale was .86, of the M scale was .80, and of the L scale was .83. The Brown IDS Self-Concept Referents Test, which assesses self-concept in young children was the second child measure utilized. The test-retest reliability for this measure was .71, for
black children, and .76 for white children. The Modified PIPS Test, which is a modified version of the Preschool Interpersonal Problem Solving Test was the third child instrument implemented and its test-retest reliability was .73. Unfortunately, the authors failed to provide the intervals for the test-retest reliabilities. They also failed to provide the internal consistency estimates for these measures.

The maternal instruments included the Demographic Information Questionnaire, which obtains personal information from each mother, and the Modified Child Rearing Practices Report (CRPR), which assesses parental child rearing attitudes and values and had a Cronbach alpha of .82. The test-retest reliability was not provided. The Internal-External Locus of Control Scale, which evaluates an individual's general tendency to attribute causation to internal or external sources, was also administered. Its test-retest reliability measures for time periods varying from one to two months and range between .49 and .83. Its internal consistency estimate was not provided. In addition, the Social Readjustment Rating Scale, which determines the existence of any stressful life events that mothers may have experienced during the last 12 months was used. Neither the test-retest reliability nor the internal consistency estimate were provided for this measure.

A series of step-wise multiple regressions were performed. Based on the analysis, it does not appear nurturance was a significant predictor of child moodiness or self-concept, relative to the other variables measured. The authors did report that mothers who tended to be less nurturant had children who were more likely to be shy and withdrawn in school, as well as less academically competent. The various nurturing behaviors consisted of spending time playing with their child, expressing affection, showing appreciation and trust, encouraging self-expression, and reasoning with the child to solve problems together. Atlas and Rickels reported that maternal nurturing behaviors foster a child's feeling of security and comfort.
Baumrind (1967) also studied parental nurturance and its effects on children. Baumrind studied childrearing practices associated with competence in young children by identifying a group of preschool children who were self-reliant, self-controlled, exploitative, and content. The childrearing practices of their parents were contrasted with those of parents whose children were discontent, withdrawn, and distrustful. They were also contrasted with those parents whose children had little self-control or self-reliance and tended to retreat from novel experiences.

Baumrind examined 3 to 4 year old children (N=32) chosen from children enrolled at the Child Study Center, Institute of Human Development, University of California Berkeley. The average I.Q. for the subjects was 123. Due to the fact that all subjects came from a upper-middle class area and more specifically from an elite University Child Study Center, the generalizability of these findings may be severely limited. However, it is important to note that Baumrind wanted to study middle-class children. Therefore, caution should be taken when generalizing these results to children from other socio-economic classes.

The method Baumrind used to chose the 32 children out of a sample of 110 children is notable. She and her colleagues assessed the 110 children along four dimensions: namely, self-control, approach-avoidance tendencies, self-reliance, subjective mood, and peer affiliation. Self-control refers to the ability of the child to handle his/her affairs in an independent fashion relative to other children his/her age. Approach-avoidance refers to the extent to which the child reacts to stimuli that are novel, stressful, exciting, or unexpected, by approaching these stimuli in an explorative and curious fashion. Self-reliance refers to the tendency to supress, redirect, inhibit, or in other ways control the impulse to act in those situations where self-restraint is appropriate. Subjective mood refers to the predominant affect expressed by the child with regard to the
degree of pleasure and zest shown. The last dimension, peer affiliation, refers to the child's ability and desire to express warmth towards others of his/her own age.

Nursery school teachers and an observing psychologist, with sufficient training, observed the children for 14 weeks. At the end of the period the teacher and psychologist, from each room, separately ranked the children on each dimension. Where the teacher and the psychologist disagreed about the placement of a child, the disagreement was resolved by a conference or the child was disqualified. Rater reliability was not provided. Those children who ranked in the higher or lower end of each dimension were then observed in a laboratory setting.

Three patterns of children were then selected in order that a set of hypothesis concerning the interacting effects of parental control, parental maturity demands, parent-child communication and parental nurturance could be tested. Children who were ranked high on mood, self-reliance, and approach or self-control were designated as Pattern I (N=13). Children who were ranked low on the peer affiliation and mood dimensions and were not ranked high on the approach dimension were designated as Pattern II (N=11). Children who were ranked low on self-reliance and low on self-control or approach were designated as Pattern III (N=8). Once the children were assigned to groups, Baumrind studied the children in more depth as well as the childrearing practices associated with the children's behavior. Unlike many other studies on parenting, this study did not rely solely on self-report measures. Baumrind examined the children and their parents through various measures including home observations. The multiple measures employed provide confidence that the construct validity of the study is acceptable.

A Q-Sort was devised to provide a means by which the psychologists could describe each child. It was found that Pattern I children were both socialized and independent. They were self-controlled and affiliative on the one hand and self-reliant,
explorative, and self-assertive on the other hand. They were realistic, competent, and content by comparison with Pattern II and Pattern III children. The difference between Pattern I children and children in the other two Patterns were far more pronounced than were the differences between children in Patterns II and III.

The parent-child interactions were assessed during home visits, structured observation, and interviews. Rater reliability for the parent-child assessments ranged from .90 to .76. The parents of Pattern I children were similarly discrepant from the other two groups. In the home setting, parents of Pattern I children were markedly consistent, loving, conscientious, and secure in handling their children. They respected their child's independent decisions but demonstrated a remarkable ability to hold to a position once they took a stand. Mothers of Pattern I children demonstrated firm control and demanded a good deal of their child. They were also more supportive and communicated more clearly with their children. Parents of Pattern I children balanced high nurturance with high control and high demands with clear communication about what is required of the child. Fathers of Pattern I children accepted a more important role in the disciplining of their children.

Pattern II children were significantly less content, more insecure and apprehensive, less affiliate toward peers, and more likely to become hostile or regressive under stress than Pattern I children. Parents of Pattern II children were, by comparison with parents of Patterns I and III children, less nurturant and involved with their children. They exerted firm control and used power freely, however they offered little support or affection. The mothers of Pattern II children expressed attitudes that were less sympathetic and approving. These mothers also admitted more to frightening their child than did mothers from the other two groups.
Pattern III children were lacking in self-control and self-reliance by comparison with children in the other groups. The parents of Pattern III children behaved in a markedly less controlling manner and were not as well organized or effective in running their households. They were self-effacing and insecure about their ability to influence their children. Neither parent demanded much of their child and fathers were lax in reinforcing their son or daughter. Some mothers from Pattern III children used love manipulatively by withdrawing love as an incentive for appropriate behavior from their child.

Although caution should be exercised in generalizing these results, this study indicates that parents who are more nurturing yet firm have the more competent and mature boys and girls.

Peterson, Southworth, and Peters (1983) also studied the effects of parental nurturance, among other variables. The researchers in this study examined the relationship between children's perceptions of maternal child-rearing behaviors and their self-esteem. The maternal child-rearing dimensions included loving, demanding, and punishing behaviors. Loving behaviors refer to nurturance, warmth, and support. Demanding behaviors refer to control, pressure for achievement, and explanation of rules. What the authors mean by punishing behavior is the use of arbitrary force or restrictiveness, coercion or power assertion.

The present study was part of a larger research project conducted in selected low-income rural areas in the southwestern region of the United States. The subjects were members of three different cohorts of low-income fifth and sixth grade students from 15 rural Appalachia schools from three different states. A total of 2,194 subjects were sampled in three cohort groups of 579 subjects in 1969, 845 subjects in 1975, and 770 subjects in 1978. Although the sample size was large, the subjects were all from low-
income areas and therefore caution is needed in generalizing the results to children from middle or upper classes.

The subjects were administered the Bronfenbrenner Parent Behavior Questionnaire (BPBQ), which measures a child's perception of maternal behavior. The BPBQ is a 45-item form, specifically developed for fifth and sixth graders. Loving, demanding, and punishing dimensions of maternal behavior were operationalized from the 45-item BPBQ based on the examination of this instrument with factor analytic procedures. Alpha reliability coefficients for the loving, demanding, and punishing dimensions that resulted from the principal components factor analysis were .81, .75, and .81, respectively. Test-retest reliability was not provided. The adolescent's self-esteem was operationalized via the administration of the Lipsitt Self-Concept Scale. This is a 22-item trait, 5-point scale, trait-descriptive instrument that measures the degree to which children assign positive or negative evaluations to themselves. The Lipsitt scale was administered to the three cohort groups in 1969, 1975, and 1978, internal reliability coefficients of .85, .84, and .85, respectively, were found. Although both were self-report measures it is presumed that the child would be consistent in his responses to each measure. Therefore, there is not a great concern in regards to the data collection in this study.

Correlational analyses were conducted for the three child-rearing dimensions and the children's self-esteem in both males and females in 1969, 1975, and 1978. The zero order correlations show that the loving and demanding variables were positively correlated, at the .05 level, with the children's self-esteem, with the exception of males in 1975, (1969: males; r = .34 & .14; females; r = .28 & .13, 1975: males; r = .44 & .02; females; r = .29 & .15, 1978: males; r = .35 & .16, females; r = .36 & .13), while the punishment variable demonstrated a negative relationship, at the .05 level, with the children's self-esteem (1969: males; r = -.29; females; r = -.38, 1975: males; r = -.30,
females; $r = -.21$, 1978: males; $r = -.16$, females; $r = -.10$). These results appear to support Baumrind's (1967) study, which included a different socio-economic class.

Burbach, Kashani, and Rosenberg (1989) studied parental bonding but from a different angle than the previous studies reviewed. Burbach et al. performed an exploratory study to determine whether a sample of depressed adolescents differed from demographically similar samples of normal and non-depressed psychiatric controls as a function of their perceived patterns of parental bonding.

The researchers interviewed 150 adolescent subjects, using the Diagnostic Interview for Children and Adolescents (DICA). The DICA is an orally administered structured interview used to diagnose common psychiatric disorders in children and adolescents, aged 7-17 years, according to the DSM-III criteria. Unfortunately, the researchers did not indicate where the original 150 subjects came from. The subjects were interviewed to determine a diagnosis, if applicable. Out of the 150 subjects 12 were considered eligible for inclusion in the depressed group: 5 met the DSM III criteria for dysthymia disorder and 7 met the criteria for major depressive disorder. Sixteen subjects were considered eligible for the non-depressed psychiatric control group. Of these, 12 met DSM III criteria for conduct disorder or oppositional defiant disorder. Other diagnosis included anxiety disorders and somatization disorders. Seventy-five of the original 150 subjects met the criteria for the normal control group.

The parent version of the DICA (DICA-P) was administered to the parents of the subjects. The DICA-P is identical to the DICA except that the items are written in the third person, in order to obtain parental information about their children's functioning.

All adolescent subjects were administered the Parental Bonding Instrument (PBI). The PBI is a written self-report instrument consisting of 25 items rated on a 4-point Likert-type scale. It is used to assess parental bonding, parental care and parental over-
protection. Test-retest reliabilities and internal consistency estimates were not provided for any of the measures used in this present study.

Once the measures were administered, a multivariate analysis of variance was utilized. The end results were that adolescents in the non-depressed psychiatric group perceived their parents as significantly less caring (mean = 20.80 for the non-depressed psychiatric group and 29.16 for the normal control group, p < .05) and significantly more over-protective (means = 17.00 vs. 11.92, p < .05) than did adolescents in the normal control group. Though non-significant, similar trends were also observed in the perceptions of depressed adolescents.

Although this study provides some interesting information, there are a number of concerns regarding its validity. First, there were only a small number of subjects in the depressed group (N=12) and in the non-depressed psychiatric group (N=16). Had they included a larger sample size, the results may have been more sensitive the possible differences between the groups, thereby strengthening the statistical conclusion validity of the study. The researchers failed to provide information on where and how the subjects were attained. They also failed to state the economic status and race of the subjects. This type of information is critical to determine the external validity of a study. A third concern involves the construct validity of the study. Adolescents diagnosed with conduct disorders or oppositional defiant disorders may perceive their parents very differently then those adolescents who do not suffer from such disorders. Therefore, it is important to exercise caution when interpreting these results.

Turner and Harris (1984) also studied the effects of parental nurturance on their children. Turner and Harris studied the association between parental attitudes toward child-rearing and preschool children's social competence. The authors refer to social competence as being related to successfulness of attempts to influence the behavior of a
peer, positive-active behavior, effectance motivation, and coping in superior ways in day to day situations. Further, social competence seems to be related to cognitive competence and affective and cognitive perspective-taking ability (Turner & Harris, 1984). The subjects were 47 children and their parents who came from a few preschool centers, most of which were located at or near a university. Although the subjects came from specific areas, they were from various socio-economic levels. Increasing the socio-economic variance broadens the external validity.

In this study, the parents were given two forced choice inventories regarding their child-rearing attitudes. These consisted of the Maryland Parent Attitude Survey (MPAS) and the An Altruism Measure (A1). The MPAS is a forced-choice inventory that measures general child-rearing attitudes with social desirability controlled. Its four scales describe attitudes as, Disciplinarian (D), Indulgent (I), Protective (P) and Rejecting (R). The reliabilities for the four scales range from .622 to .843. The A1 consists of five forced-choice questions constructed by the investigators. Unfortunately, the authors did not provide test-retest reliabilities for this measure. The parents were also given the A Child Rating Scale (CRS). The CRS was designed to assess the child's general social competence. It consists of 14 items in which children were rated on a continuum of one (almost all the time) to five (almost never).

The children were given the Peabody Picture Vocabulary Test (PPVT) to determine their I.Q. The PPVT is a well known test, used to measure intelligence. The children were administered the Brown IDS Self-Concept Referents Test to measure their self-concept. This measure involves taking a self-developing picture of the child and asking him/her 15 bipolar questions about the child in the picture (him/herself). The test-retest reliability was .74. Neither the test-retest interval was provided, nor the internal consistency estimate. The children were administered the Interpersonal Awareness Test...
(IAT) to measure their ability to empathize. The IAT consists of pictures accompanied by stories illustrating general and specific situations that might produce feelings for the child. Unfortunately, no reliability or internal consistency estimates were provided. The children were also administered the Altruism measure (A2) to determine the child's level of altruism. The children were given 25 cents and later were told they could donate a portion or all their earnings to help crippled children. No reliability scores were provided for the A2. In addition, each child's teacher completed a Child Rating Scale. An analysis of the Child Rating Scales revealed interitem reliability coefficients with alphas of .87 for the teachers, .81 for the fathers, and .82 for the mothers.

There were several intercorrelations among the parental attitude measures, the children's social competence measures, and the three Child Rating Scales. The results of this study demonstrated that parental indulgence and parental protectiveness was significantly correlated to their child's self-concept ($r = .47$, and $.31$, $p < .05$). Although not significant, parental indulgence was associated with higher scores on measures of the child's vocabulary, empathy, and altruism. The results suggest that children whose parents express attitudes consistent with positive, nurturing aspects of child care rather than more negative, restricting ones may indeed feel better about themselves. Parental nurturing attitudes were positively associated with a number of behaviors which could be considered as measures of various aspects of preschool children's social competence (i.e., greater generosity, and more accurate recognition of other's emotions). Parental disciplinarian and rejecting attitudes were negatively associated with preschool children's self-concept ($r = -.30$ and -.39, $p < .05$).

A concern with this study involves the possible drop-out rate. Unfortunately the drop-out rate was not reported and therefore it is difficult to determine if it might have
impacted the results. This is not to say the results are not valid, rather, caution is needed in their interpretation.

The last study relating to nurturance was conducted by Buri, Kirchner, and Walsh (1987). This study examined the relationship between adolescent/young adult's self-esteem and parental nurturance. Subjects were recruited from a pool of 81 students from a co-educational, liberal arts college in the northern Midwest. The students were white, predominately Catholic, and generally from a middle-class background. The subjects were asked to solicit the participation of their parents. There were several parents who declined to participate, and an additional 7 subjects were eliminated due to divorced parents. The remaining subjects eligible to participate in the study included 31 females and 33 males. These 64 subjects and their parents completed several questionnaires.

The subjects were first administered a parental nurturance questionnaire. Concepts and items relating to parental nurturance were derived from several sources and were used to construct 24 statements that would allow an individual to appraise the nurturance received from his or her mother and father. The test-retest reliabilities for the 5-point Likert scale, over a two-week interval were .92 for mother's nurturance and .94 for father's nurturance. Cronbach's coefficient alpha values were .95 for mother's nurturance and .93 for father's nurturance. Next, each of the college-aged participants and their parents completed the Tennessee Self-Concept Scale. The test-retest reliability was .92. Finally, the Waring Intimacy Questionnaire was completed by the mother and father of each student. This last questionnaire addressed marital intimacy. Test-retest reliabilities reported were .70 for females and .83 for males. Neither the test-retest interval was given, nor the internal consistency estimate, for these measures.
The results from this study indicated that only two of the variables were significantly related to adolescent/young adult self-esteem. These were mother's nurturance ($r = 0.486, p < 0.001$) and father's nurturance ($r = 0.482, p < 0.001$).

The main concern regarding the validity of this study is the sample population used. First, all subjects were drawn from a liberal arts college in the Midwest. This specific location does not provide much geographical diversity among subjects. In addition, all subjects were white, predominately Catholic, and from intact families. Most were middle-class. Again, ethnic and socio-economic diversity was also lacking. Therefore, there is concern regarding the external validity of this study and caution should be taken when generalizing these results.

Another concern with this study relates to the data acquisition. Self-report measures were the only means utilized to gather information.

Despite the few concerns reported for this study, the results of this study are still potentially useful. They provide additional support for how parental nurturance correlates with self-esteem in children, even into young adulthood.

The studies presented in this section combine to provide valuable support for parental nurturance. The most prevalent pattern found among the studies is that parental nurturance provides positive results. Parents who provide their children with adequate nurturance have better adjusted children than parents who do not.

**Parenting Style**

The second aspect of parenting to be considered is parenting style. There are many styles of parenting. The three most common styles referenced in the literature are permissive, authoritative, and authoritarian. Permissive parents are tolerant and accepting toward their child's impulses, use as little punishment as possible, make few demands for mature behavior, and allow considerable self-regulation by the child (Dornbusch, Ritter,
Leiderman, Roberts, & Fraleigh, 1987). Because Baumrind's (1966) definitions for authoritarian parenting and authoritative parenting are so complete and often quoted her definitions will be cited in their entirety:

The authoritarian parent as she is generally described in the literature attempts to shape, control, and evaluate the behavior and attitudes of the child in accordance with a set standard of conduct, usually an absolute standard, theologically motivated and formulated by a higher authority. She believes in inculcating much instrumental value as respect of authority, respect for work and respect for the preservation of order and traditional structure. She does not encourage verbal give or take, believing that the child should accept her word for what is right.

The authoritative parent as she appears in my studies also attempts to direct the child's activities but in a rational, issue oriented manner. She encourages verbal give and take, and shares with the child the reasoning behind her policy. She values both expressive and instrumental attributes, both autonomous self-will and disciplined conformity. Therefore, she exerts firm control at points of parent-child divergence, but does not hem the child in with restrictions. She recognizes her own special rights as an adult, but also the child's individual interests and special ways. The authoritative parent affirms the child's present qualities, but also sets standards for future conduct. She uses power to achieve her objectives. She does not make her decisions on group consensus or the individual child's desire. In addition, she does not regard herself as infallible. (p. 890)

There is much more to discipline than just fitting into one of the three styles presented. Being sensitive to the child's developmental stages in regards to discipline is also very important. Baumrind (1980) stated that the most effective parents regard their parental rights and obligations as complementary to the duties and rights of their child.
She believes authoritative parents see the balance between the rights of parents and those of children as a changing function of the child's state of development. For instance, Baumrind (1966) stated that by early adolescence, power cannot and should not be used to legitimate authority. She believes the young person at that age is capable of formal operational thought. She believes the adolescent can formulate principles of choice in order to judge his/her own actions. This concept correlates well with the fourth aspect of parenting to be discussed later, parenting in regards to individual differences.

The following studies examine the various disciplinary styles of parenting and how these styles effect children.

The first study on discipline to be examined is by Baumrind and Black (1967). In this study, Baumrind and Black studied parent attitudes and behaviors in relation to dimensions of competent behavior in normal pre-school children. The subjects in this study were 95 pre-schoolers and their parents. The sample came from the same pool as did the first study mentioned in the previous section (Baumrind, 1967). The same concerns regarding external validity exist for this study as for Baumrind's previous study.

The sample population consisted of middle to upper-middle class subjects with an average I.Q. of 123. The children were observed by trained psychologists over a three month period. A 95-item Q-sort was devised to provide a means by which the psychologists could describe each child. The psychologists focused on behaviors related to neurotic symptoms, mood and energy characteristics, self-control, perseverance, self-reliance, self-assertiveness, friendliness, and cooperativeness. The families were then observed by a different psychologist in each family's home. In addition, each parent was interviewed separately. After all the data was gathered, the psychologists rated the parents in regards to their child-rearing practices.
The results of this study show that consistent parental discipline was associated with independence and assertiveness in boys and with affiliativeness in girls. For boys, parental consistency was associated with likable, autonomous, imaginative, and confident behavior, and for girls with well-socialized, friendly, and dependable behavior.

As with Baumrind's previous study, the data gathering was exceptional. Several different approaches were used to gather information which provides for a sufficient degree of construct validity. The only caution to take with the results of this study is generalizing the data to other populations due to questionable external validity.

Baumrind (1972) also studied the effects of discipline on black children. She conducted an exploratory study of socialization effects on black children. The subjects of this study came from the same pool as did the subjects from the two previous studies conducted by Baumrind (1967) and Baumrind and Black (1967), that have been previously discussed. In the previous studies, families who met one of the eight sets of criteria were placed in the pattern (1-8) describing their style of child rearing. More than 80% of the white families could be placed in one of the eight patterns using these criteria (Baumrind, 1967). Using the same criteria, only one of the seven families of black boys could be placed in any pattern. This family was assigned to pattern I, Authoritarian (Not Rejecting). Families of black girls fell predominately into pattern VIII, designated Authoritarian-Rejecting. In Baumrind's (1967) previous study the data analysis for black families was based on the entire sample, which was predominately white. Therefore, the black families could be understood only in contrast with their white counterparts' norms.

The subjects in this study came from an elite University preschool. The subjects consisted of 16 black preschool children and their families. Again due to the limited amount of diversity among the subjects there is some concern regarding the external validity. There is also concern about the statistical conclusion validity because of the small
sample size. Baumrind mentions that the results are provisional and the purpose was to provide readers with the information in hopes of stimulating further research in the area.

The data from the preschool sample were obtained after a three month period of observation in the preschool which each child normally attended. Additional data was obtained from a structured situation which included the administration of the Stanford-Binet, which is a well known intelligence test. Data concerning the parents were obtained during two home visits of 3 hours each, followed by a structured interview with the mother and the father.

In order for the researchers to identify the special characteristics of black families when compared with white families, the researchers took the overall scores for the two ethnic groups and compared them. For boys, relatively few significant black-white differences appeared. Black boys were expected to behave in a more mature manner by their parents, and their fathers were more likely to encourage independent behavior. There were no significant black-white differences on the child behavior measures, although black boys tended to be less achievement oriented and more aggressive than white boys.

For girls there were some significant differences in child-rearing practices and attitudes. The parents of black girls, by comparison with those of white girls, did not encourage independence and individuality, or provide enrichment of the child’s environment. Fathers did not promote nonconformity and were authoritarian in their practices. Mothers practiced firm enforcement, were not passive-acceptant, and were somewhat rejecting. Black girls were expected to be more mature. The girls themselves were somewhat more dominant and less achievement oriented, but not to a statistically significant degree.

Once the researchers obtained the data necessary, they were able to compare the effects of authoritarian upbringing on black and white girls. They were unable to compare
boys because their differences were not sufficiently significant. Black daughters of authoritarian parents, when compared with white girls, were significantly more domineering ($M = 58.2$ for blacks and $M = 46.0$ for whites, $p < .05$) and independent ($M = 54.9$ for blacks and $M = 44.8$ for whites, $p < .05$).

Adolescent academic success is another aspect of parenting style that has been studied by several people. Dornbusch et al. (1987) examined the relation of parenting style to adolescent school performance. The researchers wanted to develop and test the application of Baumrind's typology of authoritarian, permissive, and authoritative parenting styles in the context of adolescent school performance. In this study the researchers obtained their data from a questionnaire completed by 7,836 adolescents enrolled in six high schools in the San Francisco Bay area, approximately 88% of the total enrollment of those schools. The number of subjects in this study is worthy of comment. Although the study would be more valuable if the subjects were distributed across a variety of demographic areas, the number of subjects in this sample is impressive. The subjects were from various ethnic backgrounds, which strengthens the external validity. However, due to the fact that all subjects were from a specific geographical location, some caution should be taken when generalizing the results to other parts of the country.

The researchers also obtained information from parental responses to a family questionnaire mailed to the homes of each student. The questionnaire included questions regarding ethnicity, parental education, and family structure (who was present in the home). The family questionnaire also included 25 items that reflected one of the three styles of parenting: authoritative, permissive, and authoritarian. The reliability for these three quantitative indices of parenting styles were assessed using Cronbach's alpha. The alpha coefficients were .66 for the authoritative index, .60 for the permissive index, and .70 for the authoritarian index. For some of the students, the researchers were able to
obtain grade point averages. This allowed the researchers to assess the validity of the self-reported grades that were used as a dependent variable.

It was found that both authoritarian ($r = -.18$ for males and $-.23$ for females, $p < .001$) and permissive ($r = -.09$ for males and $-.17$ for females, $p < .001$) parenting styles, although weak, were negatively associated with grades. Authoritative parenting was positively associated with grades ($r = .08$ for males and $+.13$ for females, $p < .001$). Parenting styles generally showed the expected relation to grades across gender, age, parental education, ethnic, and family structure categories.

This study seems to support Baumrind's findings that authoritative parenting, in comparison to authoritarian and permissive parenting, had some positive influence on children's grades. The main concern, although not significant enough to minimize the results, is that the only data acquisition was via self-report measures. The measurement of parenting styles from data derived from the child's perceptions can create a potential problem. However, due to the large sample size this concern is minimized.

Steinberg, Elmen, and Mounts (1989) also examined authoritative parenting and academic success among adolescents. The sample for the study was composed of 120 families with a firstborn child between the ages of 11 and 16. The subjects were predominately white, socioeconomically heterogeneous, and from a variety of family structures (i.e. intact family, single parent family). Most of the data was obtained via self-report measures. The self-report measures included a revised version of the Child Report of Parent Behavior Inventory (CRPBI). The acceptance and psychological control subscales for the CRPBI had alpha coefficients in excess of .80. No test-retest reliability was provided. The CRPBI is a Likert-scale format report of parental disciplinary practices that yields separate measures for several aspects of the mother-child and father-child relationships. The purpose of this measure is to get the adolescents' perceptions of their
parents practices as well as their reports of their parents' use of behavioral control. The subjects also completed a Psychosocial Maturity Inventory. This measure assessed the adolescent's work orientation, which includes: work skills, aspirations for competent work performance, and capacity to experience pleasure in work, self-reliance, which includes independence, control over one's life, and initiative, and identity, which includes self-esteem concern for life goals, and internalization of values. The internal consistency alphas for work orientation, self-reliance, and identity were .78, .76, and .71, respectively. In addition, the researchers obtained the subjects' school grades as well as their achievement test scores from the California Achievement Test.

A path analysis, based on multiple regression coefficients, was performed. The analysis showed that two of the three aspects of authoritative parenting (psychological autonomy, and behavioral control) were predictors of grades at time two ($t = 1.96, B = .148, p < .05$, and $t = 2.01, B = .142, p < .05$). The third aspect of authoritative parenting, acceptance, was not significant. The information on parenting practices were obtained from adolescents' perceptions and not through objective observations of parent-child interaction. Therefore, the data provides us with results that those adolescents who "feel" their parents are accepting, democratic, and firm, out-perform those adolescents who perceive their parents as not having one or more of these attributes.

Lamborn, Mounts, Steinberg, and Dornbusch (1991) studied patterns of competence among adolescents from authoritative, authoritarian, indulgent, and neglectful families. The data for this study came from two self-report questionnaires administered to approximately 10,000 ninth through twelfth grade students attending nine high schools in Wisconsin and California. The schools were selected to produce a diverse sample in terms of ethnicity, family structure, socioeconomic status and type of community. The diverse sample provides this study with strong external validity. Once the self-report measures
were administered the students were then contrasted along four sets of outcomes: psychosocial development, school achievement, internalized distress, and problem behavior. The self-report measures examined the adolescents perceptions of their parents child-rearing practices.

The first self-report measure sampled demographic information (i.e., background information and current family information). The second measure contained many questions on parenting practices. Three factors emerged from the parenting style measure: acceptance/involvement, strictness/supervision, and psychological autonomy. The acceptance/involvement scale measured the extent to which the adolescents perceives his or her parents as loving, responsive, and involved. It had an alpha coefficient of .72. The strictness/supervision scale measured parental monitoring and supervision of the adolescent and had an alpha coefficient of .76. No test-retest reliabilities were provided. The psychological autonomy scale assessed the authoritativeness of the parents, however, the authors did not employ this scale in their analysis. The four sets of outcome variables were gathered via self-report questionnaires, with the exception of grade point average.

A four-way multivariate analysis of variance was conducted. Results indicate that adolescents who characterize their parents as authoritative, evidence the most positive levels of competence and adjustment. This group reported significantly higher academic competence (authoritative vs. neglectful, \( r = .107, p < .001 \); authoritarian, \( r = .073, p < .001 \); indulgent, \( r = .038, p < .05 \)), significantly lower levels of problem behavior authoritative vs. neglectful, \( r = -.130, p < .001 \); authoritarian, \( r = -.035, p < .05 \); indulgent, \( r = -.071, p < .001 \), and significantly higher levels of psychosocial development (authoritative vs. neglectful, \( r = .144, p < .001 \); authoritative, \( r = .043, p < .05 \); indulgent, \( r = .061, p < .001 \)) than adolescents from authoritarian, indulgent, or neglectful households. All correlations, although significant, were weak.
The main concern with this study is that most of the data came from self-report measures administered to the adolescents. There is concern that information provided by the adolescent may not have been accurate due to social desirability. However, due to the high number of subjects (N=10,000), these concerns are minimized. Note, however, that we are looking for patterns in the overall results across the studies, and these results are consistent with those of other studies on parenting style.

The trend among the studies presented on discipline is that an authoritative style of parenting produces children who are better adjusted in various aspects than children who are raised in an authoritarian or permissive parenting style.

**Parents as Role Models**

Parents as role models is the third aspect of parenting to be examined. Although it proved difficult to access studies on parents as role models, it is obvious that parent's behaviors play a very significant role in influencing their children. Children look to their parents to guide their own behavior. Kagan and Moss (1962) in their book *Birth to Maturity*, state that a mother acts as a model, and the ways in which she is perceived by the child determines many of the behavioral choices the child will make. Baumrind (1980) stated, "socialization is an adult-initiated process by which developing children, through insight, training, and imitation, acquire the habits and values congruent with adaptation to their culture" (p. 640). Adams (1985) reported that based upon social learning, adolescents acquire their identity through the identity status modeled by their parents.

A model is anyone who demonstrates a behavior that others observe (Dworetzky, 1981). Miller and Dollard (1941) stated that we are more likely to imitate those we admire. Therefore, parents are the most likely persons that a child would model his/her behavior after. Children spend a very significant amount of time with their parents and children tend to admire their parents a great deal. It is important that parents realize the
importance of their role in their child's life. Children model their parents' behavior in both positive and negative ways. In the first study examined below, the behavior being replicated across generations is unfortunately a negative one.

The first of three studies which examined parents as role models was completed by Simons, Whitbeck, Conger, and Chyi-In (1989). Their researchers studied intergenerational transmission of harsh parenting. For this study, a sample of 451 seventh grade students were recruited from all the seventh-grade classes, in eight counties in north central Iowa. A criteria for inclusion in the study was that both parents were present in the home. An additional criteria for inclusion in the study was the presence of a sibling within four years of age of the seventh grader. Slightly less than half of the seventh graders had families who met these criteria. Seventy-seven percent of the eligible families agreed to participate in the study. Families who participated in this study received $250 for their efforts, which translated into about $10 per hour for each family member's time. The families in this study lived on farms or in small towns. All of the families were White, with an annual income between zero to $135,000. The average annual income was about $29,000.

Each of the parents in the study completed several questionnaires focusing on issues such as parenting, psychological adjustment, self-concept, health, social support, and economic status. Both parents completed three Harsh Discipline Scales (HDS). The first two were in reference to their perceptions of each of their parents' level of harsh punishment and the third was in reference to their perceptions of their own level of harsh punishment. The HDS is a four-item, 5-point Likert scale. Its coefficient alpha was .73 for father's reports for their fathers and .70 for their mothers. Alpha was .78 for mothers' reports for their fathers, and .75 for their mothers. The coefficient alpha for parents evaluating their own parenting was .54 for fathers and .58 for mothers. The seventh
graders also completed a Harsh Discipline Scale in which they rated their mothers' and fathers' parenting. However, for the adolescent's HDS there was an additional item. This item asked the child to think about the time spent with their parent, over the previous month, and then determine how much of that time was their parent hitting, pushing, or shoving them. The coefficient alpha for this expanded HDS was .74 for reports about fathers' parenting and .70 for reports about mothers' parenting. The parents were also given a Commitment to Physical Discipline Scale (CPDS). This measure only consists of three items and has a coefficient alpha of .60 for fathers and .63 for mothers. The CPDS assesses the degree to which parents endorse the use of physical force to control and correct children. The Hostility subscale of the SCL-90-R was used as a measure of hostility. In the present study the alpha was .74 for fathers and .66 for mothers. There were no test-retest reliabilities provided for any of the measures administered. The parents were also asked about years of education and family income, as well as report their family's standard of living. Family members completed this assortment of questionnaires during two visits made to the home by project staff and as homework assigned between the two visits. Because there were very few items in the measures utilized, there is some concern as to the amount of data that was obtained.

The results of this study indicate that parents who perceive their own parents as being harsh, judged themselves to be harsh as well (father as harsh parents \( r = .26 \), mother as harsh parents \( r = .31 \), \( p < .01 \)). In addition, these parents' own children also perceived them to be harsh (grandparents as harsh parent \( r = .13 \), \( p < .05 \); and grandmother as harsh parent \( r = .21 \), \( p < .01 \)). This indicates that parents model parenting style to their children for succeeding generations.

It is important to use these results with caution. As mentioned previously, there is concern regarding the brevity of the questionnaires used in this study. There is also
concern about the data acquisition being accumulated via self-report measures alone. There is a possibility that the parents and/or seventh graders may have provided inaccurate information to protect themselves and/or their family members from child abuse reporting. However, due to the fact that both the seventh graders and the parents provided information, the researchers were able to compare the results to see if rater bias existed. In addition, there is some concern about the sample population. The subjects were all from a specific geographic location, were White, and predominately middle class. Therefore, there is little subject diversity. The external validity of this study is of some concern.

Although there are a number of concerns regarding the validity of this study, the findings should not be ignored. The results show that parenting style may be due to the modeling parents provide for their children.

The second study on parental modeling was conducted by Bandura (1965). Bandura examines the influence of the models' reinforcement contingencies on the observer's acquisition of imitative responses. The subjects in this study consisted of 33 boys and 33 girls who were enrolled in the Stanford University Nursery School. The children ranged in age from 42 to 71 months. The children were assigned randomly to one of three treatment conditions. Each condition consisted of 11 boys and 11 girls. The three conditions consisted of the model-rewarded condition, the model-punished condition, and the model no-consequence condition. Two adult males served as role models, and one female experimenter conducted the study for all 66 children.

There is some concern regarding the lack of subject diversity in this study. All children were from a prominent nursery school, which reduces the external validity of the study. The subjects were randomly assigned, which strengthens the study's internal validity. In addition, those who judged the children on their behavior were unaware of the treatment conditions to which the children were assigned, which also strengthens the
validity. There is concern, however, that the two role models were males. This may have impacted the response of the female subjects. It would be interesting to see if the results would differ if one of the models had been a female.

Each group observed a 5 minute film while they waited for the experimenter to take them to the playroom. The film consisted of an adult male model who acted aggressively towards an adult size doll. The subjects in the model-reward condition observed the model receiving candy for being a champion. The subjects in the model-punished condition observed the model being scolded and spanked for his aggressive behavior. The subjects in the no-consequence condition observed the same aggressive behavior but did not see the model receive a consequence at the end.

Once the children saw the film, they were taken to the play room, which had various toys, including the doll in the film. The children were observed and their behavior was judged. Comparisons of pairs of means by t-tests indicated that while the model-rewarded and the no-consequences groups did not differ from each other (M = .55), subjects in both of these conditions performed significantly more matching responses than children who had observed the model experience punishing consequences following the display of aggression (M = 2.20 and M = 2.25, p < .025). The results indicated that the children in the model-punished condition performed significantly fewer aggressive behaviors than did children in the other two conditions.

Later in the study, children in all three conditions were offered attractive positive reinforcers contingent on their reproducing the model's aggressive responses. The introduction of incentives completely wiped out the previously observed performance differences, revealing an equivalent amount of learning among children in the model-rewarded, model-punished, and no-consequence conditions.
Although these results do not specifically demonstrate that children imitate their parents and use them as role models, the results do indicate that children tend to imitate behavior they see which is rewarded. The results also indicate that children tend to learn behavior which has no consequences. It seems logical that if children tend to imitate behaviors they see, parents would logically be the most influential models available to children.

The last study in this section was conducted by Adams (1985). In this study the author attempted to determine if parents contribute to the positive development of their daughter's identity formation. This study included 45 families who's names were randomly drawn from a larger sample of 294 families in a longitudinal research project on identity and ego development. All families consisted of father, mother, and college-aged daughter. The families came from 14 different states and two foreign counties, providing considerable diversity among subjects, and therefore giving the study sufficient external validity.

The attrition rate for this project was approximately 10%. Originally 50 families were selected, but two families withdrew after losing a parent, and three families were unwilling to participate. The final sample was reduced to 45 families.

Participating families with all three participants agreeing to respond, were interviewed by phone with the aid of mailed questionnaires to assist them in answering the questions. Mothers, fathers, and daughters responded to all measures. On the childrearing measures, mothers and fathers reported perceptions of their own parenting styles, while daughters provided perceptions of both maternal and paternal behaviors.

The measures which were utilized in this study included The Objective Measure of Ego-Identity Status, which consists of 24 items that assess the overall ideological identity status of an individual. Subjects responded on a six-point Likert scale for each item.
test-retest reliabilities ranged from .71 to .93. Neither the test-retest interval or internal consistency estimates were provided.

The second measure Adams utilized was 38 items drawn from three different parent-child relations measures. This measure used a 5-point Likert scale. The internal consistency coefficients ranged from .83 to .94 across five subscales. Split-half reliabilities ranged from .83 to .94. Although the study used self-report measures, interviews were also utilized. In addition, all three family members completed the measures which provided the researchers with the opportunity to compare the results.

Female adolescents' ego-identity development was the dependent variable for this study. Adams provided highly descriptive definitions of all variables.

A median-split was conducted between female ego-identity development and parental identity status formation. A Chi-square analysis was utilized. It was found that more mature mothers and fathers had significantly more mature identity status daughters (chi-square = 28.46, p < 0.01). The results of this study indicate that mothers and fathers who are mature in their identity status formation are likely to have daughters with mature identities. Such findings suggest that identity achievement in parents is likely to provide, through role modeling behavior, a standard for their child's possible identity formation.

Although only three studies were examined investigating parents as role models, the results still provide important information. Overall, the results indicate that children imitate behaviors they observe. They not only imitate positive behavior (i.e., positive self-esteem), but also negative behavior (i.e., aggression). Because children imitate the behaviors they see and because children spend a great deal of time with their parents, it is important for parents provide their children with positive role modeling.
Individual Differences

The last concept that will be considered is the importance of parental awareness of individual differences among children. Mohar (1988) stated, "One recurring theme in innumerable publications relating to child development, child rearing, and discipline is that every child is a unique individual and should be treated as such by all caretakers in all situations" (p. 221). Thomas and Chess (1977) in their book *Temperament and Development* stated that goodness of fit, which refers to a good fit between a caretaker and a child, "results when the properties of the environment and its expectations and demands are in accord with the organism's own capacities, characteristics, and style of behaving" (p. 11). Therefore, parents need to adjust their parenting to their children's individual differences.

There is a great need for additional research in the area of individual differences. Only one article was found, although this does not mean other studies have not been performed in this area, which perhaps could be located under different topical headings.

This study was completed by Lee and Bates (1985). Their longitudinal sample consisted of 111 mother-child dyads. The sample included 50 girls and 61 boys from various socio-economic backgrounds. Early temperament was assessed at ages 6, 13 and 24 months via mother ratings on age-appropriate versions of the Infant Characteristics Questionnaire. At the 24 month follow up, each mother was given a Child Characteristics Questionnaire. The questionnaire consisted of 32 seven-point scales concerning such characteristics as the child's activity level, persistence in attention-getting, amount of crying and fussing, and overall difficultness. Unfortunately, the authors did not provide reliability coefficients for this measure. Once the questionnaires were completed, the mother-child dyad was observed at home during two observation periods each lasting 2 to 3 hours and scheduled several days apart. The observation system attempted to
encompass all child behaviors (verbal and nonverbal), and all possible maternal responses to a child's overture. In its final form, the system consisted of 65 descriptors of parent and child behaviors. The major categories of codes were affection, maturity demands, communication, interpersonal control, and child trouble behaviors.

The results of this study indicated that children whose mothers considered them to have difficult temperaments in infancy were more likely to be difficult at the age of 2. Both the 6-month and the 13-month difficultness ratings were modestly correlated with conflict outcomes in the two 24-month interaction-sequence variable in which maternal restraint of the child was prompted by either mild trouble (6-month, r = .18; 13-month, r = .19; both p < .03), or by approach to moderate/extreme trouble (6-month, r = .25; 13-month, r = .24; both p < .005). Compared to mothers of easier children, mothers of children who were perceived to have difficult temperaments were more likely to use more intrusive control strategies, which include restraining or removing their child (r = .23, p < .05), made fewer maturity demands (r = -.18, p < .05), gave in after initially resisting (r = .16, p < .05), and seldom explicitly gave the children choices between alternative behaviors (r = -.16, p < .05). This intrusive control may be indicative of an overall negative quality of the mother-child relationship. It is difficult to say which comes first. Is the mother's intrusive controlling behavior a response to her child's difficult temperament or is the child's trouble behavior a response to his/her mother's intrusive controlling behaviors? Most likely, a vicious cycle is established.

This single study indicates that a mother's response to her child may greatly affect the child's behavior. Children with more difficult temperaments need certain responses from his/her parent. Unfortunately, there were not enough studies identified on the topic of individual differences to provide confidence in the results or to show the importance of parents responding to their child as an individual. More research is needed in this area.
Summary

We can glean a great deal from the findings found in the studies on nurturance, parenting style, parents as role models, and individual differences. Each of the studies that was examined was unique in its own right. However, patterns among the results are also apparent. At some level, each study supported the results of the others.

The studies examined on nurturance provided overwhelming support that parents who provide adequate nurturance have better adjusted children than parents who do not. Some of the studies on nurturance, examined children's social competence, whereas others examined children's emotional adjustment. The end result was the same, children who received adequate nurturance were better adjusted than children who did not. The theme of "better adjusted children" indicates that adequate parental nurturance impacts children in a number of positive ways.

Because parental nurturance is such an important concept, further research is needed. It would be helpful to replicate some of these studies using more direct observations, rather than relying solely on self-report measures. In addition, new areas of study are needed in this area. The effects of parental nurturance on infants would be one example as would the role of nurturance in single parent families. Many of the studies conducted focused on children between the ages of two and seventeen. It seems logical that the effects of nurturance could be of paramount importance during infancy. Another area of nurturance that should be addressed is the effects of nurturance received as a child on adult relationships. Those who received adequate nurturance as children would probably be much better equipped to provide nurturance and compassion in their adult relationships (i.e., spouse). These are just a few ideas for future research in the area of parental nurturance.
The studies on parental nurturance were not the only ones that provided consistent results. The studies on parenting styles did the same. The common theme which emerged from the studies on parenting styles was that authoritative parenting produce better adjusted children than did a permissive or authoritarian style of parenting. Children raised under an authoritative style of parenting were not only more socially competent but were also more likely to achieve better grades than were children from the other two styles. Because study after study indicated that the authoritative style of parenting produced more positive results, it can be presumed that authoritative parenting is a significant determinant for producing emotionally healthy children.

Although there have been several studies performed on parenting styles, one of the areas lacking is the effects of parenting style on children across culture. This type of study would examine differences among minority groups. For example, Asian children may respond very differently to an authoritative parenting style than would Hispanic children. More direct observations are also needed in this area of study. Many of the studies examined used self-report measures as their only means of data acquisition.

The studies on parents as role models also provided valuable information. Unfortunately, there were fewer studies identified on role modeling compared to studies on nurturance and parenting styles. The results of the studies on role modeling indicated that children look to adults for guidance in their behavior. Children tend to repeat the behavior they see adults perform. Because children both respect and spend a great deal of time with their parents, parents are usually a child's most significant role model. The impact of this phenomenon can be observed across succeeding generations.

The results of these studies demonstrate the incredible potential of parental role models. Therefore, additional research in this area is greatly needed. Research with direct observation, on how parents serve as role models to their children is necessary. Past
research has focused more on the lines of "other" modeling but not specifically on parents as the model. It would be interesting to observe the effects of parents modeling their religious beliefs for their children. It would also be interesting to have documented results on the effects of parents' delinquent behaviors on their children. We frequently hear about a delinquent child's past including a delinquent parent. There are numerous other examples of how parent's behavior may greatly influence their children's behavior and further research could isolate the effects of these mechanisms.

The last aspect of parenting considered, individual differences, has even fewer research studies available. The result of the one study examined in this area of parenting indicated that knowledge of individual differences manifested in a mother's response to her child, may greatly impact the child's behavior. Children with more difficult temperaments may need different parenting responses than an easy to parent child. Because children are so individual, and therefore have different needs, it is important that parents respond to each of their children accordingly.

This one study could not confirm this hypothesis by itself and therefore more research is required in this area. It would be especially helpful for a study to be conducted which included families with two or more children with different temperaments. The results of such a study would probably confirm the hypothesis that children need to be treated as individuals because of their individual differences.

All four aspects of parenting: nurturance, parenting style, role modeling, and individual differences are critical factors to consider. The results of these studies support that each is important to the overall process of healthy parenting.
Discussion

From all of the information gathered, we can answer the question, "Does research support biblical principles of parenting? The answer is yes! God calls parents to demonstrate love and warmth (nurture) to their children (I Thessalonians 4:18, 5:11, Hebrews 3:13, 10:25). The research has shown that parents who provide their children with adequate nurture have healthier, better adjusted, more competent, and more confident children, than parents who do not provide adequate nurture.

God also calls parents to discipline their children (Proverbs 13:24, 22:15, 23:13-14). God's discipline is authoritative, it includes love, consistency, warmth, and limits (Proverbs 3:11-12, Hebrews 12:5-8, Revelation 3:19). The research in this critique shows that parents who provide their children with authoritative discipline produce children who are more competent and better adjusted.

Parents are not only to nurture and discipline their children but they are also to be good models for them (II Thessalonians 3:9). The research in this area indicates that parents are powerful role models and therefore need to model for their children the way they should go (Proverbs 22:6).

Lastly, God calls parents, through His modeling, to treat their children as individuals (John 20:19-31). God treats all of His children differently, depending on their needs and their willingness to respond to His discipline. Therefore, parents need to model God's behavior for their own children. The research presented in this review indicates that children have different temperaments and need to be treated accordingly.

Knowing that God is omnipotent, it is easy for Christians to conclude that His way is best. It is helpful, however, to see that empirical research on different aspects of parenting (God's general revelation) confirms what the Bible teaches (God's special revelation).
The research only confirms what Christian parents should already know. God has a plan for parents. As parents seek God's guidance, through His Word, they can begin to understand His desires for them to rear their children in a godly manner. Both parents and professionals who work with parents can use this information to enhance parenting skills.

I believe parenting is the most important job a person can have. This is especially true for Christians. Christian parents are obligated to raise their children according to God's standards. If children are raised in the way they should go, they will not depart from it (Proverbs 22:6). The way to do this is to look to God's Word.
REFERENCES


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