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THE FAMILY DIVERSION PROJECT:

EXPERIMENTAL EVALUATION OF AN INTERVENTION

FOR ABUSING AND NEGLECTING FAMILIES

By

Deborah Bybee

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ABSTRACT

THE FAMILY DIVERSION PROJECT:
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Despite a vast literature on the problem of child abuse, very little is known about effective treatment. In response to this gap in knowledge, an innovative intervention model was implemented and evaluated in an experimental field setting. The problem was conceptualized in social labeling terms: Families identified as abusing or neglecting were diverted from the labeling system of a protective services agency to the Family Diversion Project. Each diverted family received 18 weeks of intervention combining two strategies: behavioral contracting and family advocacy. Intervention was provided by trained paraprofessionals, interacting with family members in their homes six to eight hours per week.

The intervention model was evaluated within the context of an experimental design. Thirty-one families were referred to the project from a protective services agency: 16 of these were randomly assigned to the Family Diversion intervention; 15 were returned to Protective Services for treatment-as-usual. Repeated assessment of families through one-year follow-up allowed comparisons between groups and over time. Multiple measurement strategies (interview with parents, children, and intervention agents; archival records of Protective Services and court involvement;

school records; and home environment ratings) addressed a variety of potential intervention effects and allowed for assessment of convergent and discriminant validity of measures. Extensive process monitoring through interview and archival methods provided information about treatment fidelity and differences between the two intervention modalities.

Of 34 measures of intervention outcome, only four revealed significant Condition x Time interactions. All favored the Family Diversion intervention. Compared with Protectives Services treatment-as-usual, the Family Diversion intervention was significantly more successful in (a) decreasing children's levels of school absence, (b) decreasing children's negative school experiences, (c) decreasing children's conflicts with adults outside the family, and (d) increasing parents' levels of employment. Despite numerous significant differences in intervention process between the two treatment models, the Family Diversion intervention appeared no better than Protective Services treatment-as-usual in reducing further officially-labeled abuse or neglect: Approximately 50% of the families in each condition were re-reported to Protective Services during the 18-week intervention.

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Many others were essential to the completion of the project. The undergraduate paraprofessionals and interviewers showed remarkable creativity and perseverance in charting the unknown territory of a new intervention. The caseworkers and supervisors at Protective Services gave essential assistance: Without their faith in the venture, it could not have been done. The families involved in the project also deserve recognition: Their willingness to try something new made the project possible, and their feedback provided invaluable information.

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CHAPTER I

INTRODUCTION

Child abuse has existed as a phenomenon since the beginning of recorded history, but it has only recently been defined as a social problem demanding research and treatment efforts. Prior to 1962, when Kempe and his colleagues published their seminal article on "the battered child syndrome," child maltreatment was viewed as one of numerous problems of the poor, to be dealt with by the courts, welfare system, or private charitable organizations. When Kempe defined the phenomenon as a medical syndrome, however, child abuse became a legitimate social problem, worthy of public attention and resources. The number of child abuse articles in professional journals increased each year thereafter, starting with those in medicine, then psychology, social work, and sociology. Within two years of Kempe's article, all states had passed laws mandating professional reporting of suspected child abuse cases. In 1974, the federal government became involved with passage of the Child Abuse Prevention and Treatment Act. This legislation established the National Center on Child Abuse and Neglect; provided funds for demonstration projects in identification, prevention, and treatment; and mandated the development of state reporting and investigation systems. (As Hoffman [1979] and Nelson [1979, 1984] have described, this legislation process may have reflected extraneous political pressures as much as rational decision-making about the child abuse problem.)

In recent years, writers have begun to review the theory, research, and treatment efforts which have developed over the past 20 years. The state of knowledge in this field has prompted one writer (Zigler, 1979) to make the following observations:

> There is general agreement that theoretical and research efforts in this area remain primitive and rudimentary. . . . Given the embryonic state of research knowledge in the child abuse area, it is not surprising to discover the area more replete with myths than with well-validated facts. . . . The child abuse area appears to have its own mythology, with the myths' only claim to validity resting on the fact that they are so frequently repeated. (pp. 178, 181)

As Zigler and others have discovered, the mythology has rested on the erroneous assumption that "child abuse" is a clearly defined, discrete, measurable phenomenon.

Definitions

The difficulty of defining the phenomenon has remained the most basic problem in studying or treating child abuse. Numerous writers have discussed the complexities of this difficulty (Bourne, 1979; Gelles, 1982; Giovannoni & Becerra, 1979; Newberger & Daniel, 1979; Starr, 1979; Zigler, 1979), although few have offered useful solutions.

The range of phenomena defined as "child abuse" has been vastly expanded over the last 20 years. Kempe et al. (1962) first defined the term medically, as a fairly discrete pattern of broken bones, concussions, contusions, and other serious physical injuries inflicted by parental battering. As public attention to the problem grew, less extreme forms of physical injury were included until Gelles (1979) defined all use of corporal punishment (including spanking) as abuse. Meanwhile, as agencies were being created to deal with all "children in need of protection," other types of unacceptable parental behavior were included in the

definition: failure to provide for the material well-being of one's children (neglect), failure to protect one's children (inadequate supervision), failure to provide for the education of one's children (educational neglect), fostering delinquency (failure to control), and immoral behavior on the part of the parent (drug use or unacceptable sexual mores). Recent attention to the phenomenon of incest has led to the inclusion of various forms of sexual abuse in the definition. Further complicating the issue is an increasing awareness of emotional abuse and neglect, phenomena which promise to be much harder to define than physical maltreatment.

Researchers and theoreticians have not yet arrived at a consensus about which of the above phenomena should be labeled "child abuse." Many have limited their investigations to physical abuse, rejecting neglect, sexual abuse, and emotional mistreatment as diagnostically distinct. Some studies have employed Kempe's "battered child" definition, sampling from the families of hospitalized children (Ebbin, Gollub, Stern, & Wilson, 1969; Elmer, 1967; Kotelchuck, 1982; Lauer, 1974; Starr, 1982). Others have used broader definitions of physical abuse (Gelles, 1979; Gil, 1970; Kadushin & Martin, 1981; Light, 1973). Most of the theoretical work done in this field has sought to explain the etiology of physical abuse, although the exclusion of other forms of abuse from theoretical formulations has not often been explicit.

A radically different theoretical approach has been to define child abuse as "conditions which deprive children of equal rights and liberties and/or interfere with their optimal development" (Gil, 1973, p. 7). Using such a definition, Giovannoni, Conklin, and Iiyama (1978) identified numerous factors which cause far greater harm to larger numbers of

children than does physical abuse. From this analysis, they deduced that the salient issues in defining child abuse have been attributions of parental intent to harm their children, not the degree of danger to the children involved. Gelles (1982), in fact, found that professionals' labeling of various parental actions as "abuse" depended more on the parent's intent than on the extent of injury to the child. Giovannoni, Conklin, and Iiyama have argued that "abuse" and "neglect" have been legally defined as tools of social control and that these terms can have no utility for research. These authors proposed, instead, a reconceptualization of etiological questions to focus on "non-optimal child development" caused by a variety of factors including parental abuse.

Other researchers have differentiated between types of maltreatment on the basis of parental actions--acts of commission versus acts of omission--and have compared abusing with neglecting families (Burgess & Conger, 1978a, 1978b; Garbarino & Crouter, 1978; Smetana, Kelly, & Twentyman, 1984; Spinetta, 1978; Young, 1964). Egeland and Sroufe (1981) addressed emotional as well as physical maltreatment, studying four types of families: physically abusive, hostile/verbally abusive, psychologically unavailable, and physically neglectful. Giovannoni and Becerra (1979) made even finer differentiations, comparing nine types of child maltreatment. Polansky (1976) conceptualized abuse as lying on a continuum of adequacy of care, measuring the seriousness of maltreatment with his Childhood Level of Living Scale.

Much research has relied on operational definitions of abuse as officially labeled acts, using undifferentiated samples of families involved with protective service agencies or courts (Kempe & Helfer, 1972; Knight, Disbrow, & Doerr, 1978; Mash, Johnston, & Kovitz, 1983; Melnick &

Hurley, 1969; Perry, Doran, & Wells, 1983). The degree to which these samples have represented comparable populations is questionable, given the vagueness of the official labeling criteria.

Laws which prohibit abusive actions have left much room for subjective interpretation. As an example, the state of Michigan Child Protection Law has defined child abuse as "harm or threatened harm to a child's health or welfare . . . which occurs through nonaccidental physical or mental injury, sexual abuse, or maltreatment." Child neglect has been defined as "harm to a child's health or welfare . . . which occurs through negligent treatment including the failure to provide adequate food, clothing, shelter, or medical care" (Michigan PA 238-75).

As Giovannoni and Becerra (1979) have pointed out, the vagueness of state statutes relevant to child abuse has placed most of the burden of defining the phenomenon on the professionals charged with identifying it. In order to assess the degree to which these professionals share consensual definitions, Giovannoni and Becerra (1979) compared the views of social workers, pediatricians, police officers, and lawyers. Members of each of the professional groups were asked to rate the seriousness of a number of vignettes describing various types of child maltreatment. The authors found some general patterns of agreement, especially in regard to the perceived seriousness of more clearly defined types of maltreatment such as physical abuse and educational neglect. However, they also found high variability in perceptions of the seriousness of maltreatment in the forms of physical neglect, emotional mistreatment, inadequate supervision, and parental drug use. In a similar study, Gelles (1982) surveyed physicians, social workers, police officers, and school professionals. He discovered considerable variation among professions, with

agreement above 80% only on vignettes in which the intent of the parent was clearly to harm the child. These findings indicate that professionals, like researchers, have not yet developed a consensus about the definition of child abuse.

The failure to reach an agreement as to what constitutes the phenomenon has obviously been a major contributor to the primitive state of knowledge about child abuse. As Giovannoni and Becerra (1979) have pointed out, the lack of comparability of samples across different studies has hampered theoretical development and made it difficult for new research efforts to build on the findings of earlier ones. Moreover, the failure of many researchers to fully describe the definitional criteria used has made it impossible to assess the comparability of various samples. Additionally, evaluations of treatment efforts have produced results which cannot be replicated because neither the definition used to select samples nor the criteria used to determine treatment success were made explicit. As these authors have explained, evaluation results which cannot be replicated are useless for social policy decisions.

Incidence

The most fundamental policy decisions are usually based on rates of indicence of the social problem in question. In child abuse, the absence of clear definitional criteria has produced widespread disagreement on even this basic question. As one might guess, estimates of incidence have varied as a direct function of the definition used by the estimator. Gelles (1979) cited a number of national estimates based on a variety of definitions: between 365 and 5,000 deaths due to child abuse each year (depending on the criteria used for "cause of death"); between 30,000 and

60,000 cases of "battered child syndrome" each year; 167,000 cases of abuse known to community agencies in a given year; 500,000 cases of "abuse" (no specified criteria) each year. Viano (1977) has stated that 600,000 cases of abuse and neglect are reported each year and that 16,000 deaths each year are caused by abuse and neglect.

Gelles (1979), in reaction to the wide discrepancies among various estimates of child abuse rates, conducted a national survey of 1,146 parents to assess the self-reported frequency of parental violence toward children. Using a narrow definition of physical abuse but a broad criterion of seriousness, he found that 63% of the parents in his sample reported at least one episode of violence against a child during the preceding year. Specifically, 58% reported slapping or spanking; 41% had pushed or shoved their child; 13% had hit their child with an object; and 5% had thrown something at their child. More serious types of violence were reported less frequently: 3% had kicked, bitten, or hit their child with a fist; 0.1% had used a gun or knife against their child. Extrapolating these reported frequencies, Gelles estimated that between 1.4 and 1.9 million children were vulnerable to physical injury at the hands of their parents during 1975, the survey year.

One of the first projects undertaken under the Child Abuse Prevention and Treatment Act of 1974 was a national survey of incidence and severity of child abuse. The first complete survey revealed that 711,000 reports of abuse or neglect were made to the central registries of the 50 states during 1979 (American Humane Association [AHA], 1981). Approximately 40% of these were substantiated by protective services investigation. Two thirds of the reports alleged child neglect; one third concerned abuse. Over 90% of the injuries reported were minor (bruises,

welts, etc.); fewer than 10% were major (broken bones, serious burns, internal injury, etc.).

The authors of the AHA survey interpreted these official rates of report as a vast underestimate of actual abuse and neglect. Further, they noted a wide variation in rates among states, ranging from 0.65 to 6.83 per thousand total population; this they attributed primarily to wide variations in state laws and reporting procedures.

The most recent incidence statistics released by the Department of Health and Human Services indicated that nearly one million reports of child maltreatment were made to state central registries in 1982 (Heckler, 1984). This represented a 9.2% increase in reports over 1981 totals. The National Center on Child Abuse and Neglect has considered this number of reports an underestimate of actual incidence; Heckler placed the number of children maltreated in 1982 at 1.5 million.

Theories of Child Abuse and Neglect

Much of the research on child maltreatment has addressed the issue of etiology. Obviously hampered by the definitional confusion discussed earlier, much of this literature has suffered from serious methodological problems as well. Additionally, as Zigler (1979) has observed, research and theory in this field has been "circumscribed, isolated, and fractionated." Theoretical efforts in child abuse have often developed in isolation, both from other work in the field and from related areas of social and behavioral inquiry. Research efforts stemming from each of the several theoretical positions have generally addressed only the limited range of variables seen as important to the particular theory. Consequently, it has been impossible to evaluate the relative contributions

of the various factors thought to be important in causing child abuse.

The etiology of child maltreatment has been explored from a variety of perspectives. Psychiatrists and psychologists have traditionally searched for causes in the personalities and social histories of parent-perpetrators. More recently, developmental researchers have begun to explore the causal contributions of characteristics and behaviors of the child-victims of maltreatment. The possibility that children may in some way contribute to their own maltreatment--that the cause is not unidirectional--has led to new studies of the patterns of interaction within abusing and neglecting families.

Sociological inquiry into child abuse has also been approached from several perspectives. Traditional research has examined the role of situational stress in provoking child maltreatment. Societal theories have focused on cultural features which produce varying levels of child abuse and neglect. Very recent inquiry has explored the process of social labeling relevant to the child abuse problem. The inability of any of these theoretical perspectives to provide an adequate explanation of the phenomenon has led to the development of several ecological theories of child maltreatment, viewing causality as multidimensional and multidirectional and incorporating aspects of both psychological and sociological inquiry.

The major theoretical positions and research findings from each of the perspectives outlined above will be discussed in the following sections: (a) Parent-Focused Theories, (b) Child-Focused Theories, (c) Family Interaction Theories, (d) Situational Stress Theories, (e) Societal Theories, (f) Social Labeling Theories, and (g) Ecological Theories.

Parent-Focused Theories

Parental personality characteristics. The earliest and most pervasive notions about the etiology of child abuse have focused on the personality characteristics of abusing parents. The strong individual-differences tradition in psychology has produced a large body of literature describing personality factors which have been thought to correlate with abusive parental behavior. The basic notion, that qualitative differences exist between abusing and non-abusing personalities, has remained essentially unchanged over the past 30 years. The labels attached to those differences, however, have been modified over time.

Early writings in the field, published primarily in medical journals, posited the theory that child maltreatment stemmed from parental psychosis or severe neurosis (Spinetta & Rigler, 1972). By the late 1960s, however, perhaps as a function of broadening definitions of child abuse, most authors agreed that only a small minority of abusing parents could be described as psychotic (Kempe & Helfer, 1972; Steele & Pollock, 1968).

As the "psychotic" label was declining in popularity, other diagnostic categories were being developed to describe the personalities of abusing parents. In the clinical literature, a variety of personality characteristics have been linked to child maltreatment: poor impulse control (Spinetta & Rigler, 1972; Steele & Pollock, 1968), chronic aggressiveness (Curtis, 1963), high dependency needs (Kempe et al., 1962; Melnick & Hurley, 1969), low nurturance needs (Melnick & Hurley, 1969), inability to empathize (Knight, Disbrow, & Doerr, 1978; Melnick & Hurley, 1969; Spinetta, 1978), high anxiety (Perry, Wells, & Doran, 1983), low self-concept (Knight, Disbrow, & Doerr, 1978; Helfer, Schneider, & Hoffmeister, 1977), and emotional immaturity (Nathan, 1965; Dougherty, 1983).

The hypothesized relationships between these characteristics and abusive behaviors have come to form the basic operating assumptions for many child abuse treatment efforts. In his survey of professionals, Gelles (1982) found that parental personality variables constituted the top six factors thought to cause child abuse. Research supporting the existence of these relationships, however, has remained inadequate. Much of the evidence has come from informal clinical observations of abusing parents seen in psychiatric clinics or hospitals. Such evidence is open to a variety of criticisms stemming from questionable reliability and validity of observations, extreme sampling biases, and lack of normative comparison groups. The oft-cited psychiatric study by Steele and Pollock (1968) typifies this kind of research and exemplifies its limitations.

Within the last decade, more systematic research has addressed the issue of personality differences. The earliest of these, a 1969 study by Melnick and Hurley, compared 10 abusing mothers with a group of non-abusing mothers matched on socioeconomic variables. While this study marked a significant advance in sophistication, with its use of systematic personality-test observations and inclusion of a comparison group, its results were severely limited by other problems. The sample was extremely small and included only poor, nonwhite mothers who had seriously injured children under age three. Thus, the generalizability of findings was extremely limited. Additionally, the univariate statistics used were inappropriate for the number of comparisons made. Although the authors reported differences on 6 of 18 personality tests, only one of these was significant at the $p < .01$ level.

More recent studies of personality differences have suffered from similar limitations. Ongoing research by Schneider, Helfer, and colleagues at Michigan State University (Schneider, Helfer, & Pollock, 1972; Helfer, Schneider, & Hoffmeister, 1977; Schneider, 1982) has aimed at developing a personality test capable of screening parents for their abuse potential. Univariate tests have demonstrated significant differences between abusing and non-abusing parents on each of the five clusters comprising the Michigan Screening Profile of Parenting. However, multivariate O-type analyses have revealed a high degree of misclassification of parents on the question of abusive behavior.

Spinetta (1978) used a refactored version of Helfer's screening instrument to investigate differences between three groups of abusing and neglecting parents and three types of comparison groups. Univariate F tests showed significant differences were lodged in the comparisons of lower-class abusing parents and the middle-class and college student control groups. Few differences were found between the abusers and their matched lower-class comparison group.

Difficulties in predicting abusive behavior have led to efforts to use the Michigan Screening Profile of Parenting to identify parents at risk of developing "some sort of parent-child interaction problem" (Schneider, 1982, p. 158). Recent work has found that only one cluster--Emotional Needs Met (assessing parents' feelings of past and present emotional deprivation)--has significant predictive value. Schneider has reported that this cluster correctly predicts 75% to 100% of "problem families" when compared with samples of selected "good parents." However, it misclassifies 20% to 37% of the good parents as problems. In undifferentiated samples, it predicts only 30% to 75% of the problem families.

The screening device appears to be highly vulnerable to socioeconomic biases. Schneider has reported that it is correct in identifying problem families 30% to 35% of the time in middle class samples, 60% to 65% of the time in lower class samples, and 75% of the time in ghetto area clinics. The higher rates of predictability among lower class parents were likely the result of higher base rates, among lower class populations, of the types of problem-families against which the instrument was validated. Schneider has reported the problem-family base rate as 50% in lower-class groups.

Knight, Disbrow, and Doerr (1978) have reported preliminary results of another effort to develop a screening device capable of differentiating abusing from non-abusing parents. Their measurement strategies represented a considerable advance in sophistication over previous efforts, which had relied solely on self-reported personality questionnaires and projective tests. Knight and colleagues used several types of measurement techniques, including interviews, questionnaires, videotapes of structured parent-child interactions, and physiological response measures. From the large number of variables assessed by these techniques, the authors arrived at 17 empirically-defined factors which discriminated between 85 abusing/neglecting parents and a comparison group of 84 non-abusers. The average correlation between each of these factors and abuse was reported at $\underline{r} = .27$. Discriminant analysis revealed that the collective use of all 17 factors as predictors resulted in the correct classification of 67% of the validation sample.

The screening devices developed by Knight, Disbrow, and Doerr (1978) and Helfer and Schneider (Schneider, Helfer, & Pollock, 1972; Helfer, Schneider, and Hoffmeister, 1977; Schneider, 1982) are vulnerable to

serious errors in classification if used to identify potential child abusers. As various authors (Daniel, Newberger, Reed, & Kotelchuck, 1978; Kotelchuck, 1982; Light, 1973) have demonstrated, the use of imperfect instruments to predict a relatively rare event such as child abuse inevitably results in high rates of false positive classifications, or the misidentification of many parents as potential abusers. For example, using Schneider's most optimistic estimate of 75% sensitivity (true identification of problem families) and 75% specificity (true identification of good parents) and assuming 10% prevalence of problem families in the general population, one would be correct in classifying families as potential problems 25% of the time. In a population of 1,000, one would miss 25 true problem families and falsely label 225 good parents as problems. If a lower prevalence rate were assumed (as would be more realistic with narrower definitions of abuse), the rate of false positives would be dramatically higher. The utility of screening instruments in accurately identifying potentially abusive parents has yet to be demonstrated.

Despite the steadily improving sophistication of personality research in the area of child abuse, the state of knowledge has remained rudimentary. All of these studies have been flawed by several major problems. First, the samples of parents chosen for study have been seriously biased on a number of factors. Most have been drawn from clinical populations whose abusive behavior has been so extreme as to have resulted in a child's hospitalization or removal from the home or the parent's incarceration in a prison or psychiatric facility. In the two studies which have looked at less extreme samples drawn from protective service agency caseloads (Knight, Disbrow, & Doerr, 1978; Spinetta, 1978), "inappropriate"

parents were screened from study for unknown reasons. None of these studies has included parents whose abuse or neglect has affected a child over age five; the majority, in fact, have included only parents of children under age three. Additionally, the majority of these studies have been based on very small samples. Even Knight, Disbrow, and Doerr (1978), who assessed 85 abusing parents from 55 families, encountered sample size limitations in submitting their data to sophisticated multivariate analysis.

Second, all of these studies have been limited by inadequate or inappropriate comparison groups. Several of the studies have matched abusing and comparison group parents only on the ages of their children (Schneider, Helfer, & Pollock, 1972; Spinetta, 1978). Others have attempted to match on socioeconomic and ethnic variables (Melnick & Hurley, 1969; Knight, Disbrow, & Doerr, 1978; Perry, Wells, & Doran, 1983). All, however, have used radically different methods of recruiting parents in the two groups: The abusing parents have been officially identified and referred from hospital, clinic, or protective service agency populations; comparison group parents have been self-referred, voluntary participants recruited typically from nursery schools or well-child clinics. It should be expected that parents recruited in such dissimilar ways should display dramatic differences in motivation, perceptions about the testing situation, and anxiety about test performance. In fact, these extraneous differences in recruitment methods may have produced the reported differences between abusing and non-abusing parents on such variables as "fear of external threat" (Spinetta, 1978); "concern about being criticized" (Helfer, Schneider, & Hoffmeister, 1977), and anxiety (Knight, Disbrow, & Doerr, 1978; Perry, Wells, & Doran, 1983).

This last concern with extraneous differences exemplifies a third limitation which applies to all studies of differences between members of existing groups. No amount of careful matching can ever control for all the extraneous variables on which such groups may differ. The danger, of course, is that these differences will be interpreted as correlates of group membership or, worse, as causes of group membership. For example, as mentioned above, officially identified abusing parents may differ from comparison group parents on a number of variables as an artifact of dissimilar recruiting procedures. These differences may be discovered when the two groups exhibit significantly different responses on some variable, such as the physiological anxiety measures used by Knight, Disbrow, and Doerr (1978). Anxiety is then interpreted as a correlate of child abuse when it may, in fact, be simply a correlate of self-initiated versus agency-initiated participation in the research. Unfortunately, despite the correlational nature of such studies, differences have often been interpreted as causes of abusive behavior. Personality variables such as anxiety have come to be seen as causes of child abuse when, in fact, they may actually represent effects of the process of being identified as an abusing parent.

The basic problems discussed above are common to all cross-sectional studies of group differences. Longitudinal research which could identify pre-existing differences between abusing and non-abusing parents would provide more definitive knowledge about personality characteristics predictive of abuse. One such study (Vietz, O'Connor, Hopkins, Sandler, & Altemeier, 1982) involved assessment of risk through interviews conducted with mothers during their first prenatal hospital visits. A variety of factors, including personal adjustment variables, were used to identify

273 mothers thought to be at risk of abusing their children. Eighteen-month follow-up revealed a significantly higher rate of physical abuse, failure-to-thrive, neglect, and abandonment among the high-risk group than among a randomly selected comparison group. Analyses of the contribution of pre-existing parental personality characteristics to later abuse and neglect have not been reported. Full exploitation of these or similar prospective, longitudinal data could provide a considerable advance in the state of knowledge about parental personality characteristics and child abuse.

Parental history. Another set of theories about the etiology of child abuse has focused on the developmental histories of abusing parents. The most commonly-held developmental notions have viewed abuse as intergenerationally transmitted: Abusing parents themselves experienced abuse as children at the hands of their parents. Several theories have sought to explain such a pattern. From a cognitive perspective, abuse and neglect have been seen as the product of inadequate parenting skills, which, in our society, are basically learned in childhood, passed from one generation to the next (Spinetta & Rigler, 1972). From a social learning standpoint, abuse has been seen as a parenting behavior learned through modeling and reinforcement (Bandura & Walters, 1963; Costa & Nelson, 1978). In a psychodynamic framework, abusive behavior has been thought to derive from parental psychopathology produced by childhood experiences of abuse or neglect. A variety of mechanisms have been hypothesized to explain the intergenerational transmission of psychopathology: role reversal (Morris & Gould, 1963), in which abusing parents seek from their own children the love and nurturance which they did not receive in childhood; transference (Galdston, 1965), in which

abusing parents perceive their children's misbehavior as rejection similar to the rejection they experienced from their own parents; projection (Steele & Pollock, 1968), in which abusing parents invest their children with their own feelings of hostility, aggression, and worthlessness.

All of these theories rest on the basic assumption that the childhood experiences of abusing parents actually differed from those of non-abusing parents. A number of researchers have reported significant correlations between abusive parental behavior and childhood experiences of abuse (Helfer, Schneider, & Hoffmeister, 1977; Knight, Disbrow, & Doerr, 1978; Kotelchuck, 1982; Schneider, Helfer, & Pollock, 1972; Spinetta, 1978). Indeed, the relationship has been so often mentioned in the child abuse literature that it has become accepted as a basic etiological "fact."

Recently, however, this "fact" of intergenerational transmission has come under serious question. In a critical review of the relevant research, Jayaratne (1977) has concluded that there is no empirical evidence to support the existence of such a phenomenon. She focused primarily on the lack of appropriate comparison groups in the research on childhood experiences and on the lack of conceptual clarity regarding childhood abuse. Read carefully, most indices of childhood abuse have been broadly defined, including such vague concepts as "coldness," "rejection," and "emotional distance" to describe the childhood environments of abusing parents. Jayaratne noted that many studies have found a very low incidence of physical abuse in the histories of child abusers, a finding echoed by Gil (1970), who reported that only 11% of the abusing parents in his national sample recalled having been abused as children.

Somewhat higher rates of childhood abuse have been found among abusing parents in other studies. Among parents reported to state central registries of child abusers in 1978, 20.1% were listed as having a history of abuse as children (AHA, 1979). (It should be noted, however, that these reports were completed by protective service workers, instructed by materials from the National Center on Child Abuse and Neglect that childhood abuse in parents' histories is a good predictor of abusive parenting. The objectivity of these ratings may thus be questionable.) As Holmes (1977) has pointed out, no normative data on childhood experiences are available, so there is no way of knowing whether this rate of childhood abuse is equally common among non-abusing parents. Gelles (1982), noting that prevalence rates have often been compared relative to the dependent rather than the independent variable in studies of variables associated with abuse, presented his data differently. He found that 18.5% of the parents who reported that their mothers hit them more than twice per year in childhood also reported having used severe violence on their children in the past year. In comparison, 11.8% of those reporting that their mothers hit them twice or less per year reported severe violence against their children. The association, while significant, was much smaller than has been implied in theoretical formulations of child abuse etiology.

Parental history of childhood abuse (Perry et al., 1983), "lack of nurturing" (Vietz et al., 1982), or "unhappiness" (Kotelchuck, 1982) has been found to make significant but small contributions to the prediction of abusive behavior in multivariate studies. In the Perry et al. (1983) study, differences on childhood abuse between abusing and nonabusing parents were found only among mothers with less than high school

educations; no differences were discovered for fathers.

All research on intergenerational transmission of abuse has been retrospective. DeLissovoy (1979) found a high degree of unreliability in parents' self-reports of abusive incidents in their childhoods. Abusing parents who reported childhood abuse during interviews with social workers could recall far fewer abusive experiences during a research interview several months later. The reliability problems indicated by DeLissovoy's findings could have serious implications for the validity of research in this area.

Zigler (1979) has noted that relationships between abuse in childhood and abusive parenting behavior may be spurious correlations reflecting social-group differences in child-rearing norms. Families which are likely to be identified as abusive are also more likely to belong to social groups which condone the use of physical punishment in child-rearing. What has been interpreted as intergenerational transmission of abuse may actually be cultural transmission of child-rearing styles. The lack of adequate comparison groups in the research to date has not allowed this possibility to be ruled out.

In summary, theories explaining child abuse as a function of individual differences in parents' personality characteristics and developmental histories have been among the most pervasive in the field. Empirical research seeking to test these theories, however, has suffered from serious methodological limitations stemming from inappropriate comparison groups, small sample sizes, questionable reliability and validity of measurement, inappropriate statistical analysis, and imprecise conceptualization. Until the results of more sophisticated research become available, the causal relationships between parental characteristics and child abuse will remain unclear.

Child-Focused Theories

A relatively recent line of inquiry into the etiology of child abuse has focused on the characteristics of the child-victims of maltreatment. Abused children have been found to exhibit a high frequency of a variety of problems: prematurity or low birthweight (Elmer & Gregg, 1967; Klein & Stern, 1971); colic (Ounsted, Oppenheimer, & Lindsay, 1974); mental retardation (Morse, Sahler, & Friedman, 1970; Sandgrund, Gaines, & Green, 1974); hyperactivity (Friedman, 1972); chronic illness (Lynch, 1975; Soeffing, 1975); physical handicap or congenital defect (Soeffing, 1975); emotional disturbance (Green, 1968; Soeffing, 1975). Of all officially reported cases of abuse and neglect in 1978, 14.4% involved children described as having "special characteristics": The largest percentage were emotionally disturbed, followed by those who were mentally retarded (AHA, 1979). When compared with non-abused children, abused or neglected children have shown lower levels of cognitive functioning (Hoffman-Plotkin & Twentyman, 1984; Perry, Doran, & Wells, 1983); higher levels of aggressiveness, anger, and frustration (Egeland & Sroufe, 1981; George & Main, 1979); lower levels of social competence (Camras, Grow, & Ribordy, 1983; Gaensbauer, & Sands, 1979; Perry, Doran, & Wells, 1983); higher levels of negative or inappropriate affect (Egeland, Sroufe, & Erickson, 1983; Gaensbauer, & Sands, 1979). Recently, McCabe (1984) has found significant differences between various samples of abused and non-abused children on cranial/facial proportions: Abused children appear to have proportionally smaller heads and larger faces, a characteristic which may make them appear older than their chronological age. Additionally, the temperament style exhibited by a child has been thought to be related to abuse (Thomas, Chess, & Birch, 1968).

Milowe and Lourie (1964) characterized a number of the abused children in their study as having "difficult" temperaments which were highly resistant to change.

The research into characteristics of abused children has developed in the same individual differences tradition as the research on abusing parent characteristics. Most of the studies have also shared similar methodological problems: sampling biases, nonexistent or inappropriate comparison groups, measurement of questionable reliability and validity, and unsophisticated statistical analyses. The most serious problem, however, has stemmed from the cross-sectional nature of the bulk of this research. Without longitudinal data, it has been impossible to sort out the causal directions in the apparent relationships between child characteristics and abuse.

As a consequence of limited empirical data, several causal interpretations have remained tenable. The earliest explanations were that problems identified among abused children reflected the consequences of abuse. Mental retardation has been seen as the result of injuries inflicted by abusive parents (Brandwein, 1973), and various emotional and behavioral disorders have been seen as consequences of abusive parenting patterns (Egeland, Sroufe, & Erickson, 1983; Maden & Wrench, 1977). More recent findings of apparent pre-existing differences (higher incidence of prematurity, for example) among abused children have led to interpretations of child characteristics as causal factors in abuse. Several researchers have hypothesized that pre-existing problems such as "difficult temperament," colic, retardation, and physical handicaps make some infants particularly difficult to care for. Such problems have been seen as eliciting abusive or neglectful behavior from parents who become

frustrated when their efforts to soothe or care for a "difficult" child are unsuccessful (Green, 1968; Milowe & Lourie, 1964; Ounsted, Oppenheimer, & Lindsay, 1974). McCabe (1984) has hypothesized that physical characteristics may make some children look older than they are, prompting higher behavioral expectations from parents and eliciting anger when parental expectations are not met. Others have proposed that the parent's perception of a handicapped, sickly, or colicky infant as "imperfect" or "damaged" interferes with parent-infant bonding and leads to abuse (Elmer & Gregg, 1967).

Although such factors as prematurity and congenital defect obviously predate incidents of abuse, the causal relationship has not been clearly demonstrated. Klein and Stern (1971) pointed out that both congenital difficulties and abuse have been more frequently reported among poor families. They noted that correlations between these phenomena may be spurious, reflecting more basic differences in social class and resource availability. Indeed, two studies of low socioeconomic status families found no differences between abused or neglected and adequately cared-for children on prematurity, delivery complications, physical anomalies (Egeland & Vaughn, 1981) or post-natal infant risk (Gaines, Sandgrund, Green, & Power, 1978). Klein and Stern also mentioned the possibility that attitudinal or emotional characteristics of potentially abusing mothers may contribute as well to prematurity and congenital problems, producing other types of spurious correlations.

Other researchers have found that apparent relationships between child characteristics and abuse may be mediated by intervening factors. For example, hospital care practices that limit early contact between parents and premature or distressed infants have been thought to

contribute to abuse and neglect (Klaus & Kennell, 1976). Indeed, Fanaroff, Kennell, and Klaus (1972) found that this intervening variable--amount of contact between parents and premature infants during hospitalization--accounted for a large portion of the variance in later abuse. Similarly, societal attributions of causality and availability of social support may mediate the effects of child characteristics. Martin (1982) maintained that children with obvious congenital problems do not appear to be at higher risk of abuse. He suggested that parents of obviously abnormal children may quickly modify their expectations and easily recognize that childrearing difficulties are not a result of their inadequacy as parents. Additionally, he noted, parents of children with recognizable congenital problems receive much more institutional and agency support than do parents of children with hidden difficulties.

The last fifteen years have seen increasing awareness of the possible relationship between individual differences among children and abuse. This growing awareness has paralleled a general shift in child development research, which has increasingly emphasized the active, response-eliciting potential of newborn infants in contrast to earlier tabula rasa notions. The prevailing view, however, has remained that the majority of differences between abused and non-abused children reflect the effects of maltreatment rather than reveal the precipitators of it (Friedrich & Einbender, 1983). Egeland and Sroufe (1981), in one of the few longitudinal studies in this field, have reported that their data show a "pattern of declining function of maltreated children" over time. Their comparisons of four types of maltreated children (physically abused, verbally abused, emotionally neglected, and physically neglected) with a comparison group of adequately cared-for children showed no differences

at three, six, or nine months of age on a variety of measures of cognitive and emotional development. Some differences emerged at 12 months, and by 18 and 24 months, maltreated children looked significantly worse on several measures of emotional development and revealed significant progressive declines in cognitive development. Continuing differences favoring the comparison group on a variety of measures were found at 42 months and at 4.5 to 5 years (Egeland, Sroufe, & Erickson, 1983).

Although the research conducted by Egeland and his associates has provided some evidence of declining function among maltreated children, the causal implications have remained unclear. In the Egeland et al. study, determination of which children were being maltreated was made, in part, from the observations up to 24 months which were also used to assess intergroup developmental differences. Thus, it is possible that emerging child dysfunction could have predated and precipitated maltreatment or that dysfunctional child behaviors could have contributed directly to the identification of a child as maltreated.

The longitudinal research conducted by Vietz et al. (1982) reported very different developmental patterns. In this study, risk for maltreatment was determined prenatally, from the social and psychological histories of 393 prospective mothers. Vietz et al. found only one significant difference between high- and low-risk infants 48 hours after birth: Those in the high-risk group smiled less. At one month, there was again only one difference: High-risk infants cried twice as long as low-risk infants. At three months, they spent less time in positive vocalization. No differences between infants in the high- and low-risk groups were found at 6, 12, or 18 months of age. It should be noted that, in this study, <u>risk</u> of maltreatment, rather than verified maltreatment, was the

criterion for group membership. Only 19% of the high-risk group had been reported to a protective services agency for physical maltreatment during the first 18 months; 8% of the low-risk group had been reported. Although these different rates were statistically significant, it is quite possible that prediction error obscured existing differences between maltreated and non-maltreated infants. Further analysis of the data collected in this research, which included prenatal and periodic postnatal assessments of mothers and mother-infant interactions, should produce much useful information about the precipitators and effects of child maltreatment.

The longitudinal research described above has potential for contributing to knowledge about the relationships between child characteristics and abuse. Much research in this area, however, has had limited utility. It has been plagued by problems similar to those identified in the research on parent characteristics: sampling biases, inappropriate comparison groups, unsophisticated statistical analysis, and imprecise conceptualization. The most serious limitation of most of the research available to date has stemmed from its cross-sectional nature. The majority of the studies have investigated child characteristics after the child has been identified as having suffered abuse. Research of this type has been unable to address the basic question of causal direction: Did the abuse cause the difference or did the difference precipitate the abuse? Moreover, child differences have typically been investigated in isolation from other variables, such as parent characteristics and socioeconomic indicators. As noted above, the possibility of spurious correlations and complex interactions among these variables has remained highly tenable without adequate multivariate research. Until the results of longitudinal research addressing the large number of potential causal

factors become available, the role of child characteristics in abuse is likely to remain unclear.

Family Interaction Theories

Acceptance of the notion that children may be more than passive victims in their abuse has led to a new line of research into patterns of interaction within abusing families. This research has been based on the assumption that causality is multidirectional and interactive and has sought to investigate the reciprocal patterns of exchange which covary with child abuse. From this perspective neither parent characteristics nor child charactersitics are seen as "causing" abuse; rather, abuse is thought to grow out of the patterns of interaction between the two.

Much of the research into interaction patterns within abusing families has been reported by Burgess and Conger (1977, 1978a, 1978b) and Kimball, Stewart, Conger, and Burgess (1980). These researchers conducted in-home observational studies of 17 families in which abuse had been documented, 17 families with documented neglect, and 19 non-reported comparison families matched on structural and socioeconomic variables. They found significant differences between both the abusing and neglecting families and those in the comparison group but few differences between the abusing and the neglecting families. In general, there were lower frequencies of interaction, both physical and verbal, in the abusing and neglecting families than in comparison group families. These lower rates of interaction were observed between all dyadic types: parent-child, parent-parent, and sibling-sibling. The abusing and neglecting families also displayed a significantly higher proportion of negative interaction contacts between mothers and children and between siblings. Fathers in

these families were not found to differ significantly in the quality of their interactions with other family members. Lower rates of compliance with family members' requests were also found among the abusing and neglecting families.

Similar findings have been reported in studies of mother-child interactions in laboratory settings. Wasserman, Green, and Allen (1983), comparing 12 abusive and 12 non-abusive mothers in free-play interactions with their infants, found more negative and fewer positive maternal behaviors along with lower infant compliance among abusive dyads. Mash, Johnston, and Kovitz (1983), observing mothers and pre-school children, found more directive behaviors from the 18 abusive mothers in a task-completion situation but no differences in child behaviors. Robison and Solomon (1979) observed that abusive mothers and their children were less responsive to each other than were non-abusive mothers and their children.

Crittenden (1981) found some evidence of congruence between maternal sensitivity and infant temperament in her observations of interactions within 78 dyads. All 17 mothers rated as sensitive had infants rated as cooperative. Of 16 mothers rated as neglecting, 81% had infants rated as passive; of the 16 mothers rated as abusive, 63% had infants rated as difficult; of 22 mothers rated as inept, 76% had infants rated as cooperative. Crittenden reported high levels of interrater reliability on her observational measures and a reasonably high degree of convergent validity on the ratings of maternal behavior: Observational ratings of neglecting and abusive behaviors showed 68% to 74% agreement with records of report to a protective services agency for abuse or neglect.

The family interaction research reported to date has been cross-sectional and has not addressed the issue of causal direction. Several

authors (Burgess & Conger, 1977, 1978a, 1978b; Parke, 1982) have concluded that the dysfunctional interaction patterns developed between parents in these families have been taught to the children.

Other investigators have concluded that the causal relationships are more complex. Patterson (1977) has described an escalating cycle of parent-child conflict which leads to abuse: Child misbehavior elicits parental coercive behavior, which elicits child defiance, which increases parental coercion, and so on. Burgess (1978) has suggested that such a pattern may be maintained by the reinforcing sense of power accompanying both defiance and coercion and by the compliance which results, at least temporarily, from the application of physical force. Steinmetz and Strauss (1973) have characterized the expression of aggressive feelings as cathartic and have hypothesized that the self-reinforcing release of tension following aggression is likely to lead to a maintenance or steady increase in level and frequency of violence in family situations.

Several researchers, viewing abuse as an interactional event, have begun to examine the situations and behaviors immediately surrounding abusive incidents. Kadushin and Martin (1981) conducted interviews with 66 parents who had admitted physically abusing their children. Content analysis of parents' descriptions of the events led the authors to conclude that each abusive incident started with a child behavior which the parent perceived as aversive. The parent then took some action to change the child's behavior and triggered further aversive response from the child (defiance or lack of compliance). This reaction increased the parent's attempts to change the child's behavior, and the situation escalated into abuse. Kadushin and Martin described more distant variables such as parental characteristics and family social situations as "latent,

inactive potentials for abuse" and noted that "the child's behavior serves to energize these factors" (p. 257).

Martin (1983) also examined the immediate contextual variables surrounding 830 cases of physical abuse reported to one state's protective services agencies. She found that the behavior of the child immediately preceding the incident was listed as a major precipitator of abuse in 90% of the protective services records. Defiance and aggression were the most frequently reported child behaviors preceding abusive incidents. Adolescent girls were most frequently abused after being verbally or physically aggressive or, by fathers only, when sex-related behavior or performance of household tasks had been an issue. Younger boys were more frequently abused, especially by mothers, after displaying overly active behavior. Martin concluded that parental expectations lead to the development of family rules for the use of violence against their children; these rules are modified in response to specific characteristics or behaviors of particular children at particular ages. In her view, violation of these family rules by a child can result in abusive incidents.

The research reported by Kadushin and Martin (1981) and Martin (1983), although intriguing, has been limited by several methodological problems. In the earlier study, parents interviewed were not representative of the population of abusing parents known to the protective services agency: By definition, they had admitted to physically abusing their children; further, only 35% of these agreed to be interviewed. Interviews were also retrospective, and selective memory processes could have affected parents' descriptions of the abusive incidents. In both studies, social desirability factors could have seriously biased parents' reports of the

incidents: Parents would seem much more likely to describe their behavior as "overdiscipline" in response to child misbehavior than to characterize it as random violence. Some corroborative data, perhaps from the children or other family members, would have been useful in assessing memory or social desirability problems, although information from these sources, too, could exhibit similar validity problems.

Research into family interaction patterns has been a very recent effort, and the potential for this type of investigation certainly has not been fully exploited. Results of comparative studies have been subject to the same limitations as the individual differences research discussed in the previous two sections: The sample sizes have been small, the conceptual clarity of the dependent variables questionable, the degree of confounding with extraneous variables unknown, and the statistical analyses univariate and unsophisticated. As discussed earlier, the most serious limitations of cross-sectional research into individual differences, including differences in family interaction patterns, can be addressed only by longitudinal, multivariate research. The data currently available have not made it possible to sort out causal direction: Do deviant family interaction patterns produce abuse or does abuse lead to disturbance in interaction? Nor, given the limited range of variables considered, has it been possible to examine the relative contributions of individual characteristics, interaction patterns, and other social factors to the phenomenon of abuse. The research examining immediate precipitators of abusive incidents appears to hold particular promise for understanding the dynamics of abuse, although it has not yet addressed factors distinguishing between interactions which lead to abuse and those which do not. This research has, however, made a substantial

contribution in suggesting that causation may be multidirectional and interactive and more dependent on situational context than had been previously assumed.

Situational Stress Theories

While psychologists and psychiatrists have looked to intra-individual variables to explain the etiology of child maltreatment, sociologists have focused on societal and cultural factors. Traditional sociological theories have viewed child abuse as a manifestation of family stress. A number of social conditions and events have been identified as stressors which may contribute to abuse: (a) economic factors, (b) crisis events, and (c) social isolation.

Economic factors. Poverty has been considered one of the strongest sources of stress and frustration in our society. The stresses of poverty have been attributed not only to the features of material deprivation--inadequate food and clothing, overcrowded and dilapidated housing, inadequate services and child care alternatives--but also to the powerlessness which accompanies poverty in a capitalistic society. These factors have been seen in a sociological context as producing high levels of stress and frustration which provoke aggression reactions within families (Gelles, 1976; Gil, 1977). Child neglect, defined as failure to provide for or protect one's children, has been related even more directly to the material deprivations of poverty (Polansky, 1976).

The question of whether rates of incidence actually vary across different socioeconomic groups has remained one of the most controversial issues in child abuse. Many researchers have found that a disproportionate number of abusing families fall within the lower socioeconomic

class (Elmer, 1967; Pelton, 1981; Young, 1964). Gil's (1970) study of cases of abuse officially reported during 1967 and 1968 has remained one of the most frequently-cited sources of evidence for this relationship. He found that over half the families in his sample had received welfare support during the two years prior to the alleged abuse. Light's (1973) multivariate reanalysis of Gil's data found that unemployment was the variable that most successfully discriminated between these abusing families and non-abusing populations. Seaberg (1980), however, has criticized Gil's sampling methods, maintaining that he over-sampled from large urban areas, thus over-selecting poor, nonwhite cases of abuse. In reanalyzing Gil's data in a path analytic framework, Seaberg found no direct relationship between income and severity of abuse. Indeed, Seaberg was able to account for so little variance in abuse severity with a number of potential predictors that he concluded, "It is not clear to this investigator that physical child abuse is not indeed a random phenomenon with no prescribed patterns in terms of demographic or mental or social adjustment characteristics" (p. 82). It should be noted, however, that his reanalysis involved rated severity of abuse and not its simple occurrence.

Garbarino and Crouter (Garbarino, 1976; Garbarino & Crouter, 1978) have investigated the relationships between economic variables and child abuse rates across several levels of geographic units. In the earlier study, officially reported rate of child abuse in each of the counties of New York was correlated with socioeconomic indicators for those counties. General economic indices (percent unemployed, median income of all families, percent of families with incomes under 125% of the poverty line) were found to account for 9% to 16% of the variance in county child abuse rates in three five-month periods. Indicators felt to relate more

specifically to the economic conditions of mothers (percent of women in the labor force with children under age 18 and median income of female-headed households) accounted for 27% to 36% of the variance in child abuse rates. The second study examined relationships between these variables across subunits of one Nebraska county and included some additional demographic and attitudinal variables. In this study, economic indices were found to account for 38% of the variance in child abuse reports among the 93 census tracts. The authors concluded that "rates of maltreatment vary directly as a function of these [socioeconomic] influences" (Garbarino & Crouter, 1978, p. 613). Spearly and Lauderdale (1983), in a similar study concerning maltreatment rates in Texas counties, were able to account for a much smaller proportion of variance (less than 10%).

Findings of relationship between economic factors and abuse have been open to criticism. Most research currently available has investigated the socioeconomic characteristics of officially identified abusing or neglecting families. As several authors have pointed out (Newberger & Daniel, 1979; Garbarino & Crouter, 1978; Zigler, 1979), poor families are more likely to become officially identified as abusive. Poor families are more frequently in contact with the public social service agencies which officially label child abuse, they have fewer private resources (physicians, lawyers, private therapists) to protect them from becoming identified, and they are less able to maintain the degree of family privacy which may prevent the abusive acts of the middle class from being observed. Moreover, the widespread notion that the poor are more likely to abuse their children may contribute to the likelihood that a poor child's injuries will be termed "child abuse" while the same injuries in a middle class child would be called an "accident." Obviously, if

these factors contribute to substantial reporting bias, the relationship between income and abuse is spurious, reflecting class differences in labeling rather than class differences in child abuse. Newberger (1983) cited research evidence revealing such biases in reporting by hospitals. Newberger and Hampton analyzed 805 cases of hospital-identified abuse and neglect to determine variables related to report of cases by the hospital to a protective services agency. Family income was found to be the variable most strongly predictive of report; injury severity was not related to report of the incidents.

Garbarino and Crouter (1978) attempted to address this possible confounding by examining the sources of child abuse reports. They divided reports into those from "close" sources (relatives, friends, and neighbors) and those from "distant" sources (hospitals, schools, agencies, law-enforcement officials), hypothesizing that distant sources would reveal bias in the direction of higher reporting of poor families while reporting by close sources would not be biased by socioeconomic factors. Their analysis revealed that economic variables accounted for equivalent portions of the variance among census tracts in rates of reporting from both sources. The authors interpreted this equivalence as "reflecting the underlying inverse relationship between affluence and child maltreatment" (p. 612). An alternative interpretation, however, is that both close and distant reporting sources were equally biased, with friends and neighbors as likely as schools and agencies to report abuse in poor families more frequently than in middle-class families. Research by Giovannoni and Becerra (1979) would appear to support this contention. They found that poor, less educated, minority respondents viewed all types of child maltreatment as more serious than did white, middle-class

respondents. Since poor families are more likely to have poor friends, neighbors, and relatives, they may be more open to surveillance by people who view child maltreatment as a particularly serious act and who are likely to report suspected abuse. Thus, close as well as distant sources may yield reporting rates that are biased against the poor. Garbarino and Crouter's data were inappropriate to assess such bias.

The question of whether poverty actually causes a higher incidence of child abuse or merely causes a higher incidence of reporting has remained unanswered by research investigating officially reported and identified cases of child maltreatment. Research utilizing self-reports of abuse and neglect might shed some light on the issue, although different biases stemming from class differences in social desirability responses and other factors could also confound such investigation. Gelles (1980) included socioeconomic variables in his national survey on family violence against children. He did find an inverse relationship between income and use of physical force against children, with the highest rates of "abusive violence" reported by families with incomes less than $6,000 per year. However, he also found reported violence against children in 15% of families with incomes between $6,000 and $20,000 and in 11% of families with incomes above $20,000. Additionally, he found rates of violence 62% higher in families with unemployed fathers than in families in which the father was employed. It should be noted that Gelles used a very broad definition of physical abuse and that his sample included only families with a male and a female parent in the home and with at least one child between ages 3 and 17. Single-parent families and those with infants only were excluded from study.

To summarize, the issue of poverty and child abuse has remained problematic and controversial. Most research has indicated a significant relationship between the two, although alternative explanations of class-biased official reporting and potentially class-biased self-reporting have remained plausible. Several authors have explained the controversy as an artifact of political agendas surrounding the 1974 Child Abuse Prevention and Treatment Act. Nelson (1984) and Pelton (1978) have described the process by which support for the bill was obtained by disassociating the child abuse issue from unpopular poverty programs. The disassociation required the promulgation of the "myth of classlessness," a notion which Pelton (1978) has seen as damaging to research and treatment efforts in the field. From data currently available, the status of the "classlessness" notion--as myth or reality--has remained indeterminate.

Crisis events. While most authors have agreed that ongoing adverse conditions such as poverty involve high levels of stress, others have suggested that changes in the circumstances of one's life may involve higher stress levels. Viewed in this way, a change in economic status, even a change from lower to higher income, would be stressful because it would require adaptive behavior change. Ongoing poverty, on the other hand, would be stressful only if it necessitated frequent adaptation to changing circumstances. In this context, child abuse has been seen as a function of life crises necessitating behavioral adaptation (Justice & Duncan, 1976).

A number of life crises have been found to correlate with incidents of abuse: parental separation or divorce (Ebbin, Gollum, Stern, & Wilson, 1969), change of residence (Gil, 1970l Lauer, 1974), parental loss of

employment (Galdston, 1965), parental illness (Elmer, 1967). Several research efforts have focused on relationships between stress-provoking life events and incidents of child abuse. Justice and Duncan (1976), using the Holmes and Rahe Social Readjustment Rating Scale (1967), found that abusing parents had experienced significantly greater levels of stress than a comparison group of non-abusing parents. Egeland, Breitenbucher, and Rosenberg (1980) used a modified version of the Holmes and Rahe scale designed to be more appropriate for low socioeconomic status respondents and to reflect the salience of potentially stressful events to family functioning. As part of their longitudinal research on mother-infant interactions, they chose two extreme subgroups of their total sample: 33 women who were providing excellent care to their infants and 32 women providing inadequate care (i.e., neglect and some physical abuse). They found that the two groups differed significantly in mean life stress scores, indicating some relationship between stressful events and inadequate care. However, the relationship was not particularly strong: The distributions of life stress scores were not significantly different for the two groups, and the authors noted that no meaningful critical stress score could be defined to distinguish the excellent from inadequate care groups. Life stress was found to be a significant predictor of group membership in a discriminant function analysis, but its contribution to prediction was small in comparison with a variety of mother-infant interaction variables. Egeland and colleagues concluded that life stress was a significant causal factor in child maltreatment but that its effects were mediated by a number of other variables, including mother's competence, infant characteristics, and social support.

Gelles (1980), using the Holmes and Rahe scale in his national survey, found the effects of life stress mediated by income level. He observed no relationship between life stress and physical abuse among families with very low incomes or among those with high incomes. However, he did discover a relationship among families with mid-level incomes. He concluded that stress was already high among poor families, and that the added effects of particular life events would not appreciably alter their perceived stress levels. High-income families, on the other hand, could counter stressful life events with monetary resources. Mid-level families, without monetary reserves and vulnerable to the effects of transitory stress, would be most likely to respond to life stress with physical abuse of their children.

In recognition that similar life events may not be equally stressful for all parents, Perry, Wells, and Doran (1983) assessed the self-rated impact of a variety of potentially stressful events on the lives of abusing and non-abusing parents. This variable, perceived stress provoked by various life events, revealed differences between the two groups of families. However, the relative contribution of this variable to the prediction of group membership was not assessed. Additionally, pre-existing group differences on parent education may have been confounded with perceived life stress differences.

The relationship between life crises and child abuse has not been adequately explored in the research available to date. Thus far, most studies of these factors have used small samples, cross-sectional designs, extreme comparison groups, retrospective measurement techniques, and generally unsophisticated analyses. These limitations have left the research open to the same types of confounding that were discussed earlier

in regard to other kinds of individual difference investigations. Until the results of well-designed, multivariate, longitudinal research become available, the relationship between life crises and child abuse will remain speculation.

Social isolation. The absence of social support systems has been seen as another important source of stress contributing to child abuse. The hypothesized relationship between social isolation and abuse has been explained in three ways. First, social isolation has been seen as a direct source of stress, contributing to the expression of underlying psychological disturbances (Spinetta & Rigler, 1972). Second, social support has been viewed as an important mediator of the stresses caused by other factors, such as poverty and life crises (Kempe, 1973). Families without social support systems are more likely to react to stressful circumstances by maltreating their children than are those with adequate support. A third perspective has focused on the role of support systems in encouraging social conformity (Garbarino, 1977a, 1981). Socially isolated families receive little feedback from others as to the acceptability of their child-rearing practices and have few opportunities to observe and learn alternative methods of dealing with parental frustration. Abusive and neglectful situations are thus more likely to develop in families that are socially isolated.

A number of researchers have found evidence that abusing families are more socially isolated than other families. Young (1964) found, in her sample of children hospitalized as a consequence of severe abuse, that 95% of the parents reported no continuing relationships with others outside the family and that 85% did not belong to any organized groups. Lauer (1974), studying a similar sample, found that abusing families were

significantly more mobile than a comparison group of non-abusing families. Gil's (1970) study of officially reported incidents of abuse corroborated these findings, as did Light's (1973) reanalysis of his data.

Two recent multivariate studies examining variables which discriminate abusing from non-abusing families have found social support indicators to be significant predictors. Both studies have used samples comprised of young children (under age five) seen in hospital emergency rooms. Kotelchuck (1982) found social isolation to be the strongest discriminator of abusing versus non-abusing families. Although he did not report the magnitude of relationship between social isolation and abuse, he did claim that this variable, along with seven other predictors, was able to account for 47% of the variance in criterion group membership. Starr (1982) found several social support indicators to be significantly predictive of abused versus non-abused group membership: number of people visited, whether the family had contact with relatives more than once per week, and whether parents felt their frequency of contact with relatives was adequate. Again, no magnitude of relationship was reported, but Starr claimed 70% correct classification of families using these and seven other predictors.

As Belsky (1980) and Garbarino (1977a) have pointed out, the causal direction in the apparent relationships between social isolation and abuse has remained unclear. While isolation may contribute to abuse, as hypothesized above, it is also possible that parental personality or other family characteristics may cause both isolation and abuse. Several researchers have found some evidence for this latter explanation. Elmer (1967) found that parents of hospitalized abuse victims were high on anomie--distrust of and retreat from society. Garbarino (1977a) cited an unpublished study by Lenoski, which found that 81% of the abusing

parents preferred to resolve crises alone. Finally, it is possible that the existence of an abusive family situation may directly lead to social isolation, either through rejection of the family by social networks or through protective withdrawal by the family. In support of this latter notion, Young (1864) found that abusing parents actively prevented their children from forming relationships outside the family.

Research on the relationship between social isolation and child abuse has been plagued by the same methodological problems that have been discussed in regard to other etiological theories. The use of cross-sectional designs, with small and biased samples, inadequate comparison groups, and unsophisticated analyses has seriously limited the causal conclusions which can be drawn. Although there is widespread agreement that situational stress from such factors as poverty, life crises, and social isolation contribute to the problem, there has been little empirical demonstration of the etiological processes involved. Again, more systematic, multivariate, longitudinal research is needed.

Societal Theories

The etiological theories considered thus far have focused on the question of why some parents abuse or neglect their children--what individual differences (in parent or child characteristics, family interaction patterns, or social situations) covary with incidents of abuse. A separate line of inquiry has addressed a different question: What features of our society contribute to the existence of the child abuse phenomenon? From this perspective, child abuse is seen as culturally and societally determined, a feature integral to the norms of our culture and the priorities of our society.

David Gil (1970, 1971a, 1971b, 1977, 1979, 1981) has been one of the strongest proponents of this view. He has described a number of societal and cultural features which may contribute to the maltreatment of children. The first is the high value placed on individualistic competition in a capitalistic society. Gil has seen exploitation of the weak (e.g., children) and waste of resources (again, children) as endemic to such a system, which awards all spoils to the strong. He has argued that a competitive society fosters the belief that individuals are inherently weak and lazy and must be socialized to competition by external forces such as threats and punishment. Such socialization methods, he has theorized, breed individuals who are selfish and insecure as well as competitive. Gil has also noted that, given the nature of competition, many individuals lose while some win: The lives of the losers in a competitive society are characterized by frustration, insecurity, and stress. Public expression of these emotions has been discouraged; the family, however, has remained a relatively safe place in which to express negative feelings. Thus, in Gil's view, abuse of children within families has been a predictable feature of competitive societies.

A related second feature is the cultural view of childhood as a condition qualitatively distinct from adulthood. From such a perspective, children can be accorded fewer rights than adults and can be expected to exhibit greater levels of conformity and obedience than other members of society. The third feature contributing to the abuse of children is the degree to which force and violence are culturally accepted as legitimate means for resolving conflicts and maintaining conformity. Gil has hypothesized that, when physical force is condoned, especially in child-rearing, the abuse of children is likely to result. That a large

percentage of parents in the United States do accept and use physical force in child discipline has been reported in numerous studies (Elmer, 1982; Gelles, 1979; Steinmetz, 1977; What's happening to the American family, 1978).

Gil has argued that the abuse of children in our society has been demonstrated on three levels. Societal abuse has been manifested in an unequal distribution of rights and resources, precluding the optimal development of many children. Institutional abuse has been practiced by schools, day care facilities, residential institutions, and other settings in the form of corporal punishment, harsh disciplinary measures, and various levels of neglect. Individual abuse of children within families has been but one level of manifestation of the child maltreatment which has pervaded our society. Gil has attributed the maintenance of these abusive patterns to mutual influence between the three levels of manifestation. Societal norms allowing for global waste of children's potential have allowed institutional abuse to flourish, while institutional abuse by "experts" has served as a model for individual abuse in families. Similarly, the use of abusive child-rearing practices in families has led to acceptance of institutional abuse and has allowed the perpetuation of societal policies which have denied basic rights and resources to a substantial proportion of society's children.

Williams (1980) has seen sexism and pronatalism as substantial contributors to child abuse. In her view, women have had few options for personal "fulfillment" except motherhood. Women often become mothers prematurely, inadequately prepared for the task, because no other way of life has been made available to them. Further, Williams has noted, society has structured child-rearing as an isolated, unsupported activity

and has provided no routine help or respite to women engaged in it. Under such a structure, she has theorized, maltreatment of children would be expected. Breines and Gordon (1983) have echoed Williams' observations and have further pointed out that child abuse comprises the only form of violence perpetrated at roughly the same rates by women and men. (They also noted, however, that if these rates were adjusted for the amount of time spent with children, rates of abuse by women would be much lower than rates by men.) These authors have hypothesized that gender-based power inequalities which exist at both societal and family levels may have a large effect on child abuse.

Zigler (1979) has also seen cultural factors such as the isolation of nuclear families, the unequal distribution of resources inherent in capitalism, and the acceptance of violence in child-rearing as major determinants of child abuse. In particular, he has cited the widespread acceptance of corporal punishment in the schools as evidence that our society condones and even encourages the physical abuse of children. He predicted increased abuse following the 1977 Supreme Court decision in the Ingraham versus Wright case, which ruled that students' civil rights were not violated by the school's use of severe corporal punishment. Rates of reported abuse have risen each year since this decision (AHA, 1981; Heckler, 1984); concurrent changes in definitional criteria and reporting practices, however, have made it impossible to link these increases to any particular precipitator.

Research pertaining to the "cultural violence" theory of child abuse has been reviewed by Parke and Collmer (1975). They cited a variety of cross-cultural studies linking such indicators of cultural violence as homicide rates, assault and battery rates, suicide rates, and levels of

violence on television with rates of intrafamily violence, including child abuse. These authors and others (Garbarino, 1977; Radbill, 1974) have concluded that the degree of cultural acceptance of violence is an important predictor of the incidence of child abuse.

Radbill (1974) has provided an historical description of the maltreatment of children, concluding that a culture's view of children and childhood is another important determinant of levels of abuse. This author has noted that child abuse has been particularly prevalent in societies which have viewed children as property, without rights and subject to the absolute authority of their parents. Garbarino (1977) has also cited anthropological evidence of a relationship between the culturally-prescribed role of children in a society and the incidence of child abuse.

Garbarino and Ebata (1983) have examined different rates and types of maltreatment among various ethnic groups whose child-rearing values presumably differ. They cited differences among various ethnic groups in Hawaii, differences which they attributed both to cultural values and to the degree to which these values have remained practicable in modern Hawaiian life. The also cited differences in proportions of abusing and neglecting patterns among white and Mexican-American families: Higher rates of physical abuse among whites they linked to acceptance of physical force in white child-rearing; higher rates of neglect among Mexican-American families they interpreted as reflecting "cultural preference for indirect means of control and disdain for physical aggression" (p. 779). All evidence cited by Garbarino and Ebata was obtained from official rates of reported abuse or neglect; the degree to which these rates reflected cultural biases in reporting or agency response rather than

actual differences in rates of maltreatment could not determined.

Garbarino and Ebata (1983) also provided limited evidence of cross-cultural differences in rates of incidence and types of maltreatment. They noted that China, an agrarian, cooperative culture, has reported virtually no child abuse problem. Japan, while reporting very low rates of physical maltreatment, has revealed high rates of emotional abuse, a problem the authors linked to extreme pressure for achievement in Japanese society. Comparisons of this type have been very difficult to interpret because of definitional problems. The same cultural variations which may be reflected in different rates of maltreatment are probably reflected in different definitions of the phenomenon. A parental action which might be labeled abusive in Japan might not be in China or in the United States. Similarly, countries differ in the degree to which family activities are known to societal agents and in the efficiency with which governmental agencies investigating family activities function. Comparisons between official rates have thus been open to a variety of interpretations.

Several studies have investigated the effects of possible interactions between cultural features and other variables in the etiology of child abuse. Spearly and Lauderdale (1983) attempted to account for variations in rates of maltreatment among white, black, and Mexican-American families across 246 Texas counties. Degree of urbanness of the county was found to be the only significant contributor to prediction for black and Mexican-American rates of maltreatment; white maltreatment rates could not be predicted significantly better than by chance from any of the variables included. The authors concluded that disruption of the cultural values in highly urban counties had contributed to higher rates

of abuse in non-white families. However, as urban counties may also have differed in the process by which families of various types were reported for maltreatment, this conclusion may have been premature.

Garbarino and Ebata (1983) reported a significant interaction between race and socioeconomic status in predicting rates of abuse. They found equal rates of maltreatment known to professionals among blacks and whites in higher income groups; in lower income groups, whites had rates significantly higher than blacks. These authors concluded that their data suggested "ethnic differences in ability to respond to socioeconomic stress in adaptive ways that help protect children" (p. 775). They did not, however, address the possibly confounding factors of racially-different societal expectations and frustrations or racial biases in reporting or labeling.

Theories linking child abuse and neglect to macro-level cultural norms and societal priorities have been difficult to test by empirical means. Cross-cultural and inter-group comparisons of maltreatment rates have been confounded with numerous other characteristics which differ across cultures, nations, governmental subunits, and ethnic subgroups. Breines and Gordon (1983), critiquing child abuse research from a feminist perspective, have called for qualitative, phenomenological research addressing societal features which contribute to child maltreatment. This direction could be useful in providing a context for understanding the phenomenon and developing strategies for dealing with it.

Social Labeling Theories

Another alternative view of the child abuse problem has come from the perspective of social labeling theory (Becker, 1963). This theory has only recently been applied to child abuse, primarily by Newberger and Bourne (1979). Social labeling theory has derived from the notion that acts become "deviant" only by being labeled as such by powerful members of society. Pfohl (1977) observed that, while parents have caused harm to their children since the beginning of recorded history, child abuse was not "discovered" as a social problem until 1962, when Kempe and his colleagues first described the "battered child syndrome." Pfohl described the "medicalization" of child abuse, the process by which it became defined as an illness appropriate for medical treatment, noting that the definition of a new syndrome has generally led to increased prestige in professional disciplines. Nelson (1979) pointed out that defining child abuse as a medical problem also promised new patients to hospital pediatric units, which were experiencing the effects of a declining birthrate.

Newberger and Bourne (1979) delineated the "legalization" process which followed when child abuse reporting statutes were enacted. The involvement of the legal system to investigate and adjudicate child abuse cases provided a way for physicians to avoid the role conflicts inherent in confronting abusive parents. As Newberger and Bourne have observed, it also served to increase the status, prestige, and resources of the courts. Nelson (1979) noted that legal system involvement provided a new constituency for increasing numbers of public interest lawyers involved in children's rights.

Child abuse has thus become a "medicalized" and "legalized" social problem. From the perspective of labeling theory, this process has had a number of consequences. First, as Newberger and Bourne (1979) have pointed out, child abuse is difficult to diagnose and substantiate, since it involves assessing the motivations of the perpetrator and the degree of risk to the child as well as society's current standards of child-rearing. Given such broad and vague criteria, doctors and judges are likely to base decisions on factors which may be unrelated to the parent-perpetrator's actions. Research on the disposition of abuse and neglect cases (Groeneveld & Giovannoni, 1977) has shown that a variety of factors seemingly extraneous to the abusive action itself were significantly related to case outcome: involvement of law enforcement officials in the court proceedings, family size, family ethnicity, and source of report. These factors had a stronger relationship with disposition in the more vaguely defined neglect cases than in cases of physical abuse, indicating that extraneous factors played a more important role in decisions about less clear-cut phenomena. In this study, seriousness of the alleged abuse, defined as whether or not hospital treatment was required, was not found to be related to case disposition. In a later study, however, Giovannoni and Becerra (1979) defined seriousness by surveying the views of various professionals involved in child abuse: lawyers, pediatricians, social workers, and police officers. So defined, seriousness did significantly predict case disposition in this second study, indicating that the criteria utilized by professional decision-makers did at least share some commonality. This commonality was once again lower in the less clearly-defined cases of neglect, emotional abuse, inadequate supervision, and parental immorality, where professional agreement on seriousness was

low. In these cases, disposition could not be predicted on the basis of seriousness alone. Although the authors did not collect data on other factors considered in the dispositional decisions, it is at least possible that decisions in these cases were based on variables that could be considered extraneous to the parents' actions.

A second consequence of the "medicalization and legalization" of child abuse has stemmed from the social status of the doctors and judges who label the phenomenon. Deviance labels are most likely to be applied to the poor and the socially marginal by powerful, high status members of the social mainstream. Newberger and Bourne (1979) observed that doctors are more likely to label the injuries of children from poor families as evidence of child abuse while calling the injuries of middle class children "accidents." Newberger (1983), analyzing 805 cases of abuse or neglect identified by hospital personnel, found that a significantly lower proportion of cases from white, more affluent families were reported to protective services agencies. In these hospital-identified cases of maltreatment, both income and race were significant predictors of report; severity of maltreatment was not. Newberger and Bourne (1979) noted that these biases have become institutionalized: Physicians in public clinics and hospitals, who treat more poor children, make many more diagnoses of child abuse than their counterparts in private practice. They hypothesized that judges are prone to make similar labeling decisions based on the perceived social distance between themselves and the parents who appear in their courtrooms. Through this process, poor and socially marginal families have encountered greater risk of becoming labeled as abusing or neglecting, as evidenced by the findings of Gil (1970) and others. In some cases, such as those involving failure to

provide for one's children, poverty has been directly defined as neglect. Through this sorting process, the harmful actions and practices of middle-class parents have often been defined as normal or desirable. Zigler (1979) has made the observation that the incidence of injuries to children in athletic activities organized by parents has been higher than the incidence of injuries from physical abuse. Yet organized sports such as Little League Baseball have been promoted as healthy activities for middle-class children.

A third consequence has followed directly from the second. Since the families identified as abusing and neglecting have been largely poor and socially marginal, the "services" designed for them have been generally inadequate and have often combined punitive as well as therapeutic elements. As Newberger and Bourne (1979) have observed, the less "curable" an abusing parent appears to be, the less treatment will be offered and the more punitive will be the action taken on behalf of the children. Thus, poor and marginal families, which have been seen as unable to benefit from psychotherapeutic approaches, have been more likely to have their children removed by court action. Also, since identified child abusers have been more often poor, services for them have generally been lodged in the public welfare systems. Giovannoni and Becerra (1979) have described the process by which child abuse services have been shifted from the legal system to the social services system, largely as a function of the availability of federal funds for children's protective services. The "welfare-ization" process has placed services for families labeled as abusing in a system which, almost by definition, is chronically short of resources (Keniston, 1977). Parke (1982) has noted that the "abuse" label is communicated to other agencies as well; the stigma of the label

often leads to social rejection of the family and makes it more difficult for family members to obtain needed community resources.

This chronic shortage of resources for the treatment of abusing families has contributed to a fourth consequence of the labeling process. Newberger and Bourne (1979) have explained that, by labeling child abuse as an illness, necessitating therapeutic treatment, and then failing to provide the resources necessary to deliver that treatment, child abuse has been societally defined as incurable. Whiting (1977) has noted that state central registries of identified child abusers have made it "administratively impossible to return to health." Newberger and Bourne (1979) have pointed out that the label of "child abuser" is virtually impossible to remove: Once a family is so labeled, any parental behavior or childhood injury will be viewed with suspicion.

Since child abuse has been societally defined as incurable, punitive measures against child abusers have been necessitated. Newberger (1983) has reported a growing movement among states to require professionals to report suspected abuse or neglect directly to police or prosecutors. He has described this "criminalization" process as a reaction to the ineffectuality of protective services interventions and has predicted increased class and race bias in labeling as methods of handling abusing families become more punitive.

A final consequence of the labeling of child abuse as individual deviance has been perhaps the most damaging. Giovannoni, Conklin, and Iiyama (1978), in their review of factors detrimental to the growth and development of children, identified a large number of problems which pose greater danger to the health and welfare of children than does child abuse. They concluded that the salient feature in society's reaction to

abuse has not been concern for the safety of children but repugnance toward parents who would intentionally harm their children. As Newberger and Bourne (1979) have observed, defining child abuse as individual deviance and allocating resources for discovering, investigating, and treating or punishing it has allowed other serious problems of childhood to be ignored. The notice given to this problem has deflected attention from more basic social issues such as unequal distribution of rights and resources and has served to maintain the status quo, thus fulfilling the basic function of the social labeling process.

Albee (1980) has explained this disproportionate attention to child abuse as reflecting displacement of guilt over individuals' own involvement in oppressive and exploitative patterns. He has seen anger at child abusers as primarily indicative of anger at oneself for participating in the oppression of others. Albee has regarded attention to individual child abuse as a protective mechanism which allows societal blindness toward other patterns of exploitation--blindness which is necessary to keep the system going.

Nelson (1984) has delineated the process by which public policy addressing child abuse has been developed. She has described the societal utility of defining abuse as an individual problem, allowing policy to focus on individual deviance and to ignore structural causes. She has noted that this view remains tenable only so long as child maltreatment is relatively rare: "Deviance can only exist if there is not too much of it" (p. 16). Recently, she has pointed out, child abuse intervention has become controversial, encountering backlash from conservatives and radical noninterventionists. This she has attributed to continually expanding definitions of abuse and to consequent increases in the number

of labeled families. With child abuse no longer a rare event, it has become more difficult to consider it an example of individual deviance. Instead, in Nelson's view, it is becoming increasingly difficult to ignore the connections between child abuse and economic, social, and power inequities. As these connections become clearer, Nelson has predicted, child abuse will become increasingly unfashionable in terms of research, public attention, legislation, and program funding.

Many of the assumptions and contentions made by social labeling theorists have not been tested; many are not directly amenable to empirical investigation. Discrepancies between the high rates of violence against children as reported by parents (Gelles, 1979) and the relatively low rates reflected in official child abuse reports have indicated that case-sorting is occurring in some manner. Some parents have become labeled as abusing while a much larger number have apparently committed similar actions but have avoided identification. The high proportion of poor parents in the labeled group has lent some credibility to the notions of social labeling, although the evidence has as yet been limited. The social labeling perspective has, at least, provided an interesting and provocative balance to the overwhelming focus on individual differences characteristic of the child abuse literature.

Ecological Theories

The failure of any one of the theoretical positions discussed thus far to provide an adequate explanation of child abuse has led many authors to conclude that the phenomenon is multiply determined by a variety of interacting factors. Helfer (1973) has proposed a rather simple model of three contributing factors: (a) parental characteristics, which provide

the potential to abuse; (b) a special or different child, who provokes abuse; and (c) crises, which trigger aggressive reactions. As Costa and Nelson (1978) have noted, however, Helfer's model lacks precision and is difficult to operationalize. Without clearer definitions, it would implicate a large segment of the parent population.

Gelles (1973) has also presented a causal model, in which parental socialization and social position determine the parent's (a) class and community, (b) level of situational stress, and (c) psychopathic states. These in turn contribute to immediate precipitating situations which lead to abuse. Gelles' model, too, appears imprecise and difficult to operationalize.

Gil (1977) has outlined a different multivariate model. He has described child abuse as a function of five interacting factors: (a) the basic social philosophy of a society; (b) the definition of childhood prevalent in the society; (c) society's attitude toward violence; (d) "triggering contexts" involving stress and frustration; and (e) psychopathology of the perpetrator. While slightly more comprehensive than Helfer's or Gelles' models, Gil's conceptualization has suffered from a similar lack of precision and thus has had limited utility.

Two recent efforts have applied Bronfenbrenner's (1977) ecological model of human development to the phenomenon of child abuse. Garbarino (1977b) has distinguished between "necessary" and "sufficient" causes of abuse. "Sufficient" causes include parental psychopathology (a factor in a small proportion of abuse cases) and parental incompetence in the role of caregiver. As Garbarino has noted, role incompetence is determined by a variety of factors such as inexperience in the caregiver role, excessive demands for role performance, asynchrony in parent-child interactions,

inappropriate timing and sequencing of events requiring role transitions, and disruption or mismanagement of roles outside the caregiving relationship. The sufficient causes encompass most of the individual difference variables discussed in the current review: parent and child characteristics, family interaction patterns, and situational stress factors such as poverty and life crises. Garbarino has seen these factors as sufficient to cause the development of a potentially abusive family situation. However, he has hypothesized that, without the presence of a "necessary" condition, the situation cannot lead to actual abuse. Two such conditions have been enumerated: cultural acceptance of the use of force against children and isolation from potent support systems which enforce cultural norms. Garbarino has hypothesized that the existence of these two necessary conditions in a given society allow abuse to occur.

A slightly different ecological model has been proposed by Belsky (1980, 1984). He has described abuse as a phenomenon which is multiply determined by factors existent in four embedded systems: the system of ontogenic development, the family microsystem, the community exosystem, and the cultural macrosystem. In the ontogenic development system, Belsky has included features of parental history which determine the skills, styles, and behaviors that a parent brings with him or her to the caregiver role. The microsystem has been defined to include child characteristics, parent-child interaction patterns, features of the spousal relationship, and other family characteristics. The exosystem includes the broader community networks within which the family is embedded, especially the work place and the neighborhood. Finally, cultural norms and societal attitudes are reflected by the macrosystem, the society or subculture in which all other systems are embedded. Belsky has noted

that factors operating in each of the four systems are mutually interactive, but he has rejected Garbarino's (1977b) notion of "necessary" and "sufficient" causes as premature, given the limitations of currently available data. Belsky has argued, instead, for the need to assess variables on all system levels in order to sort out causal contributions.

Two recent multivariate studies have examined variables capable of discriminating between abusing and non-abusing families. Kotelchuck (1982) used variables from three of Belsky's (1980) four system levels: system of ontogenic development, microsystem, and exosystem. The two largest predictors were social isolation (exosystem) and reported unhappy maternal childhood (ontogenic development system). With six additional significant predictors, most of which addressed features of the family's microsystem (child- and parent-child interaction variables) or exosystem (ease of access to public transportation), Kotelchuck was able to account for 47% of the variance in abusive versus non-abusive group membership. Starr (1982) used similar variables and found that, using 10 significant predictors assessing the microsystem and exosystem, he was able to predict group membership for 70% of the families.

These multivariate studies have had limited predictive value primarily because they were conducted in a cross-sectional manner, with assessment occurring after the families were identified as abusing or non-abusing. Both abusing samples included only families with a child under age five who had been admitted to a hospital for abuse or neglect. However, they have represented significant advances in sophistication over earlier univariate research which addressed only one causal dimension in isolation from others. Further multivariate research, conducted in a prospective,

longitudinal manner, should offer additional clarification about the relative contributions of factors from various systems.

These recent theoretical efforts have provided useful directions for integrating the unidimensional theories of causation, none of which, alone, has provided an adequate explanation of the phenomenon of child abuse. Both ecological conceptualizations have encompassed most of the theoretical positions and research findings discussed in earlier sections and have provided useful directions for further research. Neither Belsky (1979, 1984) nor Garbarino (1977b), however, has explicitly addressed the possible causal contributions of social labeling. It would appear possible to integrate social labeling into the ecological perspective by redefining the dependent variable somewhat. If the ecological model were reconceptualized to explain the official identification of child abuse rather than the abusive phenomenon itself, it would be possible to incorporate factors thought to cause labeling into the multi-system frameworks proposed. For example, exosystem factors such as unemployment could be seen as contributing both to abusive actions, through stress, and to identification, through the labeling effects of social distance. Similarly, macrosystem factors such as a cultural acceptance of violence could be viewed as causative of both violence against children and inadequacy of child abuse treatment, through societal definition of abuse as an individual problem. This integration of social labeling theory could make the ecological perspective even more useful for guiding research and treatment actions.

Treatment of Child Abuse and Neglect

As noted above, child abuse has only recently been "discovered" as a social problem. Over the past 20 years, child abuse has received increasing attention. A large body of literature has addressed the problem from a number of theoretical perspectives, as discussed above. Laws mandating reporting of child abuse cases have been enacted. Systems for investigating these reports have been implemented. Federal resources have been allocated to the problem. With all this attention, however, relatively little effort has been devoted to the treatment of abusing families.

Much of the applied research in child abuse has focused on case-finding and reporting. The medical literature in this field has almost exclusively addressed the issues of diagnosis (e.g., Elmer & Gregg, 1967; Kempe et al., 1962; Kotelchuck, 1982; Olson, 1976; Starr, 1982). Similarly, much of the social work literature has focused on case-identification and investigation (e.g., Bell & Mlyniec, 1974; Boisvert, 1972; Hill, 1975). Since the passage, in 1974, of the Child Abuse Prevention and Treatment Act, much effort has been concentrated on ways to increase reporting of suspected child abuse incidents (National Center on Child Abuse and Neglect, 1978).

The question of what to do with families that have been reported and diagnosed as abusing has not received adequate attention. Treatment for child-abusing families has remained essentially unchanged since the development of the public welfare system 50 years ago. The most common intervention modality is still protective casework, delivered by public agency social workers, backed up by the coercive power of the courts to remove children from undesirable homes. Since 1962, as the child abuse

problem has become a legitimate concern of the medical and psychological professions, traditional forms of psychotherapy have been made available to some abusing parents. More recently, some communities have developed innovative approaches involving the use of paraprofessionals, crisis nurseries, and self-help groups. These alternative treatments have remained available to only a few families, with the majority receiving traditional casework services. A 1978 report of the American Humane Association revealed that, of all cases reported to protective services agencies in 1976, over 50% received traditional "casework counseling"; 6% received day care services; 4% received homemaker services; and 12% had their children placed in foster care.

The relative effectiveness of any of these intervention strategies, traditional or innovative, has remained unknown. Treatment research has been rare; virtually none of these strategies has been systematically evaluated. Holmes (1977) has noted that "the impact of various treatment approaches and programs has not been measured in any systematic way to date" (p. 167). Berkeley Planning Associates (1977) have asserted that "evaluation of treatment services for abusive and neglectful parents constitutes a major gap in the child abuse and neglect literature" (p. 62). These observations have remained valid into 1985.

The limited program evaluation results available have not been optimistic. Studies of recidivism among families receiving undefined "protective services" through public agencies have been uniformly negative. Johnson (1977) found that 60% of families offered protective services were re-reported for abusing their children. Further, they tended to recidivate quickly and to cause more serious injury to their children in second and later incidents. Herrenkohl, Herrehkohl, Egolf, and Seech

(1979) conducted a follow-up study of 328 families who received undefined protective services treatment for child abuse. In 66.8% of these families, reabuse was verified; in 18.5% of families whose protective services cases had been successfully terminated, reabuse had occurred. In case record reviews of 10 protective services agencies, the Office of the Comptroller General (1976) found evidence of improvement (according to caseworkers' evaluations) in only 37% of the families served.

Initial examination of more innovative programs has been equally discouraging. The evaluation of the National Demonstration Programs on Child Abuse and Neglect indicated that the overall effectiveness of these federally-funded model interventions has not been high (Berkeley Planning Associates, 1977; Cohn, 1979). In this examination of 11 demonstration projects employing a variety of treatment modalities, the evaluators found that 30% of the families were re-reported for severe physical abuse or neglect while they were in treatment; 56% of those considered "serious" at intake were re-reported. Additionally, only 42% of the families were judged by their intervention agents as having a reduced propensity for child abuse after treatment.

This evaluation effort, like those of undefined protective services, was limited by a variety of methodological problems: No control groups were used; assignment of families to treatment modalities was biased by geographic location, family prognosis, and other family characteristics; judgments of treatment success were made by the intervention agents themselves; and there was no follow-up of families beyond treatment termination. Most of these biases, however, would appear to operate in the direction of overestimating program success. With this in mind, the high rates of failure seem even more disheartening.

The high failure rates indicated by the National Demonstration Projects evaluation and other studies of general protective services, coupled with the lack of effectiveness information available about specific intervention modalities, point to the need for systematic development and evaluation of treatment strategies. Such an effort might logically start with what is known about the etiology of child maltreatment. As pointed out in earlier sections, the state of knowledge about the causes of child abuse has also remained primitive, hampered by inadequate conceptualization, imprecise measurement, and unsophisticated methodology. Nonetheless, each of the theoretical perspectives discussed above has been associated with one or more intervention strategies. Many of these have been implemented to some degree, although few have been tested empirically. The following sections will discuss treatment efforts which have been implied by each of the theoretical perspectives: (a) Parent-Focused Interventions, (b) Child-Focused Interventions, (c) Family Interaction Interventions, (d) Situational Stress Interventions, (e) Societal Interventions, (f) Social Labeling Interventions, and (g) Ecological Intervention Strategies.

Parent-Focused Interventions

Parent-focused theories have looked to parental personality factors and social histories for the causes of child abuse. Interventions associated with these theories have thus focused on (a) removing the child from the disturbed parent, (b) treating the parent's underlying pathology through psychotherapy, or (c) giving the parent acceptable skills in child-rearing.

Child removal. When child abusing parents have been seen as uncontrollably aggressive or seriously disturbed, it has seemed necessary to remove the victim from the home to protect him or her from further abuse. The removal of a child has generally implied that the parent is seriously ill and is either incurable or in need of lengthy treatment to return to healthy parenting.

The court-ordered removal of a child from his or her abusing parents has been used as a child maltreatment intervention since the famous Mary Ellen case in 1874. By 1900, most states had enacted laws which specifically empowered the courts to take custody of abused, neglected, abandoned, and improperly influenced children. During the last two decades, removal has become procedurally more complex, due to increasing challenges against the informality of the juvenile and family courts which decide neglect and abuse cases (Giovannoni & Becerra, 1979).

Although still common, court-ordered removal has come to be viewed as a last-resort necessity, to be used when less disruptive strategies have been ineffective or when a child appears to be in immediate danger. Removal has been rejected as a preferred intervention strategy for a variety of reasons. First, the removal of a child from the custody of his or her parents has necessitated the use of the doctrine of parens patriae, a notion which has raised a multitude of questions about the boundaries of individual and parental rights and the encroachment of state intrusion into the family unit (Bourne & Newberger, 1979).

Second, removal has been criticized as having deleterious effects on both the parents whose children have been removed and the children themselves. A number of writers have documented the negative effects of removal and foster placement on children. Arvanian (1975) has

summarized the immediate and long-term consequences of removal on the emotional development of children. Elmer (1979), in a follow-up study of abused children, found that children removed from their homes showed significantly lower levels of language development when compared with children who had remained with their abusing parents. (The author observed, however, that removal was confounded with socioeconomic status in this nonexperimental study.) Mnookin (1973) has noted that removal from one's parents makes one "abnormal" by definition in a family-oriented society. He has also observed that few children remain in one foster home. (In his study, most moved at least twice; in Eliana Gil's [1982] more recent research, the average number of moves was five.) Also, few return home (less than 25% were ever returned) and even fewer are adopted (less than 15%). Derdyn (1977) has cited similar statistics in arguing for speedy decisions regarding termination of parental rights, the most common impediment to adoption of foster children.

Eliana Gil (1982) has discussed another iatrogenic effect of child removal--abuse of children in out-of-home placement. That children may frequently be abused in foster homes or institutional placements has remained a common speculation but one which has been quite difficult to document. Gil has noted that, procedurally, reports of such abuse go most commonly to the agency licensing the residential facility, not to a protective services agency. The licensing agency has a vested interest in hiding maltreatment in its own placements. Thus, such maltreatment is generally unreported. Gil cited results of a study of institutional and foster home child abuse in San Francisco in which, for 70 incident reports documenting abuse, not one official report to a protective services agency had been made.

Green (1977) has also described the negative effects of child removal from the parent's perspective. He has listed several parental reactions to removal: depression; the search for a new "scapegoat," often another child who has remained in the home; increased marital conflict; and pregnancy. As Green has observed, the act of removal shifts the focus of treatment to the child and away from the parent, who is generally ignored. The basic problems which produced the abuse thus remain unresolved, and other children in the family or children that the parent may have in the future may be susceptible to maltreatment. From the perspective of both parent and child, court-ordered removal has been observed to cause new sets of problems which may be as serious as the abuse itself.

A final factor in the rejection of removal and foster placement as an intervention of choice has been one of resources. Foster homes have always been in short supply, and they have become increasingly expensive. As Keniston (1977) has noted, "The irony is that when society removes children from their homes, it usually ends up paying more and doing less for the child than if money had been available to help the original family" (p. 188).

Despite these criticisms and the general consensus that removal should be a last resort strategy, it has remained a relatively common intervention practice. Keniston (1977) reported that, in 1976, there were 100,000 children in this country who had been removed from their homes under neglect laws. In 1982, according to Rowe (1983), there were nearly 500,000 children in foster care, the majority for reasons of abuse or neglect.

Several writers have observed recent trends toward increasing use of child removal. Besharov (1983) has noted an increase in "defensive social work" as protective services caseworkers are increasingly threatened with lawsuits, misconduct charges, and criminal prosecution for errors in predicting danger to children later injured or killed by their parents. Aber (1980) has noted that federal reimbursement policies may inadvertently encourage out-of-home placement. Under AFDC-Foster provisions, states receive more federal money for each child in placement than they do for children on AFDC in their own homes.

A few writers in the field have continued to advocate temporary removal of an abused child while treatment for the remainder of the family can render the home safe for the child's return. Helfer (1970) has seen temporary removal as necessary to "gain the time necessary to implement the treatment plan." He has asserted that a removal period of three to six months will generally be necessary before treatment results can be observed and the child can be safely returned. Unfortunately, Helfer has not addressed himself to the effects that such temporary removal might have on the child.

Williams (1983), noting high recidivism rates for all child abuse and neglect treatments, has advocated increased use of permanent child removal. She has maintained that "abused children placed in even moderately supportive non-parental domiciles show at least partial reversibility of some of the psychological, developmental, intellectual, hormonal, and statural effects of abuse" (p. 314). As evidence for this assertion, she has cited a case study of severely neglected twins (Koluchova, 1972, 1976) and recent studies of the rare phenomenon known as abuse-dwarfism (Money, Annecillo, & Kelley, 1983), 50 cases of which have been identified

at Johns Hopkins since 1958. Observations from such extreme situations appear to have little relevance to decisions about the vast majority of families reported for child maltreatment.

Psychotherapy. When abusing parents have been seen as mentally ill, they have been thought to be in need of psychotherapy to resolve the underlying pathology causing the abusive behavior. Helfer (1970) has portrayed intensive, long-term psychotherapy as the only method of treatment which can "cure" child abuse by "resolving the psychiatric problems of the parents." Although he has acknowledged that other types of intervention can render the home safe for the child, he has seen these other strategies as less than ideal, necessitated by resource shortages and expediency considerations.

Steele and Pollock's (1968) description of psychotherapy with 60 abusing parents has remained the major work in this area. They reported that three-fourths of the parents whom they treated showed "significant improvement" in resolving their psychological problems. Other writers have reported similar results among smaller samples. For example, Dougherty (1983) reported that 12 of 18 neglecting and "potentially abusive" mothers in psychoanalytically oriented group therapy made "significant improvement," according to the therapists. No independent evaluation of improvement was obtained, and no follow-up after termination of therapy was pursued. Moreover, no information about the 13 mothers who dropped out of treatment was provided. Since these reports have been based on clinical observations and have not been supported by empirical follow-up data, it has not been possible to determine the relative success of psychotherapy as a treatment strategy.

A few reports of somewhat more systematic evaluations of the effects of psychotherapy on child abuse have been published. Martin and Beezley (1976), in their 4½ year follow-up of 58 abused children, found that 18 of 20 parents treated in psychotherapy had retained custody of their children; however, they also discovered that 68% of the children in these homes were experiencing "hostile rejection and/or excessive physical punishment." Justice and Justice (1976) used Goal Attainment Scaling to assess the effects of group therapy on 15 abusing couples. These authors reported substantial improvement and no further abuse by group members; however, evaluation of improvement was made entirely on the basis of self-report by parents, most of whom needed to show improvement in order to regain custody of their children. These and all evaluations of the effectiveness of psychotherapy have been seriously flawed by subjective, biased measurement; lack of control groups; and samples of unknown representativeness.

The usefulness of psychiatric treatment for abusing parents has been questioned on several counts. First, as Helfer (1970) has noted, the limited supply of psychotherapists has precluded the use of individual therapy as a primary intervention modality for the majority of abusing parents. Furthermore, as Steele and Pollock (1968) have observed, many therapists may be unable or unwilling to deal with the strong emotional issues and difficult client populations encountered in treating child abuse.

Other writers have pointed out that parents may be unable or unwilling to benefit from psychotherapy: They may be unable to develop a trusting relationship with a therapist; they may be unwilling to actively cooperate in their treatment; they may not be verbally accessible

to "talking" treatments (Bourne, 1979). Polansky, Borgman, De Saix, and Sharlin (1971) have described a process of increasing the verbal accessibility of abusing parents to enable them to benefit from traditional psychotherapy. While these writers have reported success in preparing parents for treatment, others have recommended that alternative intervention strategies be devised for parents unable to benefit from psychiatric interventions.

Bourne (1979) has also noted that psychotherapy is a lengthy process which may not produce changes in behavior for quite some time. It may thus be of limited utility in addressing a problem such as child abuse, where rapid change is generally necessitated by overriding concerns for the protection of children in the parent's care.

Most writers have come to agree that psychotherapy is of limited utility in the treatment of abusing parents. Many have concluded that intensive psychiatric treatment may be necessary to ultimately "cure" the parent's pathology, but they have generally recommended that it be used in conjunction with other intervention strategies aimed at more immediate change.

Parent training. The theory that child maltreatment stems from inadequate parenting skills or inappropriate child-rearing styles learned in the parent's childhood has implied that abusing parents need to be taught acceptable methods of parenting. Starr (1979), Alvy (1975), Elmer (1982), Parke (1982), and others have advocated universal parent-training for high school students and prospective parents as a primary prevention strategy in child abuse. Roth (1975), Lystad (1975), and Spinetta and Rigler (1972) have concluded that parental re-training is an essential component in the treatment of parents identified as abusing.

Egan (1983) has evaluated the effects of three types of parenting classes on families referred from a protective services agency. One class focused on child management from a behavioral perspective; one addressed reduction of stress in parents' roles; a third included components of both child management and stress reduction. All three met once per week for six weeks. Egan reported significant positive effects for all three on various self-report and observational measures when compared with a randomly-assigned waiting-list control group. However, as there were no official reports for abuse or neglect in any of the 41 families during treatment, effects on this variable could not be assessed. Citing specific observational findings of increased positive affect among parents and children in the stress-reduction group and decreased positive affect among children in the child-management group, Egan cautioned about potential negative side-effects of behavioral modification. She hypothesized that behavioral methods may simply have taught parents more effective ways of exercising control over their children; the stress-reduction class may have encouraged parents to release control and enjoy interactions with their children. Research addressing effects over a period longer than six weeks would be necessary to address such hypotheses.

While parent-training has appeared to be a logical response to parenting dysfunctions such as child abuse, its effectiveness as a treatment strategy has yet to be empirically demonstrated. Additionally, as Jayaratne (1977) has discussed, the development of parent-training programs has raised serious issues about cultural differences in child-rearing practices and parenting styles. The question of whose parenting values should be transmitted through such programs has not been resolved.

Child-Focused Interventions

The relatively recent investigation of the child's possible contribution to his or her own abuse has generated several prevention strategies. Research indicating that premature, handicapped, retarded, or chronically ill children may be particularly vulnerable to abuse has led to efforts at identifying and targeting the parents of such children for early prevention efforts. Ayoub and Pfeifer (1977) and Gray, Cutler, Dean, and Kempe (1977) have reported significantly fewer incidents of maltreatment among high-risk infants whose families received preventive intervention in the form of public health nursing visits; a high rate of abuse was reported among the families in Gray's experimental control group, indicating that the screening procedures used did, indeed, identify families at risk of maltreatment. Similar strategies of increased monitoring and nursing service to parents of high-risk infants have been implemented by many neonatal units and public health agencies across the country.

Similar prevention efforts have been used with families judged at a child's birth to be high-risk on various child-abuse screening instruments. These screening devices have typically assessed parent-variables, child characteristics, and family stress indices; some have also included limited observations of neonatal maternal-infant interaction (Geddis, Monghan, Muir, & Jones, 1979; Gray, Cutler, Dean, & Kempe, 1978; Helfer, Schneider, & Hoffmeister, 1977; Vietz, O'Connor, Hopkins, Sandler, & Altemeier, 1982). Gray et al. (1978), for example, applied a hospital-based prevention program consisting of frequent contacts with a pediatrician and home nursing visits. No differences on reported abuse or neglect, parenting practices, infant development, or health care were found. Only

the number of hospitalizations for injury significantly differed between the randomized intervention and control groups.

The use of high-risk screening devices in child abuse prevention has been criticized along several dimensions. First, the screening instruments have been able to accurately predict later maltreatment in only a moderate percentage of cases (35% to 75%) and have resulted in very high rates of misclassification of non-maltreating families (Light, 1973; Daniel, Newberger, Reed, & Kotelchuck, 1978; Kotelchuck, 1982). Thus targeted prevention efforts have missed large numbers of abusing families and have wasted resources on a large number of non-abusing families. Predictive misclassification has also introduced the problem of exposing non-abusing families to the negative effects of labeling and to intrusive, inadequately evaluated intervention efforts which may produce more harm than good (Parke, 1982; Sudia, 1981). Duquette (1982) has further warned that predictive screening could, under many state laws, lead to reporting of families to protective services agencies: He has argued that a high score on a screening device could be sufficient to show "reasonable cause to suspect child abuse," all that is needed to subject a family to investigation in most states. Duquette has asserted that screening may violate parents' civil liberties and has suggested that parents be informed of the probabilities of predictive error as well as the probabilities of protective services intervention, court action, and various court-ordered dispositions before they consent to screening procedures.

These problems with child abuse screening and prediction have led numerous authors to advocate that prevention efforts be non-targeted and universally available to all families (Elmer, 1982; Gil, 1981; Newberger, 1983; Parke, 1982). One such prevention strategy has involved basic

changes in hospital care practices. Findings by Klaus and Kennell (1976) and Fanaroff, Kennell, and Klaus (1972) relating limited neonatal contact between mothers and infants to later abuse have led to increased attention to the bonding process. Most hospitals have begun to encourage early parent-infant contact, especially with premature and distressed infants, as part of routine neonatal care.

Family Interaction Interventions

Awareness that child maltreatment may be a function of family interaction patterns has led to the development of intervention strategies that involve whole families, children as well as parents. Traditional family psychotherapy has been suggested as a treatment modality but has been seen as impractical for families with young children and has been open to the same criticisms addressed to individual psychotherapy, as discussed above. Recently, several innovative approaches to family treatment of child abuse have been developed.

Levitt (1978) has described a "systems" approach to abuse which focuses on altering family structures by changing the roles occupied by various family members. Formal sessions with all family members plus relatives and significant others serve as opportunities for the therapist to observe and evaluate the role functions served by various individuals. Intervention to change dysfunctional roles then occurs through sessions with individual family members or subgroups. Periodic sessions with the entire family are then held to assess the degree to which roles have actually been modified. Although Levitt provided several illustrative case studies, she did not provide empirical evidence of the success of this strategy. While this approach does appear to address family

interactions, it seems heavily reliant on the methods of individual psychotherapy to induce change; it may thus be vulnerable to the same criticisms discussed earlier, especially those related to cost and length of treatment.

Grodner (1977) has described a different type of family systems approach which focuses on the interactions between the abusing parent and the abused child. His treatment model basically involves "family activity therapy" in which parent and child interact under therapeutic supervision, generally in the context of a day care center or residential treatment facility. The parent learns new methods of interacting with the child through modeling, direct instruction, and experimentation supervised by the therapist. Although the author has provided no empirical evidence, he has indicated that this strategy has been successful in altering family interaction patterns.

Kadushin and Martin (1981), examining the contributions of immediate contextual variables to abuse, have advocated several interventions aimed at controlling parent-child conflict. Noting that much abuse appears to grow out of parents' attempts to change children's aversive behavior, these authors have suggested (a) preparing and desensitizing parents to various noxious behaviors emitted by children, (b) reducing the aversive behavior displayed by children through behavior modification or other child-training methods, and (c) teaching parents and children "fair fighting" techniques to reduce conflict escalation.

Doctor and Singer (1978) and Tracy and Clark (1974) have reported treatment strategies similar to those advocated by Kadushin and Martin (1981). Both have been based on social learning theory and have involved application of behavioral intervention strategies to alleviate conflict

between parents and children. The focus in both approaches has been the modification, through reinforcement, of parent and child behaviors which provoke confrontations that may lead to abusive incidents. Both have employed trained paraprofessionals as behavioral interventionists to implement the treatment plans in families' homes. A follow-up study by Tracy, Ballard, and Clark (1975) indicated success in modifying targeted behaviors, although the lack of a control group has made it difficult to interpret these results.

The interaction-focused intervention strategies described above appear to show some promise for the treatment of child abuse. The behavioral intervention approaches, in particular, have addressed the problems of verbal inaccessibility, lengthy treatment precesses, and shortage of professional resources discussed earlier in regard to traditional psychotherapeutic approaches. Experimental evaluation of the effectiveness of such strategies in reducing child maltreatment would contribute greatly to the knowledge about interventions in this field.

Situational Stress Interventions

Sociological theories which have linked child abuse to various forms of situational stress have produced the majority of treatment modalities for this problem. As mentioned earlier, traditional social casework has remained the most commonly-used intervention strategy. More recently, the situational stress perspectives have produced a variety of innovative strategies, involving the use of child care facilities, paraprofessional intervention agents, and self-help groups.

Traditional casework. The traditional sociological perspective has formed the basis for the most frequently-applied intervention--social

casework. Traditional casework has consisted primarily of support, advice, resource generation, and coordination of services for abusing families. In their study of the processes and outcomes of protective casework, Sherman, Phillips, Haring, and Shyne (1973) found that support, reassurance, and encouragement were the most frequently used strategies, followed by advice and practical help. They also found that the vast majority of contacts between caseworkers and families involved the mother and focused on her functioning as a parent. In addition to direct contact with caseworkers, 57% of the families studied also received financial assistance, 27% received day care services, and 19% received homemaker assistance from the social service agency.

Sherman and colleagues have provided one of the few evaluations of the processes and effects of protective casework. Unfortunately, their only outcome criterion was the caseworker's rating of the degree to which the family's problems had been resolved at case termination. This admittedly biased assessment process yielded mixed results. Positive changes were noted in the areas of child functioning, child-training methods, and parent-child relationships. Negative changes were observed in the behavior of both mothers and fathers. Neither type of casework strategy employed nor type of services received was found to be related to outcome as perceived by the caseworker. Length of treatment and frequency of contacts were positively related to successful outcomes. (It should be noted, however, that the greater familiarity with the family implied by more intensive, longer-term involvement may have increased the biases inherent in caseworker ratings of outcomes.)

Although badly flawed by the lack of a control group and seriously biased assessment of outcomes, the Sherman et al. (1973) study has been

useful in describing the components and processes of protective casework intervention. However, it has remained impossible to assess the relative effectiveness of this type of treatment strategy from this research or from the other descriptive studies available. Recidivism rates reported in studies of undifferentiated, undefined "protective services" indicate high failure rates. Johnson (1977) reported 60% recidivism; Herrenkohl, Herrenkohl, Egolf, and Seech (1979) found 66.8% recidivism; and the Office of the Comptroller General (1976) discovered evidence of improvement in only 37% of the case records reviewed. The degree to which these rates may be better or worse than would have been found with no intervention or with alternative treatments is unknown. Systematic empirical evaluation of social casework in treating child abuse has remained unattempted.

In the absence of empirical information, several writers have discussed factors which may serve to limit the potential effectiveness of casework as a treatment strategy. Rosenfeld and Newberger (1979) have noted that children's protective services have typically been housed in public welfare agencies. The social workers who have staffed these offices have been overworked, underpaid, and poorly supervised. Staff turnover has been enormous. Moreover, as reporting legislation has been enacted and publicized, conditions in the protective service units have worsened: Increased reporting of increasingly broadly-defined child maltreatment has swamped these units with suspected cases which must be investigated. As Solnit (1980) has observed, legislation mandating reporting without concurrently increasing the resources available to protective services agencies has guaranteed that casework will be short-term, of low intensity and, therefore, ineffective. Under these

circumstances, the authors have asserted, protective casework cannot even be implemented, much less be effective.

Several researchers have examined families' perceptions of the protective casework they have received. Horowitz and Wolock (1981) reported many discrepancies between services families said they needed and services actually made available to them: 33% of the cases examined revealed minor gaps in services; 27% revealed moderate gaps; and 40% revealed major gaps. Specific issues involved caseworkers' (a) referring families for diagnosis and then not using the information for treatment; (b) referring families for treatment and then not making arrangements for it to be provided; (c) ignoring areas of material deprivation while concentrating on the presenting problem; and (d) ignoring children in the family not mentioned in the immediate complaint. Sudia (1981) corroborated these gaps in casework services; additionally, she cited a study which found that 61% of families could not recall having received any services at all from the protective services agency which listed them as clients.

Judgments of the effectiveness of protective casework have been similarly low even when services have been provided under optimal conditions. Baher (1976) reported on the effects of intensive casework consisting of twice per week contacts with professional social workers given low caseloads. Comparisons between intake evaluations and assessment of functioning after 18 months of treatment led Baher to conclude that "the results . . . relating primarily to the interaction between the mothers and the battered children were disappointing . . . leaving many doubts about the effectiveness of our treatment services in improving the quality of mothering" (p. 171). Although this study did not provide

a rigorous test of protective casework (the sample of 23 families was small, no control group was used, and the outcome measurement was highly biased), it could be expected to provide an overestimate of treatment effects rather than an underestimate of effectiveness. Baher's observations were thus particularly disheartening.

Rosenfeld and Newberger (1979) and Bourne and Newberger (1979) have examined problematic conflicts inherent in the dual role of the protective caseworker. The social worker has been expected to serve two roles: that of enforcement officer, investigating suspected abusive situations and making decisions about whether to seek punitive court intervention; and that of therapeutic agent, developing trusting, supportive relationships with families in distress and helping them to resolve their problems. As these authors have pointed out, the two roles often collide, resulting in suspicious parents, conflicted caseworkers, and inappropriate interventions. Rosenfeld and Newberger (1979) have proposed that the two roles be isolated, with treatment delegated to a therapeutic agent and decisions about legal intervention left to an investigator/administrator.

Duquette (1982) has discussed the protective caseworker's dual role from a legal perspective. He has noted that parents are often confused by the enforcement/therapy duality and cannot accurately judge the intent of the intervening caseworker. Parents may come to trust the caseworker and reveal information which can later be used against them in court. Conversely, parents may be intimidated by the caseworker into accepting services under threat of court intervention. Duquette has advocated the use of warrants and Miranda-type warnings to protect the rights of families in protective services investigations and interventions.

These basic criticisms of the traditional casework model have produced several innovative strategies which have sought to deliver more intensive intervention than has been possible by overburdened caseworkers. These alternative modalities can be grouped into the following types: (a) child care services, (b) paraprofessional interventions, and (c) self-help groups.

Child-care services. Day care services have been a fairly common tool of intervention in child abuse. Placement of children in traditional day care facilities has been seen primarily as a way of granting overstressed parents time away from their children to work out crisis situations and pursue changes in their lives. Additionally, part-time care has been viewed as a way of providing a safe daytime environment for abused and neglected children and a way of monitoring the progress of the family's situation. As such, it has been a child protection tool having less drastic effects on both parents and children than foster placement.

Recently, this crisis intervention strategy has been carried a step further: Some communities have opened crisis nurseries, which provide short-term drop-in care for children when their parents are facing a crisis. These facilities have varied widely on such dimensions as the speed with which they react to parents' requests for services, the length of time which a child may remain in the facility, tne number of times a parent may use the center, and the extent of other services provided. As Beezley (1978) has pointed out, crisis nurseries have faced a variety of problems, including licensing difficulties, conflicts arising from reporting legislation, and overuse both by parents and by caseworkers who cannot locate foster home placements.

Gabinet (1983b) has placed drop-in daycare at one end of a continuum of "shared parenting" institutions which could be "viewed as vehicles for improving the parenting experience of children, that where parents are inadequate, parental facilities would be shared or augmented but not supplanted by the institution" (p. 406). For families needing more guidance or supervision, Gabinet has suggested "family half-way houses" in which parents and children would live, in group situations, with house parents to supervise the children's care. Residential facilities for children would remain a last resort placement and would actively encourage as much involvement of children's biological parents as possible.

Another trend in child care has produced specialized ongoing daycare facilities for abused and neglected children (Bean, 1975; Gardner, 1975). These centers have incorporated therapeutic activities aimed at alleviating the developmental delays and emotional problems thought to be common among maltreated children. Many of these programs have also included therapeutic interventions with parents, such as group therapy (Bean, 1975) and parent-retraining (Grodner, 1977). Specialized daycare has thus drawn from the psychological theories of etiology as well as the sociological theories of situational stress.

While various authors have reported case studies illustrating the positive effects of child care programs (Bean, 1975; Gardner, 1975; Grodner, 1977), no empirical evidence of their success has been provided. One author, in fact, has discovered potential negative effects. Crittenden (1983) compared 13 abusing families receiving court-ordered daycare with 9 abusing families for whom ordered daycare could not be arranged. After one year, significantly more children receiving daycare services had been removed from their homes due to further abuse or neglect.

Crittenden interpreted this differential removal rate as indicating that daytime separation of mothers and children exacerbated already tenuous attachments between them and contributed to further abuse. A more parsimonious explanation could be that children in daycare were at higher risk for re-report due to increased monitoring by daycare staff. Crittenden did not consider this possibility.

Beezley (1978) has proposed that child care programs be evaluated by their utilization rates--that success be measured by utilization. While the degree to which families use child care programs would provide one important indication of their effectiveness, other factors, such as the extent to which they reduce (or escalate) further incidents of child maltreatment, need to be included in an assessment of the success of child care programs as child abuse intervention modalities.

Paraprofessional intervention agents. Paralleling trends in response to other social problems, paraprofessional intervention agents have been increasingly employed in the treatment of child abuse. In contrast to overworked professional caseworkers and psychotherapists, paraprofessionals have been thought able to deliver intensive interventions to abusing families and to respond quickly to their needs without the administrative delays often encountered in public agencies. Also, without the role restrictions of traditional helping agents, paraprofessionals have been seen as able to provide a broad range of services that have often been regarded as inappropriate for professionals (Thomas, 1982). Additionally, without the protective service workers' investigation and enforcement roles, paraprofessionals may be more effective in developing trusting relationships with family members and inducing them to change their behavior.

The focus of most interventions involving paraprofessionals has been social support. Kempe and Helfer (1972) endorsed the use of paraprofessionals as Parent Aides, individuals selected for their "warmth and patience" who could "love and mother other adults in need." Kempe and Helfer cautioned that the Parent Aide should be a "reliable friend" to the abusing parent and should focus on the parent's needs rather than the needs of the child, lest the parent become jealous and express resentment by further abusing the child. The basic assumption of the Parent Aide model has been that "if the parents are all right, the children will be protected" (Kempe & Helfer, 1972, p. 45), a statement that reveals the underlying belief that child abuse is caused by parental disturbance.

Lane and Van Dyke (1978) have provided a more detailed description of another program involving "lay therapists" for abusing and neglecting parents. In this program, the treatment modality was described as "reparenting" of the maltreating parent accomplished through intimacy with the paraprofessional. Virtually all contacts focused on the parent: From records of the first 27 families served in this project, the authors reported that 75% of the contacts involved companionship and recreation; 20% involved practical services. Paraprofessionals had an average of 7.5 contacts with each family per month; 46% of these were by phone. The average length of each contact was one hour and thirty-five minutes. After 22 months of service, 13 of the original 27 cases were still in treatment; the remainder had been closed when the family had moved or refused services or when the lay therapist had left the program. Although the authors described the intervention process as relatively short in duration, they did not present examples of planned termination of services; they did, however, discuss the dangers of dependency in this approach.

The SCAN Program (Suspected Child Abuse and Neglect), in wide use throughout Arkansas, has utilized paraprofessionals in a similar social support role (Pallone, 1978). In the counties served by this program, the roles of investigator and treatment agent have been isolated to a large extent: Suspected abuse reports are investigated by professional social service caseworkers while intervention is coordinated and provided by SCAN volunteers. Training for these volunteers has consisted of a three-day workshop focusing on self-awareness, transactional analysis concepts, and legal and psychological aspects of child maltreatment. The intervention delivered by these "lay therapists" has been described as very similar to that delineated by Lane and Van Dyke (1978), above: The paraprofessionals focus primarily on meeting the social and emotional needs of the abusing parent and responding to family crises.

Hurwitz (1978) has described a slightly different approach in which student nurses work as volunteer "family advocates" for abusing and neglecting families. The paraprofessional role in this program has been defined to include more functions than social support: The student nurses offer practical help with household and childrearing tasks, monitor medical needs of family members, help families obtain needed resources and services, encourage parents to develop social ties outside the family, and advocate for the family in court and other situations. In this model, the paraprofessional has been seen as a facilitator of social support rather than as a sole source of such support, a role which may discourage the unwanted dependency mentioned by Lane and Van Dyke (1978).

All of these authors have claimed success for their respective programs: Each has provided case examples illustrating the beneficial effects of paraprofessional intervention. None, however, has offered

empirical evidence of treatment successes. Gabinet (1983a) has, instead, focused on program failures in the Parenting Program for the Prevention of Child Abuse. In this intervention model, trained paraprofessionals worked with families in their homes, offering "supportive therapy" to the mothers, help in obtaining resources, and group recreational activities for families. Gabinet noted that 53% of the referred families failed to keep any of three appointments for the required initial office visit; an additional 5% refused services after fewer than five visits from the paraprofessional. Of the remaining families who were seen six or more times, 27% were judged (by unknown criteria) to be "treatment failures." Thus, only 31% of the families referred were judged to have been helped by the intervention. Although Gabinet did not provide a definition of program failure, describe the families referred for treatment, or compare the program effects with those of no intervention or other treatments, the negative evaluation may have some applicability to other paraprofessional interventions; the high rate of service refusal appears particularly discouraging.

Some results supporting the effectiveness of the general paraprofessional strategy have been provided by the evaluation of the National Demonstration Projects on Child Abuse and Neglect. Cohn (1979) reported that treatment models utilizing paraprofessionals showed the greatest degree of success in "reducing propensity toward abuse and neglect": 53% of the families who received lay services were rated as having improved while only 40% of those who received traditional casework or individual or group therapy were rated as improved.

Unfortunately, the results from the National Demonstration Projects have had limited utility. The "lay services" under discussion included

11 separate programs which were not adequately described or differentiated; thus, it has been difficult to determine precisely what the independent variable was. Also, the ratings of "reduced propensity for abuse" were made by the intervention agents themselves; they were undoubtedly biased, perhaps to differing degrees among professional and lay personnel. Additionally, assignment of families to treatment modalities was confounded by diagnosis and other factors; families were not randomly assigned to intervention strategies but were given the treatment deemed most appropriate for them. Thus, although the author has reported no differences among the treatment modalities in seriousness of presenting problem, it seems likely that less dangerous family situations may have been assigned to paraprofessional programs. The utility of comparisons across modalities thus seems questionable. Nonetheless, Cohn concluded that paraprofessional intervention strategies represented a potentially productive direction for further research and program development.

Self-help groups. Self-help groups are another popular approach which has been applied to child abuse. The most widely known of these groups--Parents Anonymous--has developed directly from the Alcoholics Anonymous prototype. Through a combination of group meetings and support networks, Parents Anonymous attempts to provide its members with ongoing social support and resources during crises. Although its strategies have apparently developed from the situational stress model of abuse, Newberger and Bourne (1979) have observed that its operating principles have rested on the assumption that abusing parents are sick and in need of treatment. These authors have quoted the following passages from the organization's statement of purpose as revealing its basic position:

> A destructive, disturbed mother can, and often does, produce through her actions a physically or emotionally abused or battered child. Present available help is limited and/or expensive, usually with a long waiting list before the person requesting help can actually receive treatment. . . . We must understand that a problem as involved as this cannot be cured immediately. . . . the problem is within us as a parent. (p. 150)

Other authors (Kempe & Helfer, 1972; Zigler, 1979) have expressed concern that Parents Anonymous has been entirely voluntary and have cautioned that it has not addressed the problems of parents who have not been willing or able to actively seek help. Lieber and Baker (1977) conducted a self-report survey among Parents Anonymous members and concluded that the organization is overwhelmingly white (over 95%), and that its members have higher incomes (45% had incomes over $10,000 per year) and more education (25% had attended college) than one would find among the clients of a protective services agency. Additionally, Lieber and Baker discovered that only 53% of the Parents Anonymous members reported having ever physically abused a child. Thus, it would appear that this organization is serving a somewhat different clientele than the public agencies.

Shannon and St. John (1978) have described a more structured self-help strategy, the Parent Partner Program. This program has linked both volunteer "healthy" parents and abusing parents in a social network to provide social support and parent role modeling opportunities. Volunteer parents are assigned to one or two abusing parents and serve as "helper/friends" in times of crisis. Additionally, groups of volunteers and abusing parents meet weekly to discuss parenting problems and solutions. The basic purpose of these groups has been stated by the authors as "resocializing parents to their roles"--teaching acceptable parenting methods as well as reducing social isolation.

Again, as with other intervention modalities, no empirical evidence of effectiveness has been available. Shannon and St. John (1978) have reported that parents in the Parent Partner Program perceived the program as beneficial and relevant to their needs. Lieber and Baker (1977) have found that 50% of the members of Parents Anonymous have found that organization helpful in improving their ability to handle problems. However, such subjective self-report measures cannot provide adequate information about program effectiveness. Empirical evaluation of these self-help strategies is still needed.

Societal Interventions

The societal factors discussed by Gil (1979), Zigler (1979), and others as causative of child abuse have obviously required societal intervention strategies. Gil (1979) has remained adamant that only basic changes in the capitalistic philosophy of our society can have a substantial impact on the problem. He has argued that the eradication of inequality, poverty, alienation, and violence will be necessary before child abuse can be eliminated.

Other authors have proposed less radical strategies. Keniston (1977) has delineated a series of social policy changes which would have the effect of placing the welfare of children higher on our society's list of priorities. He has proposed such measures as a guaranteed income for all families with children, a deliberate reduction in unemployment rates, expansion of supportive services for families, integration of family services across racial and economic lines, and stricter enforcement of children's rights in a number of areas. These steps, he has argued, would serve to elevate the status of childhood while at the same time

enable individual parents to provide for the welfare of their children at more optimal levels.

Williams (1983) has suggested societal changes which would expand the options available to adults, primarily women. She has advocated (a) increased availability of contraception and abortion, (b) provision of alternative models for women which do not focus on motherhood as a necessity for fulfillment, (c) correction of distorted images of children as "always cute, clean, and quiet," and (d) as an alternative to parenting classes, courses on lifestyle choices which would help individuals make the decision not to have children. Williams has basically offered the notion that all individuals are not suited for parenthood and has advocated that society make non-parenthood an attractive alternative for potentially bad parents. While her views are shared by many in the field, her contentions reveal a basic belief in psychological determinism: "These women could have been prevented from becoming child abusers. Had society offered them a variety of options, in addition to motherhood, they could have become contributors to society rather than a drain on its resources" (p. 317). Her failure to address potential social determinants of child abuse, such as poverty, social isolation, and the deleterious effects of social labeling, has left her proposals open to charges of racist, classist victim-blaming.

Keniston (1977) and Zigler (1979) have both pointed out the hypocrisy inherent in government efforts to curb family abuse of children while widespread abuse of children in public institutions is condoned. Both authors have pushed for more humane treatment of individuals in residential institutions, especially those serving children. Numerous authors have advocated the abolition of corporal punishment in schools as a

meaningful step in reducing child abuse (Gil, 1981; Williams, 1983; Zigler, 1979). Hyman and Fina (1983) have described the development of the National Center for the Study of Corporal Punishment and Alternatives in the Schools at Temple University. They described various efforts in research, advocacy, and training in alternative disciplinary techniques which are aimed at eliminating corporal punishment in schools.

The abolition of corporal punishment in all settings--including the home--has been attempted in Sweden. Ziegert (1983) has presented a description of the process by which this legislation was enacted and disseminated and has examined its potential and actual effects. Ziegert has noted that, under the 1979 ban, corporal punishment was potentially associated with criminal penalty, although none has as yet been specified. Instead, the intent of the law was to effect long-term attitude change. Enactment of the law was followed by a large-scale, intensive informational campaign which not only described the legal requirements but also offered explanations of the negative effects of corporal punishment, provided useful alternatives for discipline of children, and listed resources available to parents. The publicity campaign was apparently successful: Recent surveys have shown that 99% of the Swedish population know of the law (Ziegert, 1983).

Evaluation of the effects of the law on attitudes toward and use of corporal punishment and on rates of child abuse have been more problematic. The only index on which repeated measures have been available is the attitudinal question. Ziegert presented time series analysis of the percentage of individuals disapproving of corporal punishment, which showed a steady increase from 35% disapproving in 1965 to 71% disapproving in 1981. No difference in rate of change since the 1979 ban was apparent.

It would appear that the 1979 law primarily codified a trend in attitude which had already grown and stabilized.

Ziegert has noted difficulties in translating the Swedish legal innovation to systems like the United States. Unlike the U.S., Sweden is small and homogeneous and has a well-organized and extensive social service network which is used by all citizens, not just the poor. Ziegert reported problems in educating and persuading immigrants and religious minorities to adhere to the Swedish law; this problem would be magnified tremendously in a larger, more diverse culture such as the U.S. Ziegert also noted that supportive prevention programs such as parent-training, paid parental leaves from work, and highly available child care have created different values about child-rearing in Sweden.

Some societal-level prevention strategies have been attempted in limited ways in the United States. Campaigns to limit the levels of violence portrayed on television have been seen as having some potential effect on cultural tolerance of violence and thus on child abuse rates (Parke, 1982). Specific prevention strategies such as the "Have you hugged your kid today?" and "It shouldn't hurt to be a child" advertising campaigns have attempted to heighten public awareness of the problem and change societal child-rearing attitudes. Recent media campaigns sponsored by the National Council for the Prevention of Child Abuse and Neglect have sought to present alternative ways for parents to handle stressful, abuse-provoking situations.

The societal changes advocated by many of these authors have dictated a major reordering of our society's priorities, a strategy which Zigler (1979) has termed "an effort doomed to failure." The extent to which such societal changes are possible and the degree to which such changes

might be effective in actually reducing abuse and neglect are research questions which have not been addressed. Although it is theoretically possible to evaluate the effects of societal changes on child abuse rates, in practice such an evaluation would be nearly impossible. As Zigler (1979) has pointed out, the current state of definitional controversy and reporting bias in this area has not enabled researchers to agree as to past or current incidence rates; until these issues are resolved, trends in incidence statistics will remain meaningless.

Social Labeling Interventions

Social labeling theories have also implied societal-level changes as necessary to address the child abuse problem. The social labeling perspective has seen the consequences of the labeling process as more detrimental to families than the effects of abuse itself; change strategies have thus involved limiting access to this destructive labeling process. The Standards Relating to Abuse and Neglect, proposed by the Juvenile Justice Standards Project of the Institute of Judicial Administration and the American Bar Association (Flannery, 1979), has delineated several legal modifications aimed at limiting access to the judicial labeling process. The Standards included specific criteria which must be met before court intervention could occur: evidence that a child has suffered and/or is at substantial imminent risk of suffering physical harm which threatens "disfigurement, impairment of bodily functioning, or other serious physical injury"; evidence of "serious emotional damage, evidenced by anxiety, depression, or withdrawal, or untoward aggressive behavior toward self or others" and parental unwillingness to provide treatment; commission of delinquent acts by the child as a result of

"parental encouragement, guidance, or approval"; or evidence that a child has been sexually abused by a member of his or her household. Although these criteria have left considerable room for judicial discretion, they have been much more clearly specified than current statutes, which have referred to such vague concepts as "a child's welfare" and "inadequate parental care."

In addition to these substantive proposals, the Standards included elaborate procedural recommendations aimed at protecting the rights of all parties throughout the process of court intervention. In disposing of the case, the Standards required that "the court should choose those services which least interfere with family autonomy, provided that the services are adequate to protect the child." To order removal, the court must find, by clear and convincing evidence, that the child was endangered and could only be protected by removal from his or her home; the court must indicate specifically why in-home treatment programs would be inappropriate. Further, the court must specify what actions the parents must take to regain custody. Court jurisdiction over families must terminate after 18 months unless clear and convincing evidence indicates that the child is still endangered.

The Standards have represented a substantial improvement in clarifying the boundaries of court jurisdiction in child maltreatment cases. If implemented, they could conceivably limit the formal legal labeling process to serious cases in which imminent endangerment of a child would override considerations of the negative effects of social labeling. The Standards have been criticized, however, from two perspectives. Bourne and Newberger (1979) have attacked the recommendations for their failure to allow for court-ordered service provision in cases of non-serious harm.

They have argued that limited court intervention in less serious cases could guarantee the delivery of needed services to families before a child was placed in "imminent danger." Although these authors have elsewhere discussed the deleterious effects of the social labeling process (Newberger & Bourne, 1979), they ignored the issue in their critical response to the recommendations contained in the Standards.

A second criticism has raised the question of whether reforms in the process of court intervention can actually affect social labeling. As Newberger and Bourne (1979) have pointed out, the process of becoming labeled as a "child abuser" actually starts at the reporting stage. When a report of suspected abuse is received by a protective services agency, a family becomes labeled in an agency file. The labeling becomes more pervasive once an agency investigation has substantiated some level of abuse or neglect. At this point, the family becomes identified in a state central registry of child abusers and remains effectively labeled as "abusing" thereafter (Whiting, 1977). From a social labeling perspective, the points made by these authors would argue for earlier diversion of families from the labeling process, long before the court intervention stage.

Recently, several authors have addressed the earlier phases of the labeling process. Solnit (1980) has argued that mandated reporting of suspected abuse be abolished on grounds that it has labeled a high proportion of non-abusing families, that it has involved families in a system which cannot provide effective treatment, and that it has overloaded protective services agencies to the point that verified, serious cases of abuse are being ignored. Thomas (1982) has concurred, noting that mandated reporting has had the result of making informal responses

to child abuse--even effective ones--illegal. Several authors have advocated that special services for abusing and neglecting families be abolished and that their functions be merged into general supportive services available to all types of families (Elmer, 1982; Gil, 1981; Newberger, 1983).

Duquette (1982) has advocated the use of warrants and Miranda-type warnings in protective services investigations, to protect the due process rights of family members, particularly those who are easily intimidated by protective services authority (poor, less educated families). He and numerous other writers have warned of the dangers of targeted prevention based on fallible screening devices (Elmer, 1982; Gil, 1981; Newberger, 1983; Parke, 1982).

The last five years have seen increasing attention to the social labeling process in child abuse identification, prevention, and treatment. Most work in this area to date has involved criticism of the currently in-place system. Some authors have advocated abolition of various facets of the labeling apparatus. Few, however, have offered concrete proposals for intervention into this system. No efforts to limit social labeling have been implemented or empirically tested.

Ecological Intervention Strategies

Ecological perspectives have viewed child abuse as multiply determined by a number of interacting factors. Proponents of this view have advocated the development of intervention strategies that would have impacts on multiple levels of causal factors. Garbarino (1977b) has noted that the majority of current treatment modalities have focused on only one level of family ecology--the family microsystem. He has stressed the

need for intervention strategies addressing other system levels, especially exosystem influences such as neighborhood and community factors. Since Garbarino has seen social isolation as a necessary cause of child maltreatment, he has been particularly interested in intervention modalities which could increase the social support systems available to abusing families. Specifically, he has pointed out that neighborhood segregation along socioeconomic dimensions has concentrated poor families into isolated groupings of high-need, low-resource individuals unable to share material, emotional, or informational help with each other. Garbarino (1981) has suggested neighborhood organization, with the help of outside community organizers, to create "socially rich environments" in high risk geographic areas.

Parke (1982) has proposed a similar intervention strategy which he has termed a "telescope model of prevention." Such a strategy would focus on successively smaller geographic units judged to be at risk for high rates of child maltreatment. For example, states with high unemployment rates might initially be identified. Within these, counties with low social services expenditures might be examined. Finally, neighborhoods with high resident mobility might be targeted. Parke has advocated that prevention efforts developed for these targeted areas should meet two criteria: (a) They should be of benefit to all participants, abusing and non-abusing, and (b) they should reach a broad audience so as to include a substantial number of abusing families. He has listed several strategies which could meet these criteria: (a) in-hospital classes for new parents, (b) television presentations of non-physical child disciplinary tactics, (c) child care respite, and (d) parent hot lines and support groups to decrease family isolation. Parke has suggested that

these interventions be evaluated experimentally, through random assignment of targeted geographic units to intervention or control conditions. Analysis of effects on rates of child maltreatment could then be done at a macro-level. Parke's model of intervention constitutes one of the very few in this field which has been proposed in an evaluation-research framework.

In a similar vein, Belsky (1980) has advocated the development of multi-strategy interventions which would simultaneously address multiple levels of the systems in which the family is embedded. From his perspective, an ideal strategy would be one which attempted to change ontogenic factors (parent characteristics), microsystem factors (family interaction patterns), exosystem factors (community resources and support), and macrosystem factors (societal norms and cultural values). Belsky has noted that intervention strategies addressing all these levels have yet to be developed. He has argued, however, that the potential effectiveness of new intervention modalities can be measured by the extent to which they involve change at multiple levels of the family's ecology.

Justification for Research

From the above review of the literature in the area of child abuse, it can be seen that knowledge in this field has remained "primitive and rudimentary" (Zigler, 1979). The area has been plagued by a variety of serious problems. First, there has been little agreement on the basic conceptualization of the problem: Child abuse has been defined narrowly, as "baby battering," and broadly, as "non-optimal conditions for development," and in many ways between these extremes. Second, research and theory in child abuse have suffered from isolation, both from other

efforts in this field and from related areas of social science inquiry. Theoretical development has been generally fragmented and fractionated, and empirical research has rarely built on previous work. Research efforts have typically addressed only the variables thought to be immediately relevant to the theoretical position of the investigator. Consequently, there has been little possibility of evaluating the relative contributions of various factors to the etiology of abuse or to the effective treatment of it.

Research in this area has also suffered from widespread methodological limitations. Etiological research efforts have been plagued by biased sampling techniques, nonexistent or inadequate comparison groups, small sample sizes, inadequate cross sectional designs, measurement of questionable reliability and validity, and inappropriate statistical analyses. Treatment research has been even more limited. Case study illustrations and subjective ratings by intervention agents have remained the most commonly-used evaluation techniques. Empirical evaluations of child abuse interventions have been rare, and well-designed experimental evaluations have been non-existent.

The current research attempted to address some of these concerns, while building on currently-accepted theory, research, and treatment knowledge. This study provided an experimental evaluation of an intervention strategy designed to reduce further incidents of child maltreatment in families identified as abusing and neglecting.

Both the intervention modality and the research strategy were based on a combination of Belsky's (1980) ecological model of causation and Newberger and Bourne's (1979) social labeling perspective on identification. The problem was conceptualized in social labeling terms: The

participating families were drawn from those identified by a protective services agency as "abusing or neglecting." Additionally, in response to Giovannoni and Becerra's (1979) concerns about the lack of subject comparability across research samples, complete descriptions of the types of maltreatment found in these families were provided.

The intervention strategy basically involved diversion of families from the labeling system of the protective services agency. Intervention services were coordinated and delivered by the research organization, which maintained only a referral relationship with the protective services system. Services were relatively informal, provided in the families' homes by paraprofessional volunteers.

The treatment delivered to these diverted families addressed two levels of Belsky's (1980) ecological scheme: the microsystem and the exosystem. At the microsystem level, behavioral contracting provided a mechanism for modifying dysfunctional family interaction patterns. At the exosystem level, behavioral contracting was also used to modify the contingencies surrounding relationships between family members and other individuals or organizations significant in their lives (e.g., relatives, schools, neighbors). Additionally, family advocacy was used to obtain needed resources, services, and social support for the family from the exosystem.

Several factors thought to be promising in the treatment of abuse and neglect were incorporated into the intervention strategy. First, given indications that paraprofessionals may be particularly effective in dealing with abusing and neglecting families, volunteers were utilized as intervention agents. Second, since failure rates in traditional low-intensity programs have been high, the intervention was intensive,

involving six to eight hours of contact between the paraprofessional and the family each week. The intervention continued for 18 weeks, a period thought to be long enough to achieve meaningful changes but short enough to limit unwanted dependency. To further limit the risks of dependency, interventions had clearly defined termination dates.

In recognition that abuse is multiply determined by a variety of interacting factors, intervention occurred simultaneously at a number of levels of the family's ecosystem: The volunteer had continuing contact with all family members as well as with significant others in the family's exosystem. All intervention activities occurred in the family's natural environment--their home and community. Intervention did not focus on the needs of any one individual in the family but addressed the situation of the family as a whole. To enhance the possibility of creating lasting changes in the family's situation, the intervention included efforts to transfer the volunteer's behavioral contracting and advocacy skills to family members: The final phase of intervention focused on direct instruction in these techniques.

This intervention strategy was implemented within the context of an experimental design. Families referred to the project were randomly assigned to receive either the innovative strategy described above or the intervention strategies normally provided by the protective services agency. This experimental comparison allowed causal conclusions about the relative effectiveness of the innovative strategy to be drawn. Extensive process measurement, utilizing both archival case records from the two intervention programs and interviews with family members and paraprofessional intervention agents, permitted a detailed description of the intervention strategies used in the two approaches. Repeated measurement

was used to allow the examination of trends in both the intervention processes and the outcome criteria.

Outcome measurement was conceptualized primarily in social labeling terms. The primary outcome criterion was further application of the "abuse" label, as indicated by archival measures of re-report to the protective services agency, substantiation of abuse or neglect upon investigation of further reports, court petition for abuse or delinquency, and court-ordered removal of children from the family's home. Specifically, it was hypothesized that the families receiving the innovative intervention strategy, when compared with families receiving protective services agency treatment-as-usual, would exhibit (a) lower rates of re-report to Protective Services for suspected abuse or neglect; (b) lower rates of substantiation of abuse or neglect following Protective Services investigation; (c) lower rates of petition to court for abuse or neglect; (d) lower rates of petition to court for delinquency; and (e) lower rates of court-ordered removal of children from their homes.

Additional measurement strategies addressed two levels of Belsky's (1980) ecological model. Archival records of children's school attendance provided one measure of effects at the exosystem level. Interviews with parents and children provided indications of other effects at both the exosystem and microsystem levels. Specifically, it was hypothesized that families receiving the innovative intervention strategy would exhibit (a) higher children's school attendance levels; (b) more frequent positive interactions at both microsystem levels (parent-child, parent-parent, sibling-sibling) and exosystem levels (parent-employment, parent-friend, child-school, child-peer, family-neighbor, family-relative); and (c) less frequent negative interactions at both microsystem and exosystem levels.

CHAPTER II

METHOD

The methods and procedures utilized in this research are detailed in this chapter. Sections one through three describe the research setting, the subjects, and the overall design of the study. Section four details the procedures used in recruiting, training, and supervising the paraprofessional students; receiving referrals of families; obtaining informed consent; assigning families to research conditions; and terminating case interventions. Section five provides a description of the interventions received by families in the two conditions. Sections six and seven outline the measurement and analysis strategies used. A detailed account of measurement development processes is contained in Chapter III.

Setting

The research took place in Ingham County, Michigan, and involved two major institutions. The first was Michigan State University. The undergraduate paraprofessionals who provided direct services to the diverted families received training and supervision within a three-term sequence of psychology courses at M.S.U. (Psychology 371, 372, 373). The students met weekly in two small groups of eight, led by the author and a PhD candidate co-supervisor. Additionally, the undergraduate interviewers received their training and supervision in a three-term

sequence of psychology courses on interviewing and data collection (Psychology 371, 372, 373). The interviewing students were trained and supervised by the author and two co-supervisors, graduate students in criminal justice and sociology. The supervisors of these two classes were, in turn, supervised by a member of the Psychology Department at M.S.U. (the dissertation committee chairman).

The second institution involved in this research was the Children's Protective Services Unit of the Ingham County Department of Social Services. This agency provided the referrals of neglecting and abusing families to the project and provided normal services-as-usual to the families randomly assigned to the control group. At the time the referrals were made, Ingham County Children's Protective Services (P.S.) was receiving 150 to 180 reports of suspected abuse and neglect each month. Of these, approximately 130 to 150 cases were investigated by P.S. caseworkers, to determine whether abuse or neglect actually existed and whether a child was endangered by his or her home environment. Following this investigation, P.S. caseworkers decided among several intervention options: (a) investigation closed, no finding of abuse or neglect; (b) informal referral to community agency, no finding of serious abuse or neglect; (c) P.S. case opened, with direct service-provision by P.S. caseworkers and/or formal referral to other community agencies; (d) petition to Probate Court, immediate danger to child substantiated. Each month, Protective Services opened 50 to 60 new cases (option c) and petitioned 15 to 25 cases to Probate Court (option d). Referrals to the Family Diversion Project were expected to come from the group which would ordinarily have received direct services or formal referral (option c).

Through an extensive process of negotiation, the author and key individuals at Children's Protective Services arrived at an administrative agreement specifying the roles and responsibilities of each party (see Appendix A). Permission for the proposed project was also received from the Office of Planning, Budget, and Evaluation of the Michigan Department of Social Services.

Subjects

Abusing and Neglecting Families

Thirty-one families participated in the project after referral from County Children's Protective Services. The situations of these families were investigated by P.S. caseworkers prior to referral. As mentioned above, these families were to be those which would normally have received direct services or formal referral to other community agencies. They were to be families in which some level of abuse or neglect had been found but would not include those in which immediate danger to a child would necessitate referral to Probate Court. Additionally, all families voluntarily agreed to participate in the project.

Of the 31 referred families who agreed to participate in the project, 20 were single-parent families (18 were single-mother families; 2 were single-father families). The remaining 11 families had two parents: In 9 families a male and a female parent were present; in 2 families, both parents were female. The average number of children in each family was 3.26, with a range from 1 to 10. Thirteen families had infants aged two or younger; 10 had pre-schoolers between ages three and five; 23 had school-age children between six and twelve; 11 families had teenagers aged thirteen or older. Of the 31 families, 29 were being

supported by transfer payments from Aid to Families with Dependent Children, Social Security, or Unemployment Insurance.

In the large majority of families, the referring P.S. caseworker listed several types of abuse or neglect as presenting problems. Physical abuse was a presenting problem in 17 families; sexual abuse was suspected in 4. In 14 families, physical neglect was a problem; in 7 of these substandard housing or housekeeping was a major concern. Inadequate supervision of children was a problem in 11 families; 2 of these had been charged with infant abandonment. Non-physical maltreatment was listed by the caseworker as a significant problem in 9 families: Emotional neglect was charged in 4 families, emotional abuse in 5. In only 1 family was emotional maltreatment the sole presenting problem.

Delinquent or "pre-delinquent" behavior of a child was listed as a presenting problem in 14 families. These problems could be seen as "failure to control" on the part of the parents or as delinquency on the part of the child (incorrigibility, truancy, runaway, curfew violations, substance abuse, etc.). In 6 of these families, a child's behavior was the major problem identified by the referring caseworker.

Concern with the effects on children of the parent's lifestyle was mentioned in reference to 7 families: 3 of these had lesbian mothers, 2 had mothers who had been arrested for prostitution, and 2 had substance-abusing mothers. In 4 of the 9 two-parent families with a male adult present, physical abuse of the mother by the father was noted. Additionally, caseworkers mentioned that 12 of the mothers in the remaining 22 families had been involved in abusive relationships in the past.

Families had come to the attention of the Protective Services agency through complaints received from a variety of sources. The majority of

complaints had come from "official," mandated reporters: 7 had come from school officials, 3 from police officers, 2 from welfare case-workers, 2 from a parent's therapist, and 2 from a parent's probation officer. Only 1 complaint had been made by a physician. The remaining complaints had been made by non-mandated sources: 6 by neighbors, 1 by the child involved, and 1 by a relative. Surprisingly, 6 complaints had been made by the parents themselves. In these cases, parents had contacted Protective Services for the purpose of relinquishing custody of a child with whom they were having problems.

Many of the families referred to the project had histories of prior involvement with Protective Services. Nineteen of the 31 families had been reported to P.S. on previous occasions, most more than once. Six families had been intermittently involved with Protective Services for more than five years. Nine families had, on previous occasions, had children removed from their homes by court order.

A number of the families were also involved with other community helping agencies at the time of project referral. Professional therapists were seeing members of 8 families: In 5 families, a parent was involved in therapy; in four, a child was involved. Additionally, 4 children were regularly seeing school counselors or social workers. Some families were involved in the criminal justice system: In 4 families, a parent was reporting to a probation officer; in 3 families, a child was under court supervision. Two families were receiving weekly visits from both Public Health nurses and nutritionists. Several families were involved with more than one community agency at the time of referral: 4 families were involved in weekly contact with at least five separate agencies.

Paraprofessional Students

Sixteen undergraduate M.S.U. students served as paraprofessionals providing direct services to the families in the treatment group. Most of these students were juniors and seniors majoring in psychology or criminal justice; 4 were men and 12 were women. Participating students were randomly selected from the larger group of students who expressed strong interest in enrolling in the three-term sequence. Each student made a commitment to enroll for all three terms of the project (through Spring, 1981), and each received four credits per term.

Design

The experiment utilized a factorial design with two independent variables--time and experimental condition. Experimental condition included two levels: Family Diversion (intervention by paraprofessional students) and Protective Services control (services as usual from Protective Services). Interview outcome measures and home environment ratings were collected at three points: pre-intervention, mid-intervention, and post-intervention. Archival outcome variables--Protective Services complaints, Probate Court petitions, and school attendance records--were measured at pre-intervention, during intervention, and one-year follow-up. Intervention process measures, both interview and archival, were gathered at mid- and post-intervention points. The principal features of the experimental design, including the outcome and process measures which comprised the dependent variables, are illustrated in Table 1.

Table 1

Experimental Design and Measurement Schedule

Condition	Time			
	Pre-intervention	Mid-intervention	Post-intervention	1-year follow-up
Family Diversion (paraprofessional student intervention) (n = 16)	1-5	4-7	1-7	1-3
Protective Services (treatment-as-usual) (n = 15)	1-5	4-7	1-7	1-3

Types of Measures

Outcome:
1. Protective Services records (frequency and seriousness of abuse/neglect reports received)
2. Probate Court records (frequency of petitions received for abuse/neglect and/or delinquency)
3. School attendance records
4. Family outcome interviews (interviews with parent and child)
5. Home environment rating

Process:
6. Archival intervention records (frequency, duration, and nature of contacts with intervention agents)
7. Intervention process interviews (interviews with parent, child, and, for diverted families, paraprofessional)

Procedures

Recruitment of Students

The undergraduate paraprofessionals were selected from the remainder of a larger pool of students recruited for a similar project working with delinquent youths and their families. This pool included social science majors who had received a recruitment letter in late Winter of 1980 and had then completed a four-step series of tasks designed to inform them about the project and ensure that selected students displayed a high level of commitment to participation. As part of this selection process, all students signed contracts (see Appendix B) detailing their responsibilities to the project, including time commitments and ethical standards. Additionally, all students completed a variety of assessment tasks, including Jackson's (1971) Personality Research Form. Two of the 70 students who completed the assessment process were eliminated for high infrequency scores on this measure. From the pool of 68 students who had completed all steps of the recruitment process, 16 were randomly invited to participate in the delinquency project. An additional 25 agreed to become interviewers for that project. The remaining 27 students comprised the final pool of undergraduates eligible for selection by the Family Diversion Project.

During August, 1980, all students selected for the Family Diversion Project were contacted by phone by the author. All 6 of the male students remaining in the pool were contacted, as were 13 randomly-selected female students. After hearing a brief explanation of the new project, 3 students (2 males and 1 female) declined to participate. The remaining 16 students (4 males and 12 females) who agreed to

participate were then sent enrollment materials and began paraprofessional training on September 22, 1980.

Training of Paraprofessionals

The 16 undergraduate paraprofessionals formed two classes of 8 students each. Each class met once per week with the two trainer/supervisors. During the first nine weeks, each class met for two and one-half hours of training activities; thereafter, classes met for two hours of case supervision.

Training of the paraprofessionals followed a structured series of readings, class discussions, practical exercises, and role plays. The basic training manual borrowed heavily from the manual devised for the Adolescent Diversion Project, a project utilizing paraprofessionals as intervention agents with delinquent youths and their families. This manual was modified, replacing sections relevant to delinquency with those addressing family abuse and neglect and expanding opportunities for role plays and other practical exercises.

The Family Diversion manual consisted of eight units addressing such intervention issues as assessment, behavioral contracting, family advocacy, monitoring of intervention, and case termination. Each unit included written didactic material, additional required readings, basic principles to be learned, and structured guides for exercises and role plays. A description of each of the nine units follows.

Unit I presented a summary of the behavioral conceptualization of human learning and interaction and applied basic behavioral theory to family abuse and neglect. Required readings provided a more detailed description of behavior theory applied to human interaction. This

presentation formed the basis for the techniques of behavioral contracting to be covered in later units.

Unit II focused on the environmental resources conceptualization of human behavior and applied this theory to family abuse and neglect. Required readings offered further justification of the environmental approach to intervention into various human and family problems. This discussion provided the foundation for the family advocacy strategies to be addressed in later units. Unit II also included the rationale for the combined use of both behavioral and environmental approaches in intervention.

Unit III presented the basic processes involved in assessment from both the behavioral and the environmental resources perspectives. Readings provided a more detailed description of behavioral assessment and practical information about local community resources for use in advocacy assessments. This unit also addressed the process of meeting the family and beginning the intervention process.

Unit IV differed in format from other units of the manual. In addition to assigned readings covering base-line recording as a behavioral assessment tool, this unit included assignments for out-of-class assessment exercises which were discussed and role-played in class.

Unit V described the process of negotiating and initiating a behavioral contract. Required readings presented more information about this process and addressed common resistances to contracting encountered in practice. Structured role plays provided opportunities to practice the skills involved in negotiating a behavioral contract.

Unit VI presented various methods for implementing an advocacy strategy of intervention. Out-of-class assignments required students

to design an advocacy intervention strategy to fulfill a specified unmet need for a hypothetical family. The strategies developed by the students were discussed and role-played in class.

Unit VII described the process of monitoring a behavioral or advocacy intervention and reformulating intervention plans, when necessary. Readings addressed monitoring and renegotiation of behavioral contracts and the role of crises in the intervention process. Structured role-plays focused on monitoring and reformulating both behavioral and advocacy interventions.

Unit VIII provided a review of the total 18-week intervention process and offered strategies for transferring skills in behavioral contracting and self-advocacy to members of the target family. In-class role-plays dealt with skill-transference and case termination.

It was critical that the undergraduate paraprofessionals reach a high level of mastery of the material presented during training. For this reason, the students' understanding of each unit's contents was assessed on a weekly basis. During each class period, students completed a written short-essay examination concerning the week's readings. They were also asked to answer oral questions about the material. Students were required to rewrite any items missed until a satisfactory understanding of the material had been demonstrated. Grades during the training period were based equally on attendance, written questions, and oral questions.

Referral of Families

As mentioned above, families were referred to the project from Ingham County Children's Protective Services. This agency had

investigated each family's situation and found some level of substantiated abuse or neglect short of life-threatening danger which would warrant court intervention. The Family Diversion Project thus provided an option to Protective Services (P.S.) for families which would ordinarily have received direct services from P.S. caseworkers or formal referral to other agencies. The decision to refer a given family to the Family Diversion Project was made by P.S. caseworkers and their supervisors. The investigating P.S. caseworkers first provided a brief description of the project to the parent(s) and determined that the family was willing to consider participating in the project. The caseworker then arranged a meeting between the author and the family at the family's home. Basic information about the family's situation was communicated by the caseworker to the author through use of a referral form (Appendix C).

Each family received a complete explanation of the project from the author. During the intake meeting at the family's home, the author described the main features of the program, the time commitments required, the assessment involved (interviews and record data), the random assignment procedure, and the voluntary nature of the participation. Families which agreed to participate were required to sign a participation agreement (see Appendix D) detailing their rights and responsibilities in the project. Parents and children old enough to write signed this agreement. Basic family demographic information was also collected at this time. After the participation agreement had been signed, the author randomly assigned the family to either the experimental Family Diversion (F.D.) condition or the control Protective Services treatment-as-usual (P.S.) condition. The author opened a

randomly-selected envelope containing the assignment of the family. Family members were informed of their status at the end of this meeting. The referring P.S. caseworker was informed of the family's status within one working day.

Protective Services began making referrals to the project on October 20, 1980. Referrals were accepted until the randomization procedure yielded 16 families in the Family Diversion condition. It was initially expected that the referral process would be completed before January 15, 1981. The referral rate was lower than anticipated, however, and the referral period continued until March 6, 1981.

A total of 35 families were referred to the research project. Of these, 31 agreed to participate; 2 families refused; 1 could not be located; and 1, involving a teenage runaway whose parents could not be contacted, was judged inappropriate for the project. Of the 31 families agreeing to participate, 16 were randomly assigned to the Family Diversion (F.D.) condition (paraprofessional intervention); the remaining 15 families were assigned to the Protective Services (P.S.) condition (treatment-as-usual).

Assignment of Families to Paraprofessionals

Within one week of the intake meeting with the author, each family in the F.D. condition was assigned to one of the undergraduate para-professionals. Assignment of students to families was made on a random basis. Exceptions to the random assignment procedure were made for students who did not have cars; these students were assigned to families living near bus lines.

Students were instructed to contact their assigned families immediately after assignment. In most cases, this first contact consisted of a phone call to arrange a meeting with the parent(s). First contacts with families who did not have telephones were, of course, in person. Average time between the intake meeting with the author and the first in-person contact with the paraprofessional was eight days.

Supervision of Paraprofessionals

Throughout the intervention period the paraprofessionals received supervision in their weekly classes. Every week, each student presented a summary of the week's intervention with his or her assigned family, including goals, activities, progress toward achieving goals, and future plans. The two trainer/supervisors and other students in the class discussed each case, clarifying goals, offering suggestions, and developing strategies for intervention. Additionally, the supervisors were available for phone consultation and individual meetings with students, when needed.

The paraprofessionals also provided written summaries of intervention activities on a weekly basis. The form used for these weekly progress reports is reproduced in Appendix E. These weekly reports, in conjunction with students' oral presentations of their cases, were used to monitor case progress, to provide monthly case feedback to Protective Services, and to evaluate the performance of the paraprofessional students.

Case responsibility, participation in class discussion, and completion of weekly progress reports comprised the grading criteria for each student after assignment to a family. Half of each week's grade was

based on case responsibility, which included such criteria as spending six to eight hours per week with family members, being responsive to the family's needs, adhering to the model of intervention presented during training, and following through on suggestions made during case supervision. A complete listing of the grading criteria which were used during all phases of the three-term training and supervision class appears in Appendix F.

Termination of Cases

The intervention model with each family in the F.D. condition was to last 18 weeks, a period chosen for this and other similar projects because it provides sufficient opportunity for in-depth assessment and meaningful intervention, yet is short enough to prevent lasting dependency. As described earlier, the principal goal during the last few weeks of intervention was to transfer the paraprofessional's skills in contracting and advocacy to key members of the family. It was hoped that the family would then be able to maintain and continue the changes made after termination of contact with the paraprofessional.

Within one week after termination, each student was required to submit a formal termination report detailing the goals, intervention activities, and progress achieved in each of several areas of the family's life. A copy of this report was forwarded to Children's Protective Services. At this point, successfully terminated cases were closed in terms of further contact with this agency.

The length of P.S. intervention with families in the treatment-as-usual control group was determined on an individual basis by Protective Services caseworkers. Case termination criteria were those normally used.

Intervention

The intervention received by families involved in the project was expected to differ substantially between the two experimental conditions. Moreover, since intervention in both conditions depended upon the peculiar circumstances of individual families, much individual variation within the two conditions was expected. The basic features of the interventions in the two conditions are described below. Archival and interview measures of the intervention process are described in Chapter III. Results of analyses on these process measurements are presented in Chapter IV.

Protective Services condition. Families assigned to the Protective Services (P.S.) condition were referred back to Children's Protective Services for treatment as usually provided by this agency's caseworkers and/or referral to other community agencies. The type of service provided to these families was determined by the P.S. caseworkers and was not under the control of the author. Perusal of P.S. case records and conversations with P.S. caseworkers revealed several features which appeared to be typical of the direct services provided by that agency's caseworkers. First, contact with families was relatively infrequent; most families had less than two hours per month of contact with a P.S. caseworker. Second, nearly all contacts were with parents; children were only tangentially involved as sources of information about parental behavior. Third, most contacts appeared to fall into one of two categories. Monitoring contacts, initiated by the caseworker, usually involved visits to the home to check on the progress of the family in improving the sanitary or safety conditions of the home environment. Crisis intervention contacts, initiated by the family, usually involved

requests for emergency food, shelter, transportation, or other services. These calls often resulted in advocacy intervention by the caseworker, but generally did not directly involve family members in planning or carrying out the intervention. Fourth, the period of intervention by P.S. caseworkers was unspecified. P.S. cases remained "open" as long as the family remained "in need of services." Cases often remained open for a year or more and frequently were closed for organizational reasons (heavy caseloads, caseworker turnover, etc.) rather than client-family reasons.

The 15 P.S. condition families had an average of 2.47 contacts each with P.S. caseworkers during the 18-week intervention period. Number of contacts ranged from 0 to 6 and lasted an average of 47 minutes each. Three of the total of 37 P.S. contacts with families in the P.S. condition were parent-initiated crisis calls; the remainder were caseworker-initiated monitoring visits. At the end of the 18-week intervention period, 7 of the 15 P.S. condition cases remained "open" to P.S. supervision.

In addition to providing direct treatment, Protective Services often referred P.S. condition families to other community agencies. Again, such referrals were at the discretion of the P.S. caseworkers and were not under the control of the author. At the time of the research, the following community services were available to families through P.S. referral: individual or family psychotherapy provided by several local counseling centers; parent aides, who provide housekeeping and child-care help and advice in the family's home several hours per week; part- or full-time day care for young children; and voluntary foster-home placement for children.

Five of the 15 P.S. condition families were formally referred by Protective Services to other community agencies. Four parents were referred to psychotherapy; 3 were provided with parent aides; and 1 was referred to group therapy for sexual abusers.

Family Diversion condition. Each family in the Family Diversion (F.D.) condition had six to eight hours per week of contact with the paraprofessional assigned to them. Meetings between the family members and the paraprofessional were mutually arranged and usually occurred in the family's home. The paraprofessional was expected to see the family several times each week. Contacts were expected to range from meetings with individual family members to meetings with the family as a whole. The paraprofessional was expected to interact with all family members in a variety of settings and situations as well as with other individuals significant in the lives of family members. The intervention was to continue for 18 weeks of contact (M.S.U. academic breaks--three weeks at Christmas and one week between winter and spring terms, were not counted as intervention weeks).

The average number of contact-weeks in the F.D. condition was 18. Due to crisis situations, two families received 20 to 21 weeks of intervention; due to delays in receiving referrals, two families received only 15 to 16 weeks of contact with the paraprofessional student. F.D. condition families received an average of 57.38 contacts with the paraprofessional during the 18-week intervention period. Number of contacts ranged from 33 to 85 and lasted an average of 96 minutes.

The nature of the contacts ranged from recreational activities to formal family meetings or meetings between family members and representatives of various community services. The general nature of the

contacts was expected to change as the intervention progressed. The intervention was seen as a series of four basic stages: assessment, initiation of intervention, monitoring of intervention, and termination. The basic features of each stage will be described below.

The assessment phase included initial introductions to all family members and early discussions with and observations of each of them. During the assessment phase, the paraprofessional was expected to talk with each member of the family and casually observe family activities and interaction patterns. Recreational activities with family members and/or the family as a whole were encouraged, to provide a context for this early assessment and for establishing a relationship with the family.

The task for the paraprofessional during the assessment phase was information-gathering. The student needed extensive information about the family in order to plan an intervention strategy. To formulate a plan which would address the family's needs, the student required knowledge about family members' activities, relationships, likes and dislikes, resources, strengths, conflicts, existing contingencies, and desires for change. Results of early interactions with family members could have indicated a need to obtain information from individuals outside the family--teachers, relatives, neighbors, friends.

The focus during assessment was upon observable features of the family's environment--material and social features which would have important implications for behavioral and/or advocacy interventions. Sophisticated assessment of internal psychological processes was not used. Rather, the paraprofessional looked for undesired behaviors which family members would like to change, individuals who might act

as mediators in behavioral contracting, events which appeared to be reinforcers for family members, areas of unmet material or social need, and assets which might be strengthened.

The activities of the initiation of intervention phase were dependent on the findings of the initial assessment phase. Areas of concern identified during assessment were addressed through active formulation and implementation of an intervention plan. Acting with family members and relevant individuals outside the family, the paraprofessional focused on an area of concern to the family and devised a strategy for change. The strategy could involve behavioral contracting, a process of modifying interpersonal contingencies so that desired behaviors are increased and undesired behaviors extinguished. The intervention could involve family advocacy to gain material or social resources needed by family members. The choice of a strategy and the development of a plan for implementation depended on the circumstances of each individual family. Most often, the paraprofessional used a combination of both strategies to create change in one or several areas of the family's life.

The monitoring of intervention phase began after the initiation of an intervention effort. During this phase the paraprofessional carefully observed whether, in fact, the intervention was being implemented and whether the intervention was producing the desired change. Negative answers to either of these questions indicated a need to reformulate the intervention plans or reassess the family's situation.

The termination phase included the last several weeks of the intervention period. During this stage, the paraprofessional's primary task was transferring his or her skills in behavioral contracting and family advocacy to key members of the family. Family members had been directly

involved in planning and implementing all intervention strategies throughout the 18-week period. As termination approached, the student began actively teaching family members how to negotiate behavioral contracts among themselves and how to use self-advocacy to obtain resources needed by the family. This teaching process included direct instruction, modeling, and role-playing and was aimed at creating a structure for continuing change within the family.

Although the four phases of intervention have been presented as discrete and sequential steps, they were, in reality, overlapping and nonlinear. Assessment was an ongoing task, continuing into the termination phase. Various interventions were initiated at different points throughout the 18-week period, as more extensive assessment revealed new areas of concern. The actual progression through the four phases varied widely among cases, depending on the circumstances of individual families and the skills of individual paraprofessionals.

Measures

As discussed earlier, assessment problems in the area of child abuse and neglect have remained major impediments to intervention research. For this reason, particular attention was paid to measurement of both the dependent (outcome) variables and the independent (process) variables addressed in this study. A variety of measurement strategies were used. Archival data sources included Protective Services records, Probate Court records, and school attendance records. Interviews were conducted with parents, children, and the paraprofessional students. Environmental ratings were used to assess the families' physical home environments. Details of measurement development procedures are provided in Chapter III.

Analysis

Analysis of variance was used to test the significance of main effects for the two independent variables (treatment condition and time) as well as the two-way interactions between these terms. Univariate ANOVAs were computed for each of the main outcome variables: further contact with Protective Services or Probate Court, school attendance, each of the outcome interview scales, and home environment rating. These variables were correlated to some extent. It would, therefore, have been desirable to compute a multivariate ANOVA testing the combined significance of all dependent variables. However, given the relatively small N (31 families), this was not possible. Correlations between the dependent variables were computed, and the results of the univariate tests were evaluated in terms of the relationships found.

Intervention process data were also analyzed in an ANOVA framework to assess the significance of differences between the two treatment conditions.

The unit of analysis for all analyses of variance was the families randomly assigned to condition. Data collected for individual children were first averaged or combined for each family prior to data analysis. The results of all data analyses are presented in Chapter IV.

CHAPTER III

MEASUREMENT

As discussed in Chapter I, assessment problems have remained a major impediment to intervention research in the area of child abuse and neglect. For this reason, particular attention was paid to the development of instruments to measure both the dependent (outcome) variables and the independent (intervention process) variables addressed in this study. Several types of assessment devices were developed for use in this research.

Multiple measurement strategies were used to address the problem of defining outcome in abuse and neglect research. To measure "official" outcome, archival records from Protective Services and Probate Court were used to assess the extent to which families had experienced further application of the "abuse" label. Archival school records were used to assess effects on children's school attendance. Interviews with parents, children, and the paraprofessional students were used to measure changes in family behaviors and activities at both the microsystem and exosystem levels. Environmental ratings were used to assess changes in families' physical home environments.

Extensive process monitoring of the independent variable (the two intervention conditions) provided information about the highly individualized interventions. Interviews with parents, children, and paraprofessional students allowed assessment of the intervention process as

perceived by these sources. Archival records maintained by the intervention agents providing services in the two conditions provided details about intervention contacts, services, and activities.

The remainder of this chapter details the procedures used in instrument development, data collection, and scale construction. Information about the reliability and validity of the resulting measures is presented, as are significant correlations between measures of outcome and between process measures.

Measures of Outcome

Archival Outcome Measures

Protective Services Records. Files maintained by the Protective Services agency provided one source of archival measures of outcome. Individual case files contained records of all complaints about a family received by the agency, reports made by caseworkers following investigation of these complaints, and dispositional decisions made on the basis of these reports. Three pieces of information relevant to case outcome were collected from these files.

One crude indicator of outcome was the number of reports of suspected abuse or neglect in each of the 31 project families which were received by Children's Protective Services. It was seen as a crude indicator of level of family abuse and neglect because reporting behavior was thought to be as dependent upon the characteristics of the reporter and his or her environment as on the behavior of the reported family. Therefore, it could be seen as a measure of the extent to which a family was identified by various individuals in the community as abusing and neglecting.

The number of complaints received for each family was converted to a monthly rate and recorded for three time periods: one year prior to intake (pre-intervention), the 18-week intervention period (during intervention), and one year following the 18-week intervention period (one-year follow-up). Across all three time periods, the 31 families had an average of 0.14 P.S. complaints per month. The standard deviation of this variable was 0.19. For descriptive purposes, the type of complainant and the nature of each complaint were also recorded.

In addition to the number of reports received, P.S. case records provided a rating of the degree of risk found upon investigation of each report by P.S. caseworkers. These ratings, completed by a caseworker within 14 days of receipt of each complaint, ranged from no risk (no evidence of abuse or neglect) through several levels of intermediate risk (possible abuse or neglect unsubstantiated, low-level abuse or neglect evident, moderate level of abuse substantiated) to high risk (severe abuse or neglect substantiated, life of child endangered). These ratings were retrieved from investigation reports and coded on a five-point scale ranging from no risk (1) through intermediate risk (2 to 4) to high risk (5). The highest level of risk found in any investigation of a complaint received during each of the three time periods (one year pre, 18-week during, one year follow-up) was then assigned as the family risk score for that period. If no complaints were received for a family during a given time period, the family was given a no risk score (1). Mean risk for all 31 families averaged across the three time periods was 2.05, with an SD of 1.90.

The various levels of assessed risk were associated with different case dispositions, which were also collected from P.S. case records.

These ranged from case closed, no intervention (assigned a score of 1), through case opened, direct P.S. casework and/or formal referral for services (2), to petition to Probate Court (3). The most serious disposition made regarding a complaint received during each of the three time periods was assigned as the family P.S. disposition score for that period. Mean disposition averaged across the three time periods for all families was 1.16, with an SD of 1.08.

Permission to gather these three pieces of information from P.S. case records was obtained from each family during the intake meeting. Access to the records was negotiated with Protective Services representatives. All information was gathered by the author. Information about reports received in the year prior to referral to this project was collected in May, 1981, at the close of the referral period; data covering the 18-week intervention period were collected in September, 1981, following termination of the project; data for the one-year follow-up period were collected in September, 1982.

Two families (one in each condition) could not be located at the end of the one-year follow-up period. A check of the Michigan P.S. case registry and the Department of Social Services recipients lists indicated that they had had no further contact with Michigan P.S. agencies, and these families were assigned scores indicating no P.S. reinvolvement. Three families had moved to other states during the one-year follow-up period. P.S. complaint and risk information for these families was obtained from the P.S. agencies in their new places of residence.

Probate Court records. Two types of Probate Court records provided information on the number and nature of court contacts with the 31 families involved in this project. The number of petitions alleging

parental neglect or abuse and the court's disposition of these petitions provided measures of the extent of officially labeled abuse and neglect and the incidence of family dissolution. These were expected to be infrequent events in both experimental conditions but were considered to be crucial indicators of outcome.

A second type of Probate Court record provided information on the number and disposition of petitions which alleged delinquency among children in the project families. Although the prevention of delinquency was tangential to the main focus of this project, measurement of court intervention for delinquency was important for several reasons. First, the distinctions between delinquency and child neglect are often blurred: One common definition includes "inability to control a child's behavior" as a component of parental neglect. Second, the interventions used by the court are similar in both cases: A primary finding of either neglect or delinquency is likely to lead to court supervision of the family or removal of the child from the home. Third, the social meanings of court intervention for neglect or delinquency are similar: Both are seen as indicators of family dysfunction. Finally, since the aim of both intervention models was to enhance family autonomy in all areas of functioning, court intervention for delinquency of a child could indicate a failure of a treatment model equal to the failure assumed by court intervention for abuse or neglect.

Due to the relative infrequency of court contact among the 31 families in the project and to the similarities between the two types of court contact, petitions for delinquency and for abuse and neglect were combined for analysis. The petitions filed with the court were counted for each family and converted to monthly rates for each of the

three time periods (one year pre, 18-week during, one year follow-up). An average of 0.03 petitions per month were filed against each of the 31 families during the three time periods. This variable had an SD of 0.10.

Court disposition of each petition was coded on a three-point scale ranging from dismissal or withdrawal of petition (1), through court-ordered supervision, treatment, or probation (2), to court-ordered removal of a child from the home (3). The most serious disposition made regarding a petition filed during each of the three time periods was assigned as the court disposition score for that period. Mean disposition averaged across the three time periods for all families was 0.33, with an SD of 0.90.

A third variable, percentage of time a child was placed out of the home, was calculated as the percentage of the time in each of the three periods that a family had one or more children living out of the home due to court-ordered removal. This variable had a mean of 8.55% (averaged across all families and all time periods) and an SD of 25.77.

Permission for access to court records was obtained from each family during the intake meetings. The schedule of data collection described for P.S. records also applied to collection of court data.

School Records. School attendance records were collected for all children in the 31 families who were of school age. School attendance was an important outcome for several reasons. First, it is a fairly direct measure of educational neglect and/or delinquent truancy, a closely related concept. Second, irregular attendance is seen by some as an indication of other types of abuse and neglect which may be occurring in the family. Third, provision for regular school attendance is

a critical family responsibility which, in our society, is an important determinant of a family's ability to function autonomously.

School attendance data were collected from the records maintained by the individual schools attended by the 69 children of school age. For each child, the number of days and half-days absent were counted for each of the three time-periods (one year pre, during, one year follow-up). All absences--excused, unexcused, suspensions, and expulsions--were included. To standardize the information for differences among various school calendars, the number of days absent for each child was divided by the number of school-session days in each time period. The individual absence rates for children within families were then averaged to produce a score reflecting the average percent of days absent for all the children in a given family for each time period. The mean of this variable (across all three time periods and all 31 families) was 11.30%, with an SD of 9.08.

Approximately 3% of the quarterly attendance records could not be located by the schools. In no case were more than three school-quarters missing for a given child. In cases with missing data, absence rates were interpolated from available information.

As with all archival records, permission to gather school attendance information was obtained from each family during the intake meeting. (See Appendix G for the school record release form.) Information relevant to the one-year pre- and during-intervention periods was collected by the author during the summer of 1981; one-year follow-up information was gathered in the summer of 1982.

Intercorrelations among archival outcome measures. As can be seen in Table 2, the seven archival outcome variables were not independent. The three variables collected from P.S. records were highly correlated (r = .70 to r = .99), as were the three collected from Probate Court records (r = .66 to r = .93). For this reason, two particularly redundant variables were dropped from further analysis: P.S. disposition and Probate Court disposition. Although the remaining pairs of variables from each agency were highly correlated (P.S. complaints and P.S. risk at r = .70 and Probate Court petitions and percentage of time a child was placed out of the home at r = .66), all four variables were retained due to their conceptual importance and potential for discriminating between the two treatment groups. It should be noted in Table 2 that the remaining variables were reasonably independent from each other.

Interview Outcome Measures

In an attempt to obtain detailed information about the effects of the two types of intervention (Family Diversion and Protective Services) on various areas of the families' lives, extensive interviews were conducted with members of each of the 31 families. These interviews were broad and exploratory in nature, aimed at formulating a detailed picture of the lives of family members and identifying areas of change. Several sources of information about each family were interviewed to assess the validity of the data and to expand the scope of the information.

Interviewers. The interviews were conducted by nine female undergraduates enrolled in a three-term sequence of psychology courses on interviewing and data collection (Psychology 371, 372, 373). These students were trained and supervised by the author and two other graduate

Table 2

Matrix of Intercorrelations Among Archival Outcome Variables

Variable	2	3	4	5	6	7
1. P.S. complaints	.70**	.70**	-.02	-.00	-.02	-.14
2. P.S. risk	--	.99**	.26	.35*	.22	-.17
3. P.S. disposition		--	.27	.38*	.26	-.13
4. Probate Court petitions			--	.93**	.66*	-.10
5. Probate Court disposition				--	.68*	.03
6. % time child out of home					--	.06
7. % absent from school[a]						--

Note. N = 31; data from during intervention time interval.

[a] N for correlations involving this variable = 25, the # families with school-age children.

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

students in sociology and criminal justice. All three had extensive experience in interviewing.

The interviewing class met for two-hour sessions, twice a week. During the first five weeks, both sessions were devoted to training for the outcome interviews. The first two sessions were largely didactic, addressing the purpose of the interviews, the basic strategies of interviewing, and the mechanical details of gathering and managing interview data. Thereafter, class sessions were devoted to instruction and role-play practice in the skills of interviewing, including open-ended questionning, probing for specific information, paraphrasing, and asking follow-up questions. The majority of each class period was used for role-play practice of skills. In addition to in-class role-plays, students were required to conduct tape-recorded out-of-class interviews for further practice. Throughout the training stage, the instructors used tape-recordings of the in-class and out-of-class interviews to monitor students' progress and provide feedback in individual and small group sessions. The final class sessions of the training stage included instruction in coding responses. The final task for each student prior to the assignment of her first interviewing case was to conduct, tape, and code an interview with a parent and a child. The supervisors reviewed each of these tapes and coded responses with the interviewer, providing further feedback and instruction until an adequate level of competence was achieved.

Each student was responsible for completing all interviews relevant to the families which she was assigned. This included interviews with two sources for each family (parent and child) at each of three time points and, for Family Diversion condition cases, interviews with the

family's paraprofessional at two time points. Each interviewer was responsible for three or four sets of interviews.

Following the first case assignments, the structure of the interviewing class sessions changed. One session per week was devoted to further instruction and training in interviewing and other data collection strategies. The remaining sessions were devoted to small group and individual supervision of ongoing interview cases. The supervisors provided continual monitoring and feedback to further refine the students' interviewing skills and to ensure the quality of the interview data.

Interviewing strategy. Interviews were conducted with several sources of information about each family. In each family, at least one parent was interviewed. In two-parent families, either or both completed the interview, at the choice of the parents. In all families with a child capable of responding to questions, a child was also interviewed. In families with several children, one child was randomly selected for the interview. Each parent and each child interviewed received five dollars for participating in each interview.

Interviews were conducted separately with each person--parent and child. Through all these interviews, particular care was taken to avoid sharing information given by one source with other sources. Each source was interviewed three times. The first set of interviews occurred within one week of the intake meeting with each family and focused on information about the family's activities over the two months preceding referral to the project. The second set of interviews occurred nine weeks after intake and addressed activities and changes during the two months since the first interview. The final interviews occurred nine weeks later, at the point of termination for each family in the Family Diversion group

and an equivalent 18 weeks from intake for families in the Protective Services group.

Interviews were conducted in the families' homes. The interviews themselves were loosely structured and conversational. The interviewers worked from a broad outline (see Appendix H) aimed at developing a clear and detailed picture of all aspects of family members' lives. The interviewers were instructed to begin with general, open-ended questions about broad areas of the family's day-to-day activities. They then pursued issues raised by each source, probing for more specific information and inquiring about related points. The interviews were tape-recorded to maintain the conversational tone of the interviews and to facilitate later coding of responses. Most interviews lasted approximately 45 minutes to one hour but were allowed to extend as long as necessary to obtain the information.

Each of the 16 paraprofessionals was also interviewed as an additional source of information about the families in the Family Diversion condition. These interviews were conducted at the mid-intervention and termination points in a manner identical to that described above. Again, particular care was taken to avoid sharing information given by one source with other sources.

Missing interviews. Three families, all in the Protective Services control group, were excluded from analyses involving interview data. Two of these families refused to participate in the second and third sets of interviews. The parent source in the third family did not speak English; the child source in this family participated in the first interview but had been removed from the home and could not be interviewed thereafter. Analyses involving interview data were thus based on 28 of the total of 31 families.

Coding interview responses. Although the interviews were broad and open-ended, focusing on issues important for each family, some specific information was sought from all sources. From each source, the interviewers were expected to obtain answers to approximately 150 questions about family and parent activities and 75 questions about the activities of each child. The content dimensions addressed by these questions are summarized in Table 3. Appendix I lists the complete set of items. These were coded by each interviewer, with the help of the audio tape, after each interview had been completed.

The coded items were developed by the author with the aid of tapes of 12 pilot interviews conducted with neglecting and abusing and other families. Additionally, all tapes of the first set of interviews with the 31 project families were reviewed by the author. Minor modifications and additions to the item set were made at this point and included in the second and third sets of interviews.

Data preparation. Prior to the step of scale construction, all items were inspected for missing data or low variance problems. Any item which, for the parent source, could not be coded in over 10% of the cases or received the same code in over 90% of the cases was dropped from further analyses. Twenty-six items were excluded for these reasons. The majority of these low-variance items related to use of the telephone or to parental employment.

An average of 4% of the remaining data were missing from the parent source interviews in each case. For the scale-construction procedures, missing parent-source information was replaced with the modal response for a given item from all parent-sources. Missing data was a more serious problem in the child source interviews. Only 21 of the 28

Table 3

Outcome Interview Items: Content Dimensions

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1. Positive Parent-Child Interaction. Frequency of positive interactions between parents and children.

2. Parent-Child Conflict. Frequency of conflict interactions between parents and children and frequency of use of punishment.

3. Parental Supervision. Degree to which children's activities are supervised by parents.

4. Sibling Interactions. Frequency, nature, and quality (positive/negative) of siblings' interactions.

5. Children's Home Involvement. Extent to which children's activities center around home routines.

6. Children's School Experiences. Quality (positive/negative) of children's experiences at school.

7. Children's Peer Interactions. Frequency and quality (positive/negative) of children's interactions with peers.

8. Involvement of Children with Other Adults. Frequency and quality (positive/negative) of children's interactions with adults other than parents and teachers.

9. Parental Home Involvement. Extent to which parent's activities center around home routines.

10. Parental Employment. Quality (positive/negative) of parent's experiences and interactions at work.

11. Parent Interactions. Frequency and quality (positive/negative) of parents' interactions with each other.

12. Parental Peer Involvement. Frequency and quality (positive/negative) of parents' interactions with friends.

13. Neighborhood Involvement. Frequency and quality (positive/negative) of family's interactions with neighbors.

14. Involvement with Relatives. Frequency and quality (positive/negative) of family's interactions with relatives.

15. Informal Family Resources. Extent of informal helping network (friends, relatives, neighbors) from which family gets support.

interviewed families had children capable of participating in the interviews. Children successfully interviewed ranged in age from 5 to 16 years old. Missing data in these child source interviews averaged 9%, with a range from 3% to 16%. Items missing from these interviews were replaced with the modal response from all child-source interviews. Information missing from the paraprofessional source interviews, which averaged 3%, was handled in the same manner.

In order to provide comparability across interviews with a variety of types of families, a number of individual items were combined or averaged. Items which addressed the activities of individual children were averaged within each family to provide a family unit score. The activities of children not living in the household at the time of the interview were coded in terms of the family unit. For example, questions about frequency of interaction with parents and siblings were answered in terms of the contact between the non-resident child and remaining members of the family. The denominator for all child item averaging operations was always the original number of children in the family at the intake point.

For some items, a different combining strategy was used. Items addressing school or daycare activities were averaged across children in school or daycare. Items addressing children's role in caring for younger siblings were assigned the highest score given to any child in a given family.

Given the large proportion of single-parent families in the sample, it was also necessary to combine items addressing activities of mothers and fathers. In two-parent families, identical questions about the activities of each parent were coded. These items were combined,

assigning the higher of the two response codes to a combined parent activity item. For example, if the interviewer reported that the father in a family played with the children daily and the mother played with them once per week, the combined parent item would have received a code of "daily."

The deletion of low-variance or frequently missing items plus the combination of individual child and parent items into family unit scores resulted in a total pool of 129 items relevant to family activities. These items were further combined into rationally meaningful scales addressing a variety of dimensions of family life.

Outcome interview scale construction. The items coded from the interviews were combined into scales using a combination of rational and empirical methods. Items were initially grouped into the content dimensions described in Table 3. Parent source interview data from all three time points (pre-intervention, mid-intervention, termination) were used to refine these groupings and arrive at scales which were as internally consistent and independent from each other as possible. Using the data from 84 interviews (28 parents at each of three times), each of the initial groupings was submitted to factor analysis. In several cases these analyses indicated the presence of two distinct factors within a dimension. This was most notably the case with the following dimensions: sibling interactions, school experiences, peer interactions, involvement of children with other adults, parent interactions, neighborhood involvement, and involvement with relatives. In each of these dimensions, a positive and a negative factor emerged. The informal family resources dimension appeared to contain five factors relevant to different types and sources of aid.

The item groupings indicated by the factor analyses were then tested for internal consistency and unidimensionality. Correlations between the groupings were also inspected, as were correlations between individual items and preliminary groupings. Through an iterative process maximizing internal consistency and unidimensionality within groupings and minimizing intercorrelation between groupings, a final set of 23 conceptually meaningful scales were constructed. The resulting scales and items which comprise them, along with item-total correlations, estimates of internal consistency, scale means, and standard deviations, are presented in Table 4. Also included in Table 4 are five single items which were retained. These revealed sufficient variance for further analysis, were judged to be conceptually important, and did not show substantial enough correlation with other items to be included in any of the scale groupings.

As can be seen in Table 4, the internal consistency estimates (standardized item alphas) of the outcome interview scales ranged from .59 to .90, with the majority above .70. All corrected item-total correlations were .30 or above.

Inspection of the matrix of intercorrelations among the interview outcome variables revealed a reasonably high degree of independence. Only 19 of 378 correlations were significantly different from zero. These significant correlations are listed in Table 5.

Reliability and validity of outcome interview data. The interrater reliability of the data obtained from the outcome interviews was assessed in the following way. Each of the nine interviewers was required to complete one set of interviews with another student in the class. One student conducted the interviews with the other student present; each

Table 4

Outcome Interview Scales and Psychometric Properties

Items comprising scale	Corrected item-total correlations
1. Positive parent-child interaction (α = .88)	
a. How often does parent play with child(ren)?[a]	.83
b. How often does parent instruct child(ren) in some skill or activity?[a]	.64
c. How often does parent reward or praise child(ren) for desired behavior?[a]	.82
d. How often does parent play with child(ren) at home?	.70
e. How often does parent teach child(ren) some skill?	.64
M = 17.24 *SD* = 5.90	
2. Positive sibling interaction (α = .80)	
a. How often does child(ren) spend time with siblings in indoor activities?[a]	.68
b. How often does child(ren) spend time with siblings in outdoor activities?[a]	.77
c. How often does child(ren) engage in purchased or organized recreational activities with siblings?[a]	.55
M = 8.87 *SD* = 3.58	
3. Positive parent-parent interaction (α = .71)	
a. How often do parents eat dinner together?	.41
b. How often do parents do recreational things together at home?	.60
c. How often do parents play with children together at home?	.60
d. How often do parents go out together without children?	.72
e. How often do parents go shopping together?	.36
f. How often do parents (together) engage in recreational activities with children outside the home?	.37
M = 21.65 *SD* = 6.04	

Table 4 (cont'd.)

Items comprising scale	Corrected item-total correlations
4. Parent-child recreation (α = .70)	
a. How often does parent engage in recreational activity with children outside the home?	.67
b. How often do parent and child share recreational activities outside the home?[a]	.78
c. How often does family do recreational things with other families (parents and children)?	.41
M = 7.20 SD = 3.15	
5. Negative parent-child interaction (α = .81)	
a. How often does parent discipline child(ren)?	.30
b. How often does child(ren) do something that seriously upsets parent?[a]	.55
c. How often do parent and child(ren) argue about bedtime?[a]	.53
d. How often do parent and child(ren) argue about chores?[a]	.56
e. How often do parent and child(ren) argue about child(ren)'s out-of-home behavior?[a]	.37
f. How often do parent and child(ren) argue in general?[a]	.72
g. How often does parent use physical punishment to control child(ren)?[a]	.53
h. How often does parent use loss-of-privileges to control child(ren)?[a]	.38
i. How often does parent use verbal reprimand or lecture to control child(ren)?[a]	.61
M = 23.56 SD = 6.95	
6. Negative sibling interaction (α = .64)	
a. How often do siblings argue?[a]	.64
b. How often do siblings get into physical fights?[a]	.64
M = 6.23 SD = 1.84	

Table 4 (cont'd.)

Items comprising scale	Corrected item-total correlations
7. Negative parent-parent interaction (α = .69)	
a. How often do parents argue about children?	.45
b. How often do parents argue about money?	.46
c. How often do parents argue in general?	.63
d. How often does one parent leave the house in anger after an argument with the other parent?	.48
e. How often does one parent strike the other in anger?	.40
M = 10.61 SD = 3.96	
8. Children home alone (α = .78)	
a. How often does a child watch younger siblings when parent is not home?	.54
b. How often is child(ren) alone at home in daytime for less than two hours?[a]	.59
c. How often is child(ren) alone at home in daytime for more than two hours?[a]	.67
d. How often is child(ren) alone at home in evening?[a]	.56
M = 7.14 SD = 3.62	
9. Child home involvement (α = .72)	
a. How often does child(ren) eat dinner at home?[a]	.48
b. How often does child(ren) sleep at home?[a]	.49
c. How often does child(ren) spend weekday evenings at home?[a]	.68
d. How often does child(ren) spend weekend evenings at home?[a]	.59
e. How often does child(ren) spend weekday afternoons at home?[a]	.39
M = 22.59 SD = 2.66	
10. Child chore involvement (α = .79)	
a. How often does child(ren) help with meal preparation or cleanup?[a]	.62
b. How often do parent and child(ren) do house- or yard-work together?[a]	.66
c. How often does child(ren) help with housecleaning?[a]	.69
d. How often does child(ren) help with outdoor yardwork or other outdoor chores?[a]	.45
M = 8.24 SD = 3.43	

Table 4 (cont'd.)

Items comprising scale	Corrected item-total correlations
11. Parent home involvement (α = .64)	
a. To what extent do parents know specific things the child(ren) does in free time?[a]	.44
b. How often is parent home on weekday evenings?	.57
c. To what extent do parents know where child(ren) is when not at home?[a]	.55
M = 13.03 SD = 2.63	
12. Parent involvement with child's friends (α = .78)	
a. How often does parent interact with child(ren)'s friends?[a]	.50
b. How many of child(ren)'s friends do parents know?[a]	.87
c. How often does parent interact with children's friends?	.66
M = 8.49 SD = 3.67	
13. Child-relative interaction (α = .90)	
a. How often does child(ren) spend evenings with relatives?[a]	.74
b. How often does child(ren) stay overnight with relatives?[a]	.63
c. How often does child(ren) spend daytime with relatives?[a]	.72
d. How often does family visit relatives' home?	.35
e. How often do relatives visit family's home?	.60
f. How often do children spend night at relatives' home?	.50
g. How often do children spend time with relative in evenings?	.83
h. How often do children spend time with relative in daytime?	.79
i. How often do relatives babysit for children during day?	.63
j. How often do relatives babysit for children in evening?	.62
k. How often do relatives babysit for children over night?	.50
l. How many relatives would babysit for children with no advance notice?	.47
M = 27.16 SD = 10.42	

Table 4 (cont'd.)

Items comprising scale	Corrected item-total correlations
14. Child peer interaction (α = .86)	
a. How often does child(ren) spend time with friends in afternoon?[a]	.77
b. How often does child(ren) spend time with friends in evening?[a]	.52
c. How often does child(ren) spend time at friend's house?[a]	.67
d. How often do child(ren)'s friends spend time at family's house?[a]	.67
e. How often do children play with neighborhood children?[a]	.65
M = 17.16 SD = 5.93	
15. Positive child-school experience (α = .59)	
a. How well does child(ren) like teachers?[a]	.39
b. How often does parent inquire about child(ren)'s school or daycare experiences?[a]	.34
c. To what extent do parents know specific things the child(ren) does at school or daycare?	.30
d. How often does child(ren) participate in extra-curricular activities at school?[a]	.31
e. How well is child doing in school academically?[a]	.44
M = 16.59 SD = 3.25	
16. Parent-friend interaction (α = .78)	
a. How often does parent spend time in daytime with friends?	.60
b. How many close friends does parent associate with?	.66
c. How many other parents does parent associate with?	.57
d. How many friends would babysit for children with no advance notice?	.59
M = 9.92 SD = 3.78	

Table 4 (cont'd.)

Items comprising scale	Corrected item-total correlations
17. Positive family-neighbor interaction (α = .73)	
a. How often does child(ren) spend time with adult neighbors?[a]	.45
b. How often do parents visit a neighbor's home?	.71
c. How often do neighbors visit family's home?	.72
d. How often does neighbor watch children?	.44
e. How often does parent watch neighbor's children?	.33
f. How often do parents talk with neighbor in yard or street?	.38
M = 13.00 SD = 5.08	
18. Negative child-school experience (α = .77)	
a. How often has child(ren) missed school in last month?[a]	.31
b. How often has child(ren) been late for school in last month?[a]	.37
c. How many times has parent been contacted by school about problems with child(ren) in last two months?[a]	.37
d. How often does child(ren) get into trouble with teachers at school?[a]	.66
e. How often does child(ren) get into arguments or fights with other kids at school?[a]	.64
f. How often do parent and child(ren) argue about school or homework?[a]	.33
g. How often does child(ren) get in fights with peers?[a]	.38
h. How often does child(ren) get in trouble with friends?[a]	.43
M = 14.64 SD - 4.77	
19. Child-adult conflicts (α not applicable, single item)	
a. How often does child(ren) get into trouble with adults in neighborhood?[a]	--
M = 1.37 SD = 0.82	
20. Parent-relative conflicts (α not applicable, single item)	
a. How often do parents have conflicts or arguments with relatives?	--
M = 2.08 SD = 1.14	

Table 4 (cont'd.)

Items comprising scale	Corrected item-total correlations
21. Parent-neighbor conflicts (α not applicable, single item)	
a. How often do parents have conflicts or arguments with neighbors?	--
M = 1.71 SD = 0.95	
22. Help from relatives (α = .70)	
a. How often do relatives help family with repairs or maintenance on home, car, etc.?	.37
b. How often do relatives help family with transportation?	.43
c. How often do relatives help family with hassles with school, police, landlords, etc.?	.48
d. How often do relatives help parents deal with their children?	.47
e. How often do relatives give or lend money to family members?	.49
f. How often do relatives give food, clothing, or other things to family?	.48
M= 8.60 SD = 3.43	
23. Babysitting help from friends (α = .74)	
a. How often does child(ren) stay overnight with parents' friends?[a]	.66
b. How often does child(ren) stay with parents' friends in evenings?[a]	.48
c. How often do friends babysit for children in evening?	.53
f. How often do friends babysit for children overnight?	.66
M = 5.18 SD = 2.10	
24. Material help from friends (α = .66)	
a. How often do friends help family with repairs or maintenance on home, car, etc.?	.43
b. How often do friends lend money to family members?	.48
c. How often do friends help family with transportation?	.45
d. How often do friends give food, clothing, or other things to family?	.46
M = 5.61 SD = 2.47	

Table 4 (cont'd)

Items comprising scale	Corrected item-total correlations
25. Advice from friends (α = .60)	
a. How often do friends help family with hassles with school, police, landlords, etc.?	.60
b. How often do friends help parents deal with their children?	.60
M = 4.68 *SD* = 1.52	
26. Use of paid babysitter (α = .81)	
a. How often does child(ren) spend evenings with babysitter?[a]	.62
b. How often does child(ren) stay with babysitter in daytime?[a]	.67
c. To what extent does child(ren) like babysitter?[a]	.67
d. How often is child punished by babysitter?[a]	.57
M = 7.71 *SD* = 2.59	
27. Parent employment (α not applicable, single item)	
a. How many hours per week is parent employed (or in school) outside the home?	--
M = 1.94 *SD* = 1.54	
28. Parent looking for work (α not applicable, single item)	
a. To what extent is parent looking for a job?	--
M = 2.26 *SD* = 1.59	

[a]Items which were averaged across children within each family.

Table 5

Significant Correlations Between Interview Outcome Variables

Variable 1	Variable 2	r
Positive parent-child interaction	Parent-child recreation	.36*
Positive parent-child interaction	Children home alone	-.33*
Positive parent-child interaction	Parent home involvement	.51*
Positive parent-child interaction	Parent looking for work	.34*
Positive sibling interaction[a]	Negative sibling interaction[a]	.39*
Positive sibling interaction[a]	Child chore involvement	.37*
Positive sibling interaction[a]	Negative child-school experience[b]	-.55*
Parent-child recreation	Child-relative interaction	.37*
Parent-child recreation	Use of paid babysitter	.33*
Negative parent-child interaction	Negative child-school experience[b]	.51*
Negative sibling interaction[a]	Child-adult conflict	.37*
Children home alone	Child home involvement	-.37*
Children home alone	Parent home involvement	-.48*
Children home alone	Child peer interaction	.41*
Children home alone	Parent employment	.35*
Child home involvement	Parent home involvement	.33*
Child chore involvement	Child-peer interaction	.42*
Parent involvement with children's friends	Child-peer interaction	.44*
Parent involvement with children's friends	Positive family neighbor interaction	.42*

Table 5 (cont'd)

Variable 1	Variable 2	r
Child-relative interaction	Help from relatives	.41*
Parent-friend interaction	Positive family-neighbor interaction	.40*
Parent-friend interaction	Babysitting help from friends	.32*
Parent-friend interaction	Material help from friends	.34*
Positive family-neighbor interaction	Child-adult conflict	.47*
Positive family-neighbor interaction	Babysitting help from friends	.32*
Parent-relative conflict	Help from relatives	.40*
Parent-neighbor conflict	Use of paid babysitter	.38*
Babysitting help from friends	Use of paid babysitter	.33*
Material help from friends	Use of paid babysitter	.31*

Note. N = 28, except where noted; data from mid-intervention parent interviews.

[a]N = 25, the number of families with more than one child; [b]N = 24, the number of families with child in school or daycare.

*p < .05.

then coded the responses independently, using the tapes of the interviews as a memory aid. This resulted in interrater pairs of response-codings for each source in five families (approximately 15% of the total sample). Percent agreement between interraters across all items ranged from 68% to 94%. Agreement in interviews with parent and paraprofessional sources was consistently above 85%. Lower rates of agreement were found in interviews with children, where the range was 68% to 88%. The majority of cases of lack of agreement involved items coded by one rater and left as uncodable by the other.

Reliability and validity issues were also examined in regard to each of the interview outcome scales as coded from each of the three sources. The scale groupings developed from parent source data were applied to data from the child and paraprofessional source interviews. Interrater reliability estimates were then computed separately for each scale coded from each source. Pearson correlation coefficients between interrater pairs were computed for each scale-source combination.

The interview data were also subjected to two tests of validity. The use of multiple sources of information (parent, child, and paraprofessional) allowed validity to be assessed in terms of multitrait-multimethod matrices (Campbell & Fiske, 1959). The degree to which the three sources provided consistent information about various aspects of the family revealed the convergent validity of the instrument scales. The discriminant validity of the outcome interview measure was determined by the independence (lack of correlation) of the responses given by each source to different scales.

Interrater reliability and convergent and discriminant validity estimates are presented in the multitrait-multimethod matrices displayed

in Tables 6 through 11. To facilitate inspection of the information, the matrices are presented separately for subsets of the outcome interview scales: positive and negative within-family interactions (Tables 6 and 7), home involvement (Table 8), positive and negative outside-family interactions (Tables 9 and 10), and informal family resources Table 11). The main diagonals in each matrix contain the interrater reliability estimates for each scale as coded from each of the three interview sources--parent, child, and paraprofessional. The validity diagonals (underlined off-diagonal entries) contain the between-source correlations for each scale and indicate the extent of convergent validity between sources. The remaining entries in the matrices provide information about the degree of discriminant validity and method-dependence found in the measures.

Interrater reliability estimates for each scale are presented in the main diagonals of Tables 6 through 11. These correlations ranged from .60 to .98, indicating a reasonable degree of agreement between interrater pairs. As was indicated by the percentage agreement scores computed at the item level, the lower levels of interrater correlation generally occurred within the child source interviews. Interrater reliability estimates for the child source scales ranged from .60 to .87. Interviews with the adult sources--parents and paraprofessionals--were more reliably codable: Reliability estimates for scales from these sources were, with a few exceptions, above .75.

Although the interrater reliability estimates were reasonably high, they were in some cases exceeded by the values on the convergent validity diagonals (underlined off-diagonal elements in Tables 6 through 11). The validity correlations ranged from -.16 to .93. Convergence between

Table 6

Outcome Interview Multitrait Multimethod Matrix: Positive Within-Family Interaction Variables

Note. Correlations in different parts of this matrix were based on different subsets of the total sample. For correlations between parent-source variables, N = 84 (28 parents interviewed at three time-points). For within child-source and child-parent source correlations, N = 63 (21 children interviewed at three time-points). For within paraprofessional source and parent-paraprofessional source correlations, N = 32 (16 paraprofessionals interviewed at two time-points). For child-paraprofessional source correlations, N = 24 (12 families in which both paraprofessionals and children were interviewed at two time-points).

[a]Correlations involving this variable were computed only on families with more than one child. For within parent-source correlations, N = 75; for within child-source and parent-child source correlations, N = 60; for within-paraprofessional-source and paraprofessional-parent source correlations, N = 30; for child-paraprofessional source correlations, N = 24.

[b]Correlations involving this variable were computed only on two-parent families. For within parent-source correlations, N = 33; for within child-source and parent-child source correlations, N = 24; for within paraprofessional-source and parent-paraprofessional source correlations, N = 12; for child-paraprofessional source correlations, N = 10.

Table 6

Outcome Interview Multitrait Multimethod Matrix: Positive Within-Family Interaction Variables

Variable	Parent				Child				Paraprofessional			
	1	2[a]	3[b]	4	1	2[a]	3[b]	4	1	2[a]	3[b]	4
Parent source												
1. Positive parent-child interaction	.94											
2. Positive sibling interaction[a]	.07	.78										
3. Positive parent interaction[b]	.13	.00	.83									
4. Parent-child recreation	.38	.30	.32	.68								
Child source												
1. Positive parent-child interaction	.79	.19	.10	.31	.63							
2. Positive sibling interaction[a]	.32	.91	.39	.54	.27	.68						
3. Positive parent interaction[b]	.09	.03	.90	.36	.23	.24	.71					
4. Parent-child recreation	.31	.41	.38	.75	.30	.50	.16	.67				
Paraprofessional source												
1. Positive parent-child interaction	.55	.05	.45	.32	.50	.42	.31	.23	.98			
2. Positive sibling interaction[a]	-.25	.91	.12	.14	.11	.87	.27	.34	.05	.82		
3. Positive parent interaction[b]	-.26	.03	.79	.07	-.23	.76	.62	.73	.36	.30	.87	
4. Parent-child recreation	-.34	.20	.26	.34	-.30	.31	.07	.62	.00	.37	.57	.77

Table 7

Outcome Interview Multitrait Multimethod Matrix: Negative Within-Family Interaction Variables

Note. Correlations in different parts of this matrix were based on different subsets of the total sample. For correlations between parent-source variables, N = 84 (28 parents interviewed at three time-points). For within child-source and child-parent source correlations, N = 63 (21 children interviewed at three time-points). For within paraprofessional source and parent-paraprofessional source correlations, N = 32 (16 paraprofessionals interviewed at two time-points). For child-paraprofessional source correlations, N = 24 (12 families in which both paraprofessionals and children were interviewed at two time-points).

[a]Correlations involving this variable were computed only on families with more than one child. For within parent-source correlations, N = 75; for within child-source and parent-child source correlations, N = 60; for within-paraprofessional-source and paraprofessional-parent source correlations, N = 30; for child-paraprofessional source correlations, N = 24.

[b]Correlations involving this variable were computed only on two-parent families. For within parent-source correlations, N = 33; for within child-source and parent-child source correlations, N = 24; for within paraprofessional-source and parent-paraprofessional source correlations, N = 12; for child-paraprofessional source correlations, N = 10.

Table 7

Outcome Interview Multitrait Multimethod Matrix: Negative Within-Family Interaction Variables

Variable	Parent				Child				Paraprofessional			
	1	2[a]	3[b]	4	1	2[a]	3[b]	4	1	2[a]	3[b]	4
Parent source												
1. Negative parent-child interaction	.84											
2. Negative sibling interaction[a]	.23	.85										
3. Negative parent interaction[b]	.12	.27	.95									
4. Children home alone	-.01	.24	.41	.82								
Child source												
1. Negative parent-child interaction	.80	.02	.42	.03	.76							
2. Negative sibling interaction[a]	.20	.78	.17	.18	.22	.82						
3. Negative parent interaction[b]	-.02	-.01	.81	.31	.33	.20	.67					
4. Children home alone	-.26	.11	.47	.85	-.11	.16	.25	.72				
Paraprofessional source												
1. Negative parent-child interaction	.84	.16	.67	.17	.87	.53	.84	.18	.78			
2. Negative sibling interaction[a]	.14	.75	.45	.16	.30	.64	.46	.13	.17	.91		
3. Negative parent interaction[b]	.53	.58	.89	.81	.87	.62	.91	.69	.71	.55	.96	
4. Children home alone	.16	.28	.36	.80	.16	-.00	.22	.72	.10	.23	.48	.92

Table 8

Outcome Interview Multitrait Multimethod Matrix: Family Home Involvement Variables

Note. Correlations in different parts of this matrix were based on different subsets of the total sample. For correlations between parent-source variables, N = 84 (28 parents interviewed at three time-points). For within child-source and child-parent source correlations, N = 63 (21 children interviewed at three time-points). For within paraprofessional source and parent-paraprofessional source correlations, N = 32 (16 paraprofessionals interviewed at two time-points). For child-paraprofessional source correlations, N = 24 (12 families in which both paraprofessionals and children were interviewed at two time-points).

Table 8

Outcome Interview Multitrait Multimethod Matrix: Family Home Involvement Variables

Variable	Parent				Child				Paraprofessional			
	1	2	3	4	1	2	3	4	1	2	3	4
Parent source												
1. Child home involvement	.67											
2. Child chore involvement	-.21	.85										
3. Parent home involvement	.39	-.10	.69									
4. Parent-child friend involvement	-.03	.22	.01	.87								
Child source												
1. Child home involvement	.80	-.02	.22	-.06	.68							
2. Child chore involvement	-.09	.85	.04	.02	-.07	.79						
3. Parent home involvement	.28	.11	.85	.11	.31	.08	.72					
4. Parent-child friend involvement	.11	.23	.14	.95	-.03	.04	.12	.87				
Paraprofessional source												
1. Child home involvement	.43	-.23	-.06	-.09	.70	.14	-.26	.06	.72			
2. Child chore involvement	-.19	.94	-.17	.03	.29	.70	.20	-.15	-.20	.78		
3. Parent home involvement	.16	-.30	.94	.12	-.17	-.10	.85	.36	.01	-.21	.75	
4. Parent-child friend involvement	-.13	.09	.17	.73	-.21	-.22	.49	.70	.01	.01	.24	.82

Table 9

Outcome Interview Multitrait Multimethod Matrix: Positive Outside Family Interaction Variables

Note. Correlations in different parts of this matrix were based on different subsets of the total sample. For correlations between parent-source variables, N = 84 (28 parents interviewed at three time-points). For within child-source and child-parent source correlations, N = 63 (21 children interviewed at three time-points). For within paraprofessional source and parent-paraprofessional source correlations, N = 32 (16 paraprofessionals interviewed at two time-points). For child-paraprofessional source correlations, N = 24 (12 families in which both paraprofessionals and children were interviewed at two time-points).

[a]Correlations involving this variable were computed only on families with children in school or daycare. For within parent-source correlations, N = 69; for within child-source and parent-child source correlations, N = 60; for within paraprofessional and parent-paraprofessional source correlations, N = 26; for child-paraprofessional source correlations, N = 22.

Table 9

Outcome Interview Multitrait Multimethod Matrix: Positive Outside-Family Interaction Variables

Variable	Parent					Child					Paraprofessional				
	1	2	3[a]	4	5	1	2	3[a]	4	5	1	2	3[a]	4	5
Parent source															
1. Child-relative interaction	.94														
2. Child-peer interaction	-.12	.94													
3. Positive school experience[a]	.05	-.02	.89												
4. Parent-friend interaction	.27	.05	.21	.86											
5. Positive neighbor interaction	.01	.25	.24	.47	.75										
Child source															
1. Child-relative interaction	.88	-.22	.19	.24	.05	.71									
2. Child-peer interaction	-.14	.77	.16	.06	.33	-.11	.78								
3. Positive school experience[a]	.14	-.21	.82	.17	.18	.21	-.02	.79							
4. Parent-friend interaction	.19	.08	.24	.83	.54	.15	.17	.15	.76						
5. Positive neighbor interaction	.07	.29	.16	.35	.88	.01	.39	.17	.43	.72					
Paraprofessional source															
1. Child-relative interaction	.84	-.23	-.12	-.07	-.34	.93	-.38	-.64	-.06	-.49	.87				
2. Child-peer interaction	-.10	.64	.19	-.06	.22	-.36	.35	.29	.11	.29	.23	.82			
3. Positive school experience[a]	-.08	-.22	.83	.25	.40	-.12	.24	.70	.28	.17	-.16	.21	.85		
4. Parent-friend interaction	-.17	.10	.45	.86	.29	-.05	-.33	.24	.90	-.04	.15	.07	.31	.75	
5. Positive neighbor interaction	-.37	.07	.41	.41	.75	-.49	.17	.29	.40	.79	.01	.10	.34	.41	.69

Table 10

Outcome Interview Multitrait Multimethod Matrix: Negative Outside Family Interaction Variables

Note. Correlations in different parts of this matrix were based on different subsets of the total sample. For correlations between parent-source variables, N = 84 (28 parents interviewed at three time-points). For within child-source and child-parent source correlations, N = 63 (21 children interviewed at three time-points). For within paraprofessional source and parent-paraprofessional source correlations, N = 32 (16 paraprofessionals interviewed at two time-points). For child-paraprofessional source correlations, N = 24 (12 families in which both paraprofessionals and children were interviewed at two time-points).

[a]Correlations involving this variable were computed only on families with children in school or daycare. For within parent-source correlations, N = 69; for within child-source and parent-child source correlations, N = 60; for within paraprofessional and parent-paraprofessional source correlations, N = 26; for child-paraprofessional source correlations, N = 22.

Table 10

Outcome Interview Multitrait Multimethod Matrix: Negative Outside-Family Interaction Variables

Variable	Parent				Child				Paraprofessional			
	1[a]	2	3	4	1[a]	2	3	4	1[a]	2	3	4
Parent source												
1. Negative child-school experience[a]	.80											
2. Child-adult conflict	.12	.88										
3. Parent-relative conflict	.18	.09	.86									
4. Parent-neighbor conflict	.08	.24	-.03	.66								
Child source												
1. Negative child-school experience[a]	.88	.04	.19	.12	.81							
2. Child-adult conflict	.09	.89	-.09	.20	.05	.70						
3. Parent-relative conflict	.15	.06	.73	-.12	.18	.09	.73					
4. Parent-neighbor conflict	.21	.23	-.02	.70	.33	.26	-.07	.75				
Paraprofessional source												
1. Negative child-school experience[a]	.84	-.04	.41	.44	.78	.13	.42	.23	.94			
2. Child-adult conflict	.03	.13	.12	.12	-.10	-.16	.08	.28	.18	.78		
3. Parent-relative conflict	.24	-.16	.79	-.14	.39	.05	.85	-.14	.40	.14	.68	
4. Parent-neighbor conflict	.26	.24	.21	.64	.05	.36	-.10	.37	.46	.21	.25	.71

Table 11

Outcome Interview Multitrait Multimethod Matrix: Informal Family Resource Variables

Note. Correlations in different parts of this matrix were based on different subsets of the total sample. For correlations between parent-source variables, N = 84 (28 parents interviewed at three time-points). For within child-source and child-parent source correlations, N = 63 (21 children interviewed at three time-points). For within paraprofessional source and parent-paraprofessional source correlations, N = 32 (16 paraprofessionals interviewed at two time-points). For child-paraprofessional source correlations, N = 24 (12 families in which both paraprofessionals and children were interviewed at two time-points).

Table 11

Outcome Interview Multitrait Multimethod Matrix: Informal Family Resource Variables

Variable	Parent					Child					Paraprofessional				
	1	2	3	4	5	1	2	3	4	5	1	2	3	4	5
Parent source															
1. Help from relatives	.82														
2. Babysitting help from friends	-.01	.77													
3. Material help from friends	.14	.29	.90												
4. Advice from friends	.19	.31	.17	.65											
5. Use of paid babysitter	.26	.36	.33	.22	.92										
Child source															
1. Help from relatives	.93	.05	.18	.17	.36	.61									
2. Babysitting help from friends	-.06	.81	.19	.33	.42	-.03	.60								
3. Material help from friends	.16	.09	.82	.14	.29	.16	.11	.65							
4. Advice from friends	.17	.37	.19	.91	.22	.19	.34	.17	.61						
5. Use of paid babysitter	.34	.48	.20	.15	.87	.39	.48	.18	.18	.85					
Paraprofessional source															
1. Help from relatives	.71	-.05	-.01	-.33	-.06	.85	-.25	-.08	-.32	-.02	.73				
2. Babysitting help from friends	-.05	.70	.35	.35	.29	-.03	.51	.37	.33	.48	-.07	.63			
3. Material help from friends	-.01	.10	.72	-.08	-.01	-.08	-.25	.81	.04	-.22	.23	.21	.81		
4. Advice from friends	-.33	.08	-.04	.97	.29	-.33	-.09	.00	.89	.21	.22	.30	-.11	.64	
5. Use of paid babysitter	-.01	.37	.11	.24	.55	.07	.43	.24	.28	.65	.28	.63	.23	.22	.87

parent and child sources was acceptably high for all scales, ranging from .70 to .95. Convergence between parent and paraprofessional sources ranged from .13 to .97. For three variables (parent-child recreation, child-home involvement, and child-adult conflict), parent and paraprofessional source convergence was less than .50. Child and paraprofessional source convergence ranged from -.16 to .93. Three variables (child-peer interactions, parent-neighbor conflicts, and child-adult conflict) showed child-paraprofessional convergence less than .50. It should be noted that two of the variables with low convergent validity estimates were single items (parent-neighbor and child-adult conflicts) and could be presumed to contain greater error variance than the multi-item scales. Additionally, the convergent validity estimates below .70 all involved correlations with the paraprofessional source. This source could be presumed to have a different view of a family's activities from that held by the parent and child sources. Overall, the degree of convergence between sources, especially between parent and child, was high enough to establish an acceptable level of convergent validity for the interview outcome scales.

Another plausible interpretation of the generally high level of convergence between sources was the potential existence of extraneous method variance shared between sources. This was a particularly plausible explanation since all sources for each case were interviewed by the same person. Although the interviewers were trained to code information from different sources independently, halo effects or other types of method error were expected to be a problem to some extent. To assess the magnitude of this problem, the multitrait multimethod matrices were inspected for evidence of discriminant validity.

Correlations within the heterotrait monomethod triangles of Tables 6 through 11 revealed the amount of extraneous method variance shared among scales derived from interviews with the same sources. Correlations among parent source scales ranged from .00 to .47, with 7 of the 44 correlations over .30. Among the child source scales, correlations ranged from .01 to .50, with 8 of the 44 above .30. Correlations among paraprofessional source scales ranged from .00 to .71, with 12 above .30. In only three cases did a heterotrait monomethod correlation exceed the relevant convergent validity correlation value; in all three cases the paraprofessional was involved.

Correlations within the heterotrait heteromethod triangles provided evidence of error variance shared among the three sources. Correlations between different scales derived from parent and child sources ranged from .02 to .54, with 18 of the 88 correlations above .30. Between parent and paraprofessional sources, correlations ranged from .01 to .81, with 21 of the 88 values above .30. Correlations between child and paraprofessional source scales ranged from .00 to .87, with 18 values above .30. In only two cases did a heterotrait heteromethod correlation exceed the relevant convergent validity correlation value; both cases involved the paraprofessional source. In one case, the single-item variable, child-adult conflict, was involved. As discussed earlier, this variable showed a lack of convergence between the paraprofessional and other sources. The other case involved the positive parent-parent interaction scale. Correlations between child and paraprofessional sources which involved this variable were based only on two-parent families in the experimental condition with a child capable of being interviewed; the resulting N for these correlations was thus only 10.

The fact that correlations in the multitrait multimethod matrices were based on different sample sizes introduced problems in making comparisons. However, all direct comparisons between convergent validity estimates and extraneous correlations involved equivalent samples. An additional problem was the necessity of computing the correlations in these matrices from data obtained from all three interviews conducted with each family. Assumptions of independence of observations were thus violated. However, violation of these assumptions should have had the effect of artificially escalating the values of the correlations, both those reflecting convergent validity and those indicating method variance. Rates of error for both types of correlations should have been similar, and comparisons therefore appropriate. Given the small N of 31 families, no other means of calculating validity coefficients was possible. Although the data gathered were not ideal for submission to multitrait multimethod analysis, some information about the reliability and validity of the outcome interview variables was gained from this examination.

To summarize, the multitrait multimethod matrices revealed an acceptably high level of convergent validity between sources for most variables. Convergence between parent and child sources was generally higher than was convergence between these sources and the paraprofessional source. Instances of lack of convergence with the paraprofessional source could be explained in terms of differences between sources inside as opposed to outside the family: Differences could have been due to dissimilar perspective, level of knowledge, or salience of social desirability factors. It should also be remembered that correlations involving the paraprofessional source were based on a much reduced N of 32 or smaller (depending on the variable).

Heterotrait correlations contained in the matrices showed some level of extraneous method variance both within sources and shared among sources. The fact that many of these values exceeded zero indicated that the scales and sources were not independent. However, these values were, with very few exceptions, considerably smaller than their associated convergent validity estimates. Thus, there was evidence for a reasonable degree of discriminant validity among the scales of the outcome interview measure.

Convergence among the sources indicated that use of the parent source interview scales, available for 28 families at all three time points, would provide a reasonably valid measure of family activities and interactions. Parent source interview variables were thus used in all further analyses.

Home Environment Rating

Structured ratings provided a measure of the safety and adequacy of the family's physical home environment. The rating instrument, reproduced in Appendix J, addressed specific features of the physical environment which could constitute threats to the safety or health of the family's children. Environmental ratings were completed by the interviewers immediately following each of the three visits to the family's home (at pre- , mid- , and post-intervention).

Variance on individual items in the home environment rating was generally low. For this reason, the measure was converted to a simple sum of the number of problems indicated. The resulting variable had a mean of 1.42 and a standard deviation of 2.07.

Table 12

Significant Correlations Between Archival Outcome, Interview Outcome, and Home Environment Rating Variables

Variable 1	Variable 2	r
P.S. complaints	Negative parent-parent interaction[a]	-.62*
P.S. complaints	Child-peer interaction	-.40*
P.S. complaints	Babysitting help from friends	.37*
Probate Court petitions	Positive sibling interactions[b]	-.35*
Probate court petitions	Parent-child recreation	-.34*
Probate court petitions	Parent home involvement	-.52**
% time child out of home	Child-relative involvement	-.38*
% absent from school[c]	Positive parent-child interaction	-.39*
% absent from school[c]	Children home alone	.58**
% absent from school[c]	Parent home involvement	-.45*
% absent from school[c]	Child-peer interaction	.43*
Home environment rating	Negative parent-child interaction	.47**
Home environment rating	Negative child-school experience[d]	.51**

Note. N = 28, except where noted; data from during intervention time period.

[a]N = 11, the number of families with two parents. [b]N = 25, the number of families with more than one child. [c]N = 25, the number of families with school-age children. [d]n = 24, the number of interviewed families with children in school or daycare.

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

Interrater reliability was determined as percent agreement between the two interraters who completed the measure independently for each of five families at the three time points. Exact agreement for the rating averaged 96%.

Correlations Among Outcome Variables

Inspection of the correlations between the interview and archival outcome variable revealed a high degree of independence between variables measured by the two methods. Only 13 of the 173 correlations were significantly different from zero at $p < .05$; these significant correlations are listed in Table 12. The level of redundancy in the final set of outcome variables was thus low and justified the retention of all 34 variables for further analysis.

Measures of Process

Archival Measures of Process

Since the interventions occurring in both treatment conditions (Family Diversion and Protective Services) were highly individualized, it was important to monitor the intervention process (the independent variable) for both conditions. Archival records maintained by the intervention agents provided an important source of this process data.

Protective Services case records. One source of intervention process data for families in the P. S. control condition was the case records maintained by P.S. caseworkers. Quarterly reports were filed for each family case receiving direct P.S. services or treatment on formal referral from Protective Services. These reports contained information about each contact with family members as well as case

goals, plans, and progress. For each family in the P.S. condition, the following information was collected: total number of contacts between the primary intervention agent (P.S. caseworker or, for referred families, agent having most contact with the family) and a family member; average duration of contacts between intervention agent and family members; proportion of contacts which involved a child; proportion of contacts which involved a parent; and number of contacts between the primary intervention agent and other intervention agents working with the family.

The nature of each contact was also recorded and categorized by type of issue addressed and type of strategy used by the intervention agent. The contacts in each category were then summed and divided by the total number of intervention agent-family contacts to produce the proportion of contacts addressing each issue and involving each strategy. The categories, plus the means and standard deviations for all archival process variables, can be found in Table 13.

For descriptive purposes, several other pieces of information were recorded from each family's P.S. file: a list of agencies with which the family was involved at the time of project intake; a list of agencies to which the family was referred (formally or informally) during the intervention period; and, from the caseworkers' case plans, a list of problem areas and intervention plans for each family. Additionally, the status of each family's case with Protective Services (open or closed) at the end of the 18-week intervention period was determined from the agency's case records.

All P.S. data collection was done by the author. As P.S. records were accessible only to the author, it was not possible to assess the

Table 13

Archival Intervention Process Measures

Variable	M	SD
Amount of contact with primary intervention agent		
# contacts with family member(s)	33.45	27.98
Average duration of contacts (minutes)	68.20	40.63
Proportion of contacts involving parent(s)	.81	.33
Proportion of contacts involving child(ren)	.42	.36
# contacts with other intervention agents	8.39	11.60
Intervention strategies (proportion of contacts in which each was used)		
Assessment	.18	.26
Monitoring	.42	.36
Contracting	.07	.11
Advocacy	.12	.18
Recreation	.14	.22
Counseling	.31	.35
Direct service	.54	.10
Directives	.24	.37
Intervention focus (proportion of contacts in which each issue was addressed)		
Parent-child interaction	.32	.35
Child behavior	.26	.31
Material needs	.17	.25
Family health	.14	.26
Parent education/employment	.10	.20
Child school	.16	.27
Parent mental health	.26	.37

Note. N = 31.

level of interrater reliability of the information gathered from these records. Some indication of the reliability of archival process data collection procedure was obtained from estimates of interrater agreement on data collected from Family Diversion records, discussed below. Level of error peculiar to P.S. records could not be assessed.

As with all archival data, permission to examine the P.S. case records was obtained from each family during the intake meeting, and access to the records was negotiated with P.S. representatives. All process information was gathered by the author in September, 1981.

Family Diversion Project records. Process data for families in the Family Diversion condition were obtained from records maintained by the paraprofessional intervention agents. As described earlier, each student paraprofessional submitted a weekly progress report outlining each week's intervention activities, plans, and progress. Additionally, each student maintained a logbook detailing all contacts with family members and others. These records were the source of the same types of information described above for families in the F.D. condition. This information was gathered and coded by the author and, independently, by another rater. It was thus possible to assess the level of interrater reliability of these data for the 16 F.D. condition cases. Correlations between the two raters for each of the archival process variables ranged from .82 to .99. The individual interrater correlations are contained in the multitrait multimethod matrices for intervention process variables, discussed in a later section (Tables 18 through 20).

Correlations among archival process variables. Inspection of the matrix of intercorrelation among archival process variables revealed that these measures were not independent: 25 of the 190 correlations

were significantly different from zero. These significant correlations are listed in Table 14. The majority of significant correlations involved variables describing amount of contact and involvement of various individuals in the intervention. Other significant correlations involved both strategy and focus variables. For example, focus on parent-child interaction, child behavior, and parent mental health were all significantly correlated with use of counseling as an intervention strategy. Within the subgroup of variables addressing intervention strategy, no intercorrelations were significantly different from zero. Within variables addressing intervention focus, three correlations were significant. Focus on parent-child interaction was correlated with both child behavior and parent mental health focus, and child behavior was correlated with child school focus. Overall, with the exception of variables assessing amount of contact and involvement of various individuals in the intervention, the archival process measures appeared to be relatively nonredundant. The degree of convergent and discriminant validity associated with these variables will be discussed in a later section, in conjunction with the validity of the interview process variables.

Interview Process Measures

Interviews with various sources relevant to each of the families provided additional information about the intervention process in the two treatment conditions. As part of the interviews conducted with each source (parent and child) at the mid- and post-intervention time points, information about the intervention received by the family was sought. Additionally, the paraprofessional involved with each family in the F.D. condition was interviewed at the mid- and post-intervention points.

Table 14

Significant Correlations Between Archival Intervention Process Variables

Variable 1	Variable 2	r
Contracting strategy	Child school focus	.40*
Contracting strategy	# contacts with family member	.44*
Contracting strategy	Average length of contacts	.47*
Recreation strategy	Average length of contacts	.42*
Recreation strategy	Proportion of contacts involving children	.36*
Counseling strategy	Parent-child interaction focus	.42*
Counseling strategy	Child behavior focus	.45*
Counseling strategy	Parent mental health focus	.62*
Direct service strategy	Average length of contacts	.43*
Directive strategy	# contacts with family member	-.38*
Assessment strategy	# contacts with other intervention agents	.42*
Monitoring strategy	Child school focus	.37*
Monitoring strategy	# contacts with family member	.41*
Monitoring strategy	# contacts with other intervention agents	.44*
Parent-child interaction focus	Child behavior focus	.54*
Parent-child interaction focus	Parent mental health focus	.45*
Child behavior focus	Child school focus	.44*
Child behavior focus	Proportion of contacts involving children	.45*
Material needs focus	# contacts with other intervention agents	.54*

Table 14 (cont'd.)

Variable 1	Variable 2	r
Child school focus	Proportion of contacts involving children	.44*
Parent mental health focus	Average length of contacts	.35*
Parent mental health focus	Proportion of contacts involving parents	.37*
# contacts with family member	Average length of contacts	.62*
# contacts with family member	# contacts with other intervention agents	.52*
Average length of contacts	# contacts with other intervention agents	.38*

Note. N = 31.

*p < .05.

The intervention process section of the interview was conducted in the loosely-structured and conversational style discussed earlier. Interviewers worked from a broad outline of interviewing cues (reproduced in Appendix K). Specific questions were answered and coded by the interviewers with the aid of the audio tape. All interview process items addressed the activities of the family's primary intervention agent. For families in the F.D. condition, this was the paraprofessional. For P.S. control group families, the primary intervention agent was defined as whoever both had the most contact with the family and was addressing the broadest range of family issues. In 5 P.S. group families, the primary intervention agent was the P.S. caseworker; in 4 families, the primary agent was a parent's therapist. For 1 family each, the primary agent was as follows: a public health nurse, a nutritionist, a parent aide, a parent's probation officer, a child's probation officer, and a counselor at a crisis center for runaway youth.

The content dimensions addressed by the process interviews are summarized in Table 15. Appendix L lists the complete set of intervention process items coded by the interviewers.

Data preparation. Prior to the construction of scales, all items were inspected for missing data or low variance problems. Any item which, for the parent source, could not be coded in over 10% of the cases or received the same code in over 90% of the cases was dropped from further analyses. Ten items were excluded for these reasons. Most of these low-variance items related to contact between the intervention agent and individuals outside the immediate family or to use of the telephone.

Table 15

Intervention Process Interview Items: Content Dimensions

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1. Contacts with Intervention Agent. Frequency, duration, and nature of contacts with family members.

2. Satisfaction with Intervention. Degree to which family members like the intervention agent and are satisfied with the services provided.

3. Involvement of Children. Extent to which the children in the family are involved in the intervention.

4. Involvement of Parents. Extent to which the parents are involved in the intervention.

5. Involvement of Significant Others. Degree to which persons outside the immediate family are involved in the intervention.

6. Focus on Changing Children's Behavior. Degree to which intervention focuses on changing children's behaviors.

7. Focus on Changing Parent's Behavior. Degree to which intervention focuses on changing parent's behaviors.

8. Focus on Changing Others' Behavior. Degree to which intervention focuses on changing behavior of individuals outside the immediate family.

9. Recreational Activities. Amount of contact time spent in recreation with family members.

10. Direct Services. Amount of contact time spent in provision of direct, tangible services to family (e.g., babysitting, transportation, etc.).

11. Monitoring Activities. Extent to which intervention involves monitoring the activities of the family

12. Advocacy Activities. Extent to which intervention involves obtaining resources for the family.

13. Counseling Activities. Extent to which intervention involves talking with family members about problems, feelings, etc.

14. Contracting Activities. Extent to which intervention involves behavioral contracting.

An average of 2% of the remaining data were missing from the parent source interviews in each case. Less than 1% of the items were missing from the paraprofessional source interviews. Missing data was a greater problem in the child source interviews, where an average of 8% of the items could not be coded in each case. As with the outcome interview data, missing items were coded to the modal response for the item given by other respondents from the same source (parent, child, paraprofessional).

Items addressing the activities of individual family members were combined into family unit scores in a manner similar to that used with the outcome interview data. In two-parent families, several identical questions about intervention efforts with each parent were coded. These items were combined, assigning the higher of the two response codes to a combined parent intervention item.

Items addressing intervention efforts with individual children were combined in a slightly different manner. Distributions of these variables were decidedly bimodal: Children were generally uninvolved in the intervention or involved to a substantial extent. Averaging these items across children was therefore inappropriate. Instead, these items were dichotomized, summed, and expressed as a percentage of children in the family who were involved in the various aspects of the intervention.

The deletion of low-variance items plus the combination of individual child and parent items into family unit scores resulted in a total pool of 81 items relevant to intervention activities. These items were further combined into rationally meaningful scales addressing a variety of aspects of the intervention.

Process interview scale construction. Process interview scales were constructed in a manner similar to that described for the outcome interview scales. Items were initially grouped into the content dimensions described in Table 15. Parent source interview data from both time points (mid- and post-intervention) were used to refine these groupings and arrive at scales which were as internally consistent and independent from each other as possible. Using the data from 56 interviews (28 parents at both times), each of the initial groupings was submitted to factor analysis. These analyses indicated the presence of several factors within one dimension: The "focus on changing parent's behavior" dimension appeared to contain four factors addressing parent-child interactions, family housekeeping, family health, and parent employment/education. Several other dimensions, including satisfaction with intervention, involvement of significant others, focus on changing others' behavior, direct services, and monitoring activities, revealed a general lack of communality within the initial item groupings.

The item groupings indicated by the factor analyses were then tested for internal consistency and unidimensionality. Correlations between the groupings were also inspected, as were correlations between individual items and preliminary groupings. Through an iterative process maximizing internal consistency and unidimensionality within groupings and minimizing intercorrelation between groupings, a final set of 13 conceptually meaningful scales were constructed. The resulting scales and items which comprise them, along with item-total correlations, estimates of internal consistency, scale means, and scale standard deviations, are presented in Table 16. Also included in Table 16 are five single items which were retained. These revealed sufficient

Table 16

Process Interview Scales and Psychometric Properties

Items comprising scale	Corrected item-total correlations
1. Contracting as intervention strategy (α = .82)	
a. Negotiating agreements between family members	.76
b. Teaching parent to use contracting	.81
c. Teaching child to use contracting	.74
d. Trying to change parent's behavior	.46
e. Trying to change child's behavior	.47
M = 8.91 *SD* = 4.72	
2. Advocacy as intervention strategy (α = .79)	
a. Teaching child some skill	.43
b. Getting resources for family	.65
c. Teaching parent how to get resources	.69
d. Teaching child how to get resources	.41
e. Negotiating agreements between family members and others outside the family	.55
f. Trying to change behavior of someone outside family	.45
M = 9.52 *SD* = 4.03	
3. Recreation as intervention strategy (α = .81)	
a. Family recreation as intervention focus	.75
b. Engaging in recreational activities with parent	.47
c. Engaging in recreational activities with parent and child together	.71
d. Daycare or babysitter for children as intervention focus	.54
M = 5.71 *SD* = 2.92	
4. Counseling as intervention strategy (α not applicable; single item)	
a. Counseling with parents (talking about feelings, heavy problems, etc.)	--
M = 2.82 *SD* = 1.68	

Table 16 (cont'd.)

Items comprising scale	Corrected item-total correlations
5. Direct service as intervention strategy (α not applicable; single item)	
a. Providing direct services to family (transportation, babysitting, clothes, etc.)	--
M = 1.98 SD = 1.47	
6. Directives as intervention strategy (α not applicable; single item)	
a. Telling family what needs to be changed	--
M = 1.88 SD = 1.47	
7. Focus on parent-child interaction (α = .92)	
a. Focus on parent-child communication	.70
b. Focus on parent's involvement with children	.78
c. Focus on parent's discipline strategy	.74
d. Focus on parent's feelings about children	.69
e. Focus on parent's supervision of children	.71
f. Focus on parent-child conflicts	.74
g. Focus on parent's ability to control child	.82
h. Focus on parent's restrictions on children's activities	.62
M = 14.36 SD = 7.51	
8. Focus on child behavior (α = .87)	
a. Focus on child's school performance (grades)	.69
b. Focus on child's school behavior (fighting, sleeping, disruptions, etc.)	.58
c. Focus on child's behavior at home	.73
d. Focus on child's self-concept or feelings about self	.66
e. Focus on child's attitude toward parent	.60
f. Focus on child's free-time activities	.56
g. Focus on child's friends	.51
h. Focus on sibling interactions	.60
i. Counseling with child(ren)	.51
j. Engaging in recreational activities with child(ren)	.65
M = 17.46 SD = 7.83	

Table 16 (cont'd)

Items comprising scale	Corrected item-total correlations
9. Focus on family's material needs (α = .81)	
a. Focus on family's housekeeping standards	.50
b. Focus on family's housing.	.63
c. Focus on family's income	.58
d. Focus on family's transportation	.54
e. Focus on clothes, toys, furniture, etc. for family	.66
f. Focus on hassles with landlord	.52
g. Focus on hassles with community agency (Social Services, Unemployment, etc.)	.54
M = 10.36 SD = 5.08	
10. Focus on family's health (α = .75)	
a. Focus on child's nutrition	.55
b. Focus on child's health or medical care	.73
c. Focus on parent's child-care skills or knowledge	.43
d. Focus on parent's health or medical care	.52
M = 6.09 SD = 3.30	
11. Focus on parent education/employment (α = .79)	
a. To what extent is parent's job/education/recreation the focus of the intervention?	.85
b. Focus on parent's education	.55
c. Focus on parent's job	.65
M = 5.57 SD = 3.02	
12. Focus on child school (α = .72)	
a. Focus on child's school attendance	.56
b. Focus on hassles with school	.58
c. How often has agent talked with child's teachers, counselors, or school administrators?	.59
M = 4.68 SD = 2.62	

Table 16 (cont'd.)

Items comprising scale	Corrected item-total correlations
13. Focus on parent mental health (α not applicable; single item)	
a. To what extent is parent's mental health (feelings, personal problems, etc.) the focus of the intervention?	--
M = 2.34 SD = 1.44	
14. Contact between family and intervention agent (α = .80)	
a. How often does intervention agent see family (or any family member)?	.79
b. How much time per week does agent spend with family (or any family member)?	.79
M = 6.73 SD = 2.84	
15. Parent involvement in intervention (α = .75)	
a. How often does parent have contact with intervention agent?	.51
b. How often does parent talk alone with intervention agent?	.69
c. How involved is parent in planning the intervention?	.54
M = 9.96 SD = 3.06	
16. Children's involvement in intervention (α = .81)	
a. Percent of children who have contact with intervention agent more than once per month	.60
b. Percent of children who talk alone with intervention agent more than once per month	.62
c. Percent of children who are involved in planning the intervention	.76
M = 145.92 SD = 107.53	
17. Contact with other intervention agents (α not applicable; single item)	
a. How often has agent talked with other helping people involved with family (social workers, probation officers, therapists, doctors, etc.)?	--
M = 1.95 SD = 1.48	

Table 16 (cont'd.)

Items comprising scale	Corrected item-total correlations
18. Parent approval of intervention (α = .85)	
a. To what extent does parent like the intervention agent?	.75
b. To what extent does parent approve of what intervention agent is doing?	.75
$\underline{M}$ = 8.45 $\underline{SD}$ = 2.15	

variance for further analysis, were judged to be conceptually important, and did not show substantial enough correlation with other items to be included in any of the scale groupings.

As can be seen in Table 16, the internal consistency estimates (standardized item alphas) of the process interview scales ranged from .75 to .92. All corrected item-total correlations were above .40.

Correlations among interview process variables. The matrix of intercorrelation among the process interview variables revealed a moderate level of correlation among a number of the measures. Forty-one of the 153 correlations were significantly different from zero. These significant correlations are listed in Table 17. The majority of the significant correlations (24) involved measures of amount of contact or level of involvement of various individuals in the intervention. Amount of contact was apparently a substantial factor underlying variation in many of the other measures of intervention process. These correlations were not particularly large, however: Only one exceeded .50. This indicated that the variables addressing specific aspects of the intervention process were potentially useful for describing intervention differences not fully explained by amount of contact.

An additional set of 11 significant correlations revealed relationships between specific intervention strategies and types of issues addressed by the intervention. These generally indicated predictable associations between intervention characteristics. For example, the correlation between intervention focus on family's material needs and the use of direct services as an intervention strategy (r = .67) indicated a sensible association between these intervention descriptors. It was thought that differences between the two interventions might

Table 17

Significant Correlations Between Interview Process Variables

Variable 1	Variable 2	r
Contracting strategy	Advocacy strategy	.44*
Contracting strategy	Parent-child interaction focus	.39*
Contracting strategy	Child behavior focus	.36*
Contracting strategy	Material needs focus	.42*
Contracting strategy	Child school focus	.35*
Contracting strategy	Amount of contact with family	.44*
Contracting strategy	Parent involvement in intervention	.36*
Contracting strategy	Children's involvement in intervention	.44*
Advocacy strategy	Direct service strategy	.37*
Advocacy strategy	Material needs focus	.62*
Advocacy strategy	Child school focus	.45*
Advocacy strategy	Amount of contact with family	.39*
Advocacy strategy	Parent involvement in intervention	.44*
Advocacy strategy	Children's involvement in intervention	.34*
Advocacy strategy	Contact with other intervention agents	.41*
Recreation strategy	Direct service strategy	.36*
Counseling strategy	Parent-child interaction focus	.44*
Counseling strategy	Parent mental health focus	.55*
Counseling strategy	Parent involvement in intervention	.48*

Table 17 (cont'd.)

Variable 1	Variable 2	r
Counseling strategy	Parent approval of intervention	.51*
Direct service strategy	Material needs focus	.67*
Direct service strategy	Child school focus	.47*
Direct service strategy	Amount of contact with family	.55*
Direct service strategy	Parent involvement in intervention	.46*
Direct service strategy	Children's involvement in intervention	.42*
Direct service strategy	Contact with other intervention agents	.40*
Directive strategy	Parent-child interaction focus	.52*
Parent-child interaction focus	Child behavior focus	.39*
Child behavior focus	Child school focus	.43*
Child behavior focus	Amount of contact with family	.36*
Material needs focus	Amount of contact with family	.43*
Material needs focus	Parent involvement in intervention	.39*
Material needs focus	Children's involvement in intervention	.50*
Child school focus	Amount of contact with family	.39*
Child school focus	Contact with other intervention agents	.39*
Amount of contact with family	Parent involvement in intervention	.61*
Amount of contact with family	Children's involvement in intervention	.59*
Amount of contact with family	Parent approval of intervention	.37*

Table 17 (cont'd.)

Variable 1	Variable 2	*r*
Parent involvement in intervention	Children's involvement in intervention	.48*
Parent involvement in intervention	Parent approval of intervention	.55*
Children's involvement in intervention	Parent approval of intervention	.36*

Note. *N* = 28; data from post-intervention parent interviews.

*$p < .05$.

involve either strategies or foci and that such differences could be obscured by combining measures across the two dimensions. Therefore, although some measures of intervention focus were moderately correlated with some measures of intervention strategy, these were not combined in order to maximize the possibility of accurately describing differences between the two interventions.

A higher degree of independence was found among variables addressing each of the two dimensions (strategy and focus). The level of discriminant validity among these variables will be discussed in the next section.

Reliability and validity of process interview data. Interrater reliability of process interview data was determined in a manner identical to that described above for the outcome interview data. Pairs of interviewers independently coded the responses given by each source in five families. Percent agreement between interraters across all items ranged from 88% to 96%.

Reliability and validity issues were also examined in regard to each of the process interview scales coded from each of the three sources. The scale groupings developed from parent source data were applied to data from the child and paraprofessional source interviews. Interrater reliability estimates were then computed separately for each scale coded from each source. Pearson correlation coefficients between interrater pairs were computed for each variable-source combination.

As with the outcome interview data, the process scales were subjected to tests of convergent and discriminant validity in terms of multitrait multimethod matrices. Interrater reliability and convergent and discriminant validity estimates are presented in Tables 18 through

20. The multitrait multimethod matrices are presented separately for subsets of the process interview variables: intervention strategies, intervention foci, and contact between intervention agents and various individuals. Included in each matrix are correlations with parallel variables from the fourth source of intervention process data, the archival P.S. and F.D. case records (described above).

Interrater reliability estimates for each scale are presented in the main diagonals of Tables 18 through 20. These correlations ranged from .57 to 1.00, indicating a reasonable degree of agreement between interrater pairs. As with the outcome interview scales, the lower levels of interrater correlation generally occurred within the child source interviews. All but one of the correlation coefficients lower than .70 were between ratings of interviews with children.

Estimates of convergent validity (underlined off-diagonal elements in Tables 18 through 20) ranged from -.34 to .94. Convergence between parent and paraprofessional sources was acceptably high in most cases, ranging from .64 to .94. Convergence between child source information and responses of the parent and paraprofessional sources was more variable. In most cases, low agreement with the child source occurred in measures of activities about which the child might be expected to have little information: parent counseling strategies, telling the family what to change as a strategy, parent-child interaction focus, parent mental health focus, contact with other intervention agents, and parent involvement in the intervention. The lack of convergence between parent and child source information about the use of recreation as an intervention strategy is more difficult to explain and could reflect parent/child differences in perceptions about what constitutes "recreation."

Table 18

Process Interview Multitrait Multimethod Matrix: Intervention Strategies

Note. Correlations in different parts of this matrix were based on different subsets of the total sample. For correlations within parent-source variables and between parent and archival-source variables, N = 56 (28 parents interviewed at two time-points). For within child-source, child-parent, and child-archival source correlations, N = 42 (21 children interviewed at two time-points). For within paraprofessional-source, parent-paraprofessional, and paraprofessional-archival source correlations, N = 32 (16 paraprofessionals interviewed at two time-points). For child-paraprofessional source correlations, N = 24 (12 families in which both paraprofessionals and children were interviewed at two time-points). Correlations within archival-source variables were based on the total N of 62 (31 families at two time-points).

Table 18

Process Interview Multitrait Multimethod Matrix: Intervention Strategies

Variable	Parent 1	2	3	4	5	6
Parent source						
1. Contracting	.86					
2. Advocacy	.43	.78				
3. Counseling	.25	.13	.78			
4. Recreation	.09	.33	.31	.91		
5. Direct service	.36	.41	.12	.36	.79	
6. Directive	.21	-.01	.06	-.00	.07	.64
Child source						
1. Contracting	.72	.47	.22	.10	.31	.10
2. Advocacy	.49	.70	.23	.21	.39	.11
3. Counseling	.36	.26	.51	-.12	-.06	-.17
4. Recreation	.45	.23	.07	.37	.05	.28
5. Direct service	.53	.36	-.01	.12	.62	.10
6. Directive	.47	.44	.05	.23	.28	.52
Paraprofessional source						
1. Contracting	.81	.19	.19	-.05	.15	.27
2. Advocacy	.31	.78	.14	.25	.28	.30
3. Counseling	.25	.13	.68	.28	.01	-.03
4. Recreation	.29	.06	.03	.64	-.15	-.00
5. Direct service	.26	.41	-.00	.05	.83	.38
6. Directive	.33	.25	-.06	.18	.16	.59
Archival source						
1. Contracting	.47	.17	.03	-.07	.13	.06
2. Advocacy	.11	.14	-.01	-.11	.10	.23
3. Counseling	-.06	-.11	.37	-.14	-.22	.03
4. Recreation	.01	.26	.18	-.21	.10	.09
5. Direct service	.16	.32	.10	.07	.25	-.08
6. Directive	-.13	-.25	-.34	-.15	-.17	.22

Table 18 (cont'd.)

Variable	Child 1	2	3	4	5	6
Parent source						
1. Contracting						
2. Advocacy						
3. Counseling						
4. Recreation						
5. Direct service						
6. Directive						
Child source						
1. Contracting	.81					
2. Advocacy	.67	.64				
3. Counseling	.41	.37	.60			
4. Recreation	.37	.25	.26	.60		
5. Direct service	.43	.49	.17	.46	.66	
6. Directive	.43	.46	.05	.52	.36	.60
Paraprofessional source						
1. Contracting	.60	.35	.22	.38	.39	.22
2. Advocacy	.25	.67	.10	.16	.25	.44
3. Counseling	.17	.14	.47	.17	-.14	.07
4. Recreation	.23	.11	.03	.79	.27	.17
5. Direct service	.20	.43	-.13	.00	.63	.42
6. Directive	.54	.35	-.05	.44	.18	.76
Archival source						
1. Contracting	.43	.19	.06	.17	.16	.18
2. Advocacy	-.05	.10	-.10	-.17	-.04	.04
3. Counseling	-.06	.03	.22	-.15	.02	-.12
4. Recreation	.15	.36	.23	.10	.32	.27
5. Direct service	.18	.06	-.12	.13	.19	.36
6. Directive	-.30	-.28	-.44	-.15	-.18	-.17

Table 18 (cont'd.)

	Paraprofessional					
Variable	1	2	3	4	5	6
Parent source						
1. Contracting						
2. Advocacy						
3. Counseling						
4. Recreation						
5. Direct service						
6. Directive						
Child source						
1. Contracting						
2. Advocacy						
3. Counseling						
4. Recreation						
5. Direct service						
6. Directive						
Paraprofessional source						
1. Contracting	.94					
2. Advocacy	.31	.88				
3. Counseling	.15	.06	.72			
4. Recreation	.22	.07	.11	.83		
5. Direct service	.14	.39	.06	-.20	.93	
6. Directive	.43	.31	.00	.19	.28	.80
Archival source						
1. Contracting	.60	.02	.14	.02	-.01	.37
2. Advocacy	-.25	.26	-.23	-.14	.29	.01
3. Counseling	-.04	.02	.28	-.15	.02	-.21
4. Recreation	-.35	.07	-.45	-.34	.01	-.05
5. Direct service	-.04	.08	-.14	-.14	.42	.14
6. Directive	.27	-.04	-.29	.03	.14	-.01

Table 18 (cont'd.)

	Archival					
Variable	1	2	3	4	5	6
Parent source						
1. Contracting						
2. Advocacy						
3. Counseling						
4. Recreation						
5. Direct service						
6. Directive						
Child source						
1. Contracting						
2. Advocacy						
3. Counseling						
4. Recreation						
5. Direct service						
6. Directive						
Paraprofessional source						
1. Contracting						
2. Advocacy						
3. Counseling						
4. Recreation						
5. Direct service						
6. Directive						
Archival source						
1. Contracting	.98					
2. Advocacy	.04	.89				
3. Counseling	.02	.13	.87			
4. Recreation	.09	.05	.02	.93		
5. Direct service	.09	.10	.04	.60	.97	
6. Directive	-.23	.15	-.02	-.32	-.12	.84

Table 19

Process Interview Multitrait Multimethod Matrix: Intervention Focus

Note. Correlations in different parts of this matrix were based on different subsets of the total sample. For correlations within parent-source variables and between parent and archival-source variables, N = 56 (28 parents interviewed at two time-points). For within child-source, child-parent, and child-archival source correlations, N = 42 (21 children interviewed at two time-points). For within paraprofessional-source, parent-paraprofessional, and paraprofessional-archival source correlations, N = 32 (16 paraprofessionals interviewed at two time-points). For child-paraprofessional source correlations, N = 24 (12 families in which both paraprofessionals and children were interviewed at two time-points). Correlations within archival-source variables were based on the total N of 62 (31 families at two time-points).

Table 19

Process Interview Multitrait Multimethod Matrix: Intervention Focus

Variable	Parent 1	2	3	4	5	6	7
Parent source							
1. Parent-child interaction	.88						
2. Child behavior	.34	.83					
3. Parent mental health	.16	-.14	.90				
4. Child school	.06	.41	-.19	1.00			
5. Parent education/employment	-.17	-.02	.04	-.04	.79		
6. Material needs	.20	.26	-.00	.42	.28	.86	
7. Family's health	.16	.04	-.01	.20	-.01	.19	.72
Child source							
1. Parent-child interaction	.33	.40	.25	.08	.05	.11	-.09
2. Child behavior	-.04	.75	-.07	.42	.16	.31	-.14
3. Parent mental health	.13	-.07	.52	-.22	.02	-.14	-.04
4. Child school	-.10	.27	-.10	.86	.03	.36	.01
5. Parent education/employment	-.00	.30	.14	.36	.59	.34	.03
6. Material needs	-.00	.17	.13	.35	.10	.87	.12
7. Family's health	.08	.20	-.02	.42	.26	.53	.64
Paraprofessional source							
1. Parent-child interaction	.82	.52	.03	.20	-.14	.36	.36
2. Child behavior	.53	.89	-.18	.38	-.06	.30	.23
3. Parent mental health	-.06	-.30	.67	-.21	.05	-.11	.03
4. Child school	.05	.28	-.25	.88	-.27	.22	.16
5. Parent education/employment	.02	.02	.17	-.31	.86	.06	.25
6. Material needs	.38	.12	.08	.32	.15	.94	.39
7. Family's health	.32	.12	.03	.10	.16	.25	.85
Archival source							
1. Parent-child interaction	.29	-.00	-.10	-.19	-.11	-.06	-.14
2. Child behavior	.33	.34	-.30	.19	-.21	.02	-.14
3. Parent mental health	.09	-.38	.34	-.31	-.10	-.18	-.14
4. Child school	-.05	.16	-.19	.43	-.14	-.03	-.20
5. Parent education/employment	-.12	-.15	-.03	-.18	.64	.06	-.12
6. Material needs	-.03	-.08	-.03	.11	.26	.65	-.02
7. Family's health	-.26	-.22	.03	-.04	.00	-.03	.64

Table 19 (cont'd.)

Variable	Child 1	2	3	4	5	6	7
Parent source							
1. Parent-child interaction							
2. Child behavior							
3. Parent mental health							
4. Child school							
5. Parent education/employment							
6. Material needs							
7. Family's health							
Child source							
1. Parent-child interaction	.74						
2. Child behavior	.49	.90					
3. Parent mental health	.42	-.01	.78				
4. Child school	.19	.49	-.19	.57			
5. Parent education/employment	.35	.43	.08	.32	.61		
6. Material needs	.28	.38	-.04	.31	.38	.82	
7. Family's health	.24	.26	.04	.32	.37	.46	.62
Paraprofessional source							
1. Parent-child interaction	.59	.40	.18	.01	-.01	.05	.39
2. Child behavior	.36	.91	-.13	.10	.19	.20	.35
3. Parent mental health	.39	.13	.50	-.01	.23	.03	.26
4. Child school	-.09	.27	-.37	.75	.03	.18	.27
5. Parent education/employment	.27	.22	.40	-.21	.71	-.01	.35
6. Material needs	.13	.13	-.15	.24	.11	.82	.63
7. Family's health	.25	.36	-.08	.20	.25	.28	.88
Archival source							
1. Parent-child interaction	.08	-.00	-.12	-.21	-.10	.21	-.13
2. Child behavior	.19	.37	-.15	.09	.12	.02	-.04
3. Parent mental health	.08	-.29	.50	-.25	-.11	-.17	-.09
4. Child school	.09	.30	-.25	.50	.19	.06	-.05
5. Parent education/employment	-.11	-.17	-.03	-.18	.03	-.06	-.02
6. Material needs	-.09	.10	-.20	.22	.06	.55	.12
7. Family's health	-.08	-.19	.07	-.09	-.05	.01	.26

Table 19 (cont'd.)

Variable	Paraprofessional 1	2	3	4	5	6	7
Parent source							
1. Parent-child interaction							
2. Child behavior							
3. Parent mental health							
4. Child school							
5. Parent education/employment							
6. Material needs							
7. Family's health							
Child source							
1. Parent-child interaction							
2. Child behavior							
3. Parent mental health							
4. Child school							
5. Parent education/employment							
6. Material needs							
7. Family's health							
Paraprofessional source							
1. Parent-child interaction	.92						
2. Child behavior	.58	.88					
3. Parent mental health	.03	-.11	.90				
4. Child school	.12	.45	-.07	.94			
5. Parent education/employment	-.18	-.08	-.00	-.40	.83		
6. Material needs	.30	.32	-.02	.29	.10	.89	
7. Family's health	.46	.26	.23	.05	.22	.29	.70
Archival source							
1. Parent-child interaction	.36	.07	.34	-.37	-.04	-.31	.08
2. Child behavior	.29	.81	-.17	.50	-.16	.11	.00
3. Parent mental health	.05	-.40	.52	-.41	-.04	.16	.06
4. Child school	-.21	-.05	-.15	.53	-.31	-.13	-.31
5. Parent education/employment	-.10	-.24	-.01	-.49	.70	.10	-.03
6. Material needs	-.09	-.10	-.24	.04	.10	.74	-.00
7. Family's health	-.07	-.27	-.08	-.24	.44	.01	.33

Table 19 (cont'd.)

Variable	Archival 1	2	3	4	5	6	7
Parent source							
1. Parent-child interaction							
2. Child behavior							
3. Parent mental health							
4. Child school							
5. Parent education/employment							
6. Material needs							
7. Family's health							
Child source							
1. Parent-child interaction							
2. Child behavior							
3. Parent mental health							
4. Child school							
5. Parent education/employment							
6. Material needs							
7. Family's health							
Paraprofessional source							
1. Parent-child interaction							
2. Child behavior							
3. Parent mental health							
4. Child school							
5. Parent education/employment							
6. Material needs							
7. Family's health							
Archival source							
1. Parent-child interaction	.82						
2. Child behavior	.54	.96					
3. Parent mental health	.45	.04	.87				
4. Child school	-.02	.44	-.32	.97			
5. Parent education/employment	-.17	-.19	-.15	-.12	.99		
6. Material needs	.04	-.18	-.12	-.01	.02	.91	
7. Family's health	-.09	-.31	-.01	-.14	-.09	.17	.83

Table 20

Process Interview Multitrait Multimethod Matrix: Amount of Contact

Note. Correlations in different parts of this matrix were based on different subsets of the total sample. For correlations within parent-source variables and between parent and archival-source variables, N = 56 (28 parents interviewed at two time-points). For within child-source, child-parent, and child-archival source correlations, N = 42 (21 children interviewed at two time-points). For within paraprofessional-source, parent-paraprofessional, and paraprofessional-archival source correlations, N = 32 (16 paraprofessionals interviewed at two time-points). For child-paraprofessional source correlations, N = 24 (12 families in which both paraprofessionals and children were interviewed at two time-points). Correlations within archival-source variables were based on the total N of 62 (31 families at two time-points).

Table 20

Process Interview Multitrait Multimethod Matrix: Amount of Contact

Variable	Parent				Child				Paraprofessional				Archival			
	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4
Parent source																
1. Contact with family	.98															
2. Parent involvement	.81	.92														
3. Children's involvement	.74	.57	.86													
4. Contact--other agents	.35	.40	.28	.90												
Child source																
1. Contact with family	.59	.36	.59	.42	.86											
2. Parent involvement	.50	.44	.52	.40	.87	.64										
3. Children's involvement	.68	.50	.78	.53	.71	.66	.82									
4. Contact--other agents	.31	.24	.44	.52	.39	.27	.53	.69								
Paraprofessional source																
1. Contact with family	.53	.34	-.11	-.12	-.05	.04	.18	.11	1.00							
2. Parent involvement	.63	.72	.03	.28	.06	.64	.39	-.04	.58	.98						
3. Children's involvement	.10	.11	.90	-.12	.07	.31	.80	.36	-.08	.01	.88					
4. Contact--other agents	.02	.31	.09	.53	-.00	.23	.25	.36	.05	.27	.05	.92				
Archival record source																
1. Contact with family	.61	.46	.64	.36	.57	.44	.77	.55	-.04	.02	.30	.28	.99			
2. Parent involvement	.08	.11	-.11	-.02	-.01	.00	.01	-.04	.39	.36	-.19	-.05	.23	.85		
3. Children's involvement	.30	.08	.29	.06	.39	.35	.49	.36	.14	-.06	.23	-.10	.17	.13	.87	
4. Contact--other agents	.50	.35	.54	.23	.38	.29	.62	.30	-.07	-.12	.46	.05	.52	.20	.21	.92

Convergence between archival record source information and information from the interview sources was generally low. Lack of agreement was particularly great in the intervention strategies and amount of contact matrices, with only 3 of 40 correlations exceeding .50 (Tables 18 and 29). Particularly striking are the discrepancies between paraprofessional and archival sources. (It should be remembered that these correlations are between interviews with and ratings of records kept by the same individuals). Convergence with the archival source data was somewhat higher for the intervention focus variables (Table 19), with 11 of 21 correlations exceeding .50. The generally low level of convergence with the archival source was not unexpected for two reasons: (a) The data were of different types (archival and interview) and thus contained error and bias of different types and magnitudes; and (b) The variables derived from the two types of data collection were not completely parallel--the archival data were expressed in terms of numbers and proportions of contacts and the interview data consisted of more subjective ratings. Nonetheless, this lack of convergence casts some doubt on the validity of the process measures as accurate descriptors of the types of activities which comprised the two interventions.

The remaining entries in Tables 18 through 20 provide information about the discriminant validity of the process measures. Heterotrait monomethod and heterotrait heteromethod correlations among scales addressing intervention contact with various individuals (Table 20) were generally high. These scales were expected to have little discriminant validity but were retained as individual variables due to their potential utility in describing differences between the interventions.

Discriminant validity was somewhat more acceptable for the intervention strategy and intervention focus variables (Tables 18 and 19). Heterotrait monomethod correlations for the parent source ranged from .00 to .43, with 9 of the 36 correlations exceeding .30. Correlations among paraprofessional source variables ranged from .00 to .58, with 9 values exceeding .30. In no case did a heterotrait monomethod correlation between parent or paraprofessional source variables exceed the relevant coefficient estimating convergence between these two sources.

The discriminant power of the child source variables was much lower, with correlations among these variables ranging from .05 to .67; 23 of these values exceeded .30. In 7 cases, the heterotrait monomethod correlations among child source variables exceeded the convergant validity values involving these variables. Inspection of raw data from child source interviews revealed that many children in the P.S. control condition were unaware of the intervention activities occurring in their families. Having little contact with the intervention agent, they reported a low frequency of occurrence for most intervention strategy and focus items. The process interview measure thus had low discriminant validity when used with the child source, at least those in the P.S. control condition.

Within the archival source heterotrait monomethod triangles, correlations ranged from .01 to .60, with 7 of 36 correlations exceeding .30. In all but one case, these correlations were larger than the relevant convergent validity estimates. This indicated some level of method variance within the archival source, although not as much as was found in the child interview source.

Similar patterns appeared within the heterotrait heteromethod triangles. Correlations between different scales derived from parent and child sources ranged from .00 to .53, with 20 of the 72 correlations exceeding .30. Between parent and paraprofessional sources, correlations ranged from .00 to .53, with 14 exceeding .30. Correlations between child and paraprofessional source variables ranged from .01 to .63, with 16 values above .30. None of the parent-paraprofessional source heterotrait heteromethod correlations exceeded the relevant convergence correlation between these sources. In correlations involving the child source, a convergent validity estimate was exceeded by a heterotrait heteromethod correlation in two cases.

Evidence of shared method variance was predictably somewhat less in heterotrait heteromethod triangles involving interview and archival sources. Between parent and archival sources, these correlations ranged from .01 to .34, with 5 exceeding .30. Correlations between child and archival sources ranged from .01 to .36, with 4 exceeding .30. With paraprofessional source data, heterotrait heteromethod correlations ranged from .00 to .50, with 12 exceeding .30. This pattern is not surprising: Archival data would be expected to share little method variance with parent and child interviews but, being originally derived from the same paraprofessional who was interviewed, should share common biases and extraneous variance with that source.

To summarize, the multitrait multimethod matrices revealed an acceptably high level of interrater reliability and a reasonably high level of convergent validity among the interview sources, at least between parents and paraprofessionals. Convergence between these sources and the child source was less consistent, with lower values occurring

generally in variables about which children might be expected to have little information.

Heterotrait correlations among the interview sources showed some level of extraneous method variance both within sources and shared among sources. The fact that many of these values exceeded zero indicated that the scales and sources were not independent. Lack of discriminant validity was particularly pronounced in the child source variables, where general lack of knowledge about intervention efforts produced high method variance correlations. The measures showed a much better level of discriminant validity in the parent and paraprofessional sources, where heterotrait correlations were consistently exceeded by convergent validity estimates.

The archival data, although revealing acceptable interrater reliability, showed very low convergence with the three interview sources. This finding calls into question the overall validity of the intervention process measures. It is apparent that the interview and archival source variables assessed somewhat different constructs. For this reason, process variables from both archival and parent sources were retained for further analysis.

Summary

Since assessment problems have remained a major obstacle in child abuse research, particular attention was given to the development of instruments to measure both the dependent (outcome) and independent (intervention process) variables addressed in this study. Interview, archival, and environmental rating measures were developed. The items addressed by these methods were combined into rationally meaningful

scales of acceptable independence and internal consistency. The interrater reliability and convergent and discriminant validity of each were assessed.

This process yielded two sets of variables. Outcome variables included four archival measures of Protective Service and Probate Court involvement plus an archival measure of school absence. Interviews with parents yielded 23 scales and 5 single items measuring various aspects of family patterns and interactions. A home environment rating variable addressed physical features of the family's home. Intervention process measures included 20 variables describing the intervention from family case files at Protective Services or Family Diversion. A similar set of 18 variables was derived from parent interviews about the intervention process. Due to generally low levels of convergent validity between the interview and archival measures of intervention process, both sets of variables were retained for analysis.

These variables formed the basis for analysis of differences between the two intervention conditions. Results of these analyses are presented in Chapter IV.

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CHAPTER IV

RESULTS

Each of the variables described in Chapter III was used to assess differences between the experimental (Family Diversion) and control group (Protective Services) families. Univariate repeated measures analysis of variance was used to test the significance of main effects for the two independent variables (treatment condition and time) as well as the two-way interaction between these terms. Univariate ANOVAs were computed for each of the outcome variables: contact with Protective Services or Probate Court, school attendance, each of the interview outcome scales, and home environment rating. In general, these variables revealed a reasonable level of independence. Some, however, were significantly intercorrelated. Results of the univariate ANOVA's were interpreted in light of these correlations.

Intervention process data were also analyzed in an ANOVA framework to assess differences between the two treatment interventions. Univariate ANOVAs were computed for each of the archival and interview source process measures.

Prior to the examination of intervention process differences and differential treatment effects, the two groups were inspected for significant pre-existing differences. The results of these checks on the randomization procedure are described in the first section of this

chapter. This is followed by the results of tests for significant differences in intervention process. The third section contains results of ANOVAs on all outcome variables.

Pre-Existing Differences Between Treatment Groups

In order to assess the degree to which the randomization procedure resulted in equivalent groups, families in the two treatment conditions were compared on all available pre-intervention measures. To test for significant differences, one-way analyses of variance were computed for ordinal- and interval-level data; chi-square tests of independence were computed for nominal-level variables. No differences between the two randomly-assigned groups reached statistical significance at $p < .10$. A summary of pre-intervention measures (group means and proportions) and their associated between-group test statistics is presented in Table 21.

Differences in Intervention Process

To test the significance of differences in the characteristics of the two interventions (Family Diversion and Protective Services), analyses of variance were performed on each of the intervention process variables described in Chapter III. Intervention process was measured at two time points: mid- and post-intervention. Mid-intervention measures assessed the first half of the intervention (approximately nine weeks), and post-intervention measures addressed the process in the second half. Thus each ANOVA had two factors: condition and time. Results of these analyses are presented in this section.

Table 21

Pre-Intervention Comparisons Between Treatment Groups

Variable	Family Diversion[a]	Protective Services[b]	Test statistic[c]
Family composition			
Number of children	M = 3.19	M = 3.27	$F(1, 29) = 0.88$
Proportion of 2-parent families	.31	.40	$\chi^2(1, N = 31) = 0.26$
Proportion of families with infants (under 2)	.50	.33	$\chi^2(1, N = 31) = 0.88$
Proportion of families with pre-schoolers (3-5 years)	.31	.33	$\chi^2(1, N = 31) = 0.02$
Proportion of families with school-age children (6-12 years)	.75	.73	$\chi^2(1, N = 31) = 0.01$
Proportion of families with teenagers (over 12)	.38	.33	$\chi^2(1, N = 31) = 0.06$
Age of youngest child	M = 4.56	M = 6.25	$F(1, 29) = 1.19$
Pre-intervention agency involvement			
Number of P.S. complaints per month	M = 0.23	M = 0.22	$F(1, 29) = 0.00$
Highest P.S. risk in 12 months pre intervention	M = 3.40	M = 3.70	$F(1, 29) = 0.08$
Proportion of families with prior P.S. complaints	.69	.53	$\chi^2(1, N = 31) = 0.78$
Number of Probate Court petitions per month	M = 0.01	M = 0.01	$F(1, 29) = 0.00$
Proportion of families with children previously removed from home	.31	.27	$\chi^2(1, N = 31) = 0.08$
Number of agencies involved with family	M = 2.31	M = 1.80	$F(1, 29) = 1.80$
% time children absent from school	M = 15.59	M = 9.88	$F(1, 23) = 2.49$
Presenting problems			
Proportion of families accused of physical abuse	.50	.60	$\chi^2(1, N = 31) = 0.31$
Proportion of families accused of physical neglect	.56	.33	$\chi^2(1, N = 31) = 1.64$
Proportion of families accused of emotional abuse/neglect	.25	.33	$\chi^2(1, N = 31) = 0.26$

Table 21 (cont'd.)

Variable	Family Diversion[a]	Protective Services[b]	Test statistic[c]
Presenting problems (cont'd.)			
Proportion of families accused of inadequate supervision	.44	.27	$\chi^2(1, N = 31) = 0.99$
Proportion of families with "pre-delinquent" child	.50	.40	$\chi^2(1, N = 31) = 0.31$
Proportion of families reported by mandated source	.50	.60	$\chi^2(1, N = 31) = 0.31$
Interview outcome variables			
Positive parent-child interaction	M = 17.19	M = 16.33	F(1, 26) = 0.13
Positive sibling interaction	M = 9.00	M = 8.75	F(1, 23) = 0.04
Positive parent-parent interaction	M = 18.14	M = 19.25	F(1, 8) = 0.02
Parent-child recreation	M = 6.50	M = 7.00	F(1, 26) = 0.16
Negative parent-child interaction	M = 24.38	M = 24.42	F(1, 26) = 0.00
Negative sibling interaction	M = 5.38	M = 5.58	F(1, 23) = 0.04
Negative parent-parent interaction	M = 11.29	M = 11.25	F(1, 8) = 0.14
Children home alone	M = 7.50	M = 6.25	F(1, 26) = 0.90
Child home involvement	M = 22.75	M = 21.92	F(1, 26) = 0.60
Child chore involvement	M = 8.56	M = 7.58	F(1, 26) = 0.52
Parent home involvement	M = 13.06	M = 13.08	F(1, 26) = 0.00
Parent involvement with child's friends	M = 8.69	M = 7.33	F(1, 26) = 0.98
Child-relative involvement	M = 26.19	M = 27.92	F(1, 26) = 0.17
Child-peer involvement	M = 15.81	M = 15.08	F(1, 26) = 0.09
Positive child-school experience	M = 15.57	M = 16.50	F(1, 21) = 0.63
Parent-friend interaction	M = 10.19	M = 9.50	F(1, 26) = 0.23
Positive family-neighbor interaction	M = 14.00	M = 11.83	F(1, 26) = 0.93

Table 21 (cont'd.)

Variable	Family Diversion[a]	Protective Services[b]	Test statistic[c]
Interview outcome variables (cont'd.)			
Negative child-school experience	$M = 16.36$	$M = 16.10$	$F(1, 21) = 0.02$
Child-adult conflict	$M = 1.63$	$M = 1.42$	$F(1, 26) = 0.31$
Parent-relative conflict	$M = 2.25$	$M = 2.08$	$F(1, 26) = 0.14$
Parent-neighbor conflict	$M = 1.94$	$M = 1.50$	$F(1, 26) = 1.56$
Help from relatives	$M = 8.75$	$M = 9.58$	$F(1, 26) = 0.30$
Babysitting help from friends	$M = 5.94$	$M = 4.67$	$F(1, 26) = 1.49$
Material help from friends	$M = 6.44$	$M = 5.00$	$F(1, 26) = 1.66$
Advice from friends	$M = 3.25$	$M = 2.42$	$F(1, 26) = 1.38$
Use of paid babysitter	$M = 7.69$	$M = 7.92$	$F(1, 26) = 0.04$
Parent employment	$M = 1.69$	$M = 2.08$	$F(1, 26) = 0.45$
Parent looking for work	$M = 2.50$	$M = 1.75$	$F(1, 26) = 1.43$
Home environment rating	$M = 1.94$	$M = 1.67$	$F(1, 26) = 0.48$

[a] $n = 16$.

[b] $n = 15$.

[c] No between-group test statistic reached significance at $p < .10$.

Differences in Amount of Contact

Analyses of variables assessing amount of contact between families and their primary intervention agents are summarized in Table 22. This table presents the results of univariate two-way ANOVAs on each of nine variables. The two variables measuring total amount of contact revealed significant main effects for condition. On both variables, the F.D. condition families had more contact with their primary intervention agents. Mean number of contacts was over seven times greater for the F.D. families than for the P.S. families. Sixty-five percent of the variation in number of contacts was due to treatment condition. Average length of contacts was also significantly different between the two conditions: Contacts with F.D. families were an average of 2.5 times longer than contacts with P.S. families. Treatment condition accounted for 37% of the variance in length of contact.

Analyses revealed differences in parent involvement in the intervention. According to parent interview data, parent involvement was significantly greater in the F.D. condition. The main effect for condition accounted for 19% of the variance in parent involvement. On the archival variable--proportion of contacts involving parents--condition differences did not reach statistical significance, but trends were in a direction parallel to that found in the interview variable.

Children's involvement in the intervention, according to parent interview data, was also significantly greater among the F.D. families. Treatment condition accounted for 32% of the variance in children's involvement. Proportion of contacts involving children (archival source) showed a small but statistically significant difference favoring the F.D. intervention. A main effect for time was also found on this variable,

Table 22

Summary of Condition x Time ANOVAs on Variables Measuring Amount of Family-Primary Intervention Agent Contact

Variable	Data source	Significant effect	F	df	Treatment group means: Family Diversion[a]	Treatment group means: Protective Services[b]	$\hat{\omega}^2$
Contact with family	Interview	Condition	46.03***	1, 26	8.35	4.58[c]	.44
# contacts with family	Archival	Condition	120.79***	1, 29	28.69	3.77	.65
Avg. length of contacts	Archival	Condition	38.59***	1, 29	96.28	38.24	.37
Parent involvement	Interview	Condition	14.04***	1, 26	11.25	8.25[c]	.19
Proportion of contacts involving parents	Archival	None	-----	-----	.89	.74	--
Children's involvement	Interview	Condition	27.14***	1, 26	213.04	62.50[c]	.32
Proportion of contacts involving children	Archival	Condition	5.50*	1, 29	.53	.31	.06
		Time	6.34*	1, 29	--	--	.07
Contact between primary agent and other intervention agents	Interview	Condition	10.10**	1, 26	2.44	1.30[c]	.14

Table 22 (cont'd.)

Variable	Data source	Significant effect	F	df	Treatment group means: Family Diversion[a]	Treatment group means: Protective Services[b]	$\hat{\omega}^2$
# contacts between primary agent and other intervention agents	Archival	Condition x Time	10.35**	1, 29	-----	-----	.09
		Simple effects for Condition					.25
		Mid	38.45**	1, 48	20.25	1.00	
		Post	8.14**	1, 48	10.13	1.27	
		Simple effects for Time					.08
		F.D.	20.29**	1, 29	-----	-----	
		P.S.	0.01	1, 29	-----	-----	

[a] n = 16.

[b] n = 15

[c] n = 12 for interview source variables.

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

with marginal means of 0.52 for the mid-intervention point and 0.32 for the post-intervention point. Post-hoc Newman-Keuls tests revealed that the difference was lodged within the P.S. condition, with means of 0.45 (mid) and 0.17 (post) ($p < .01$). The F.D. means of 0.59 (mid) and 0.47 (post) were not significantly different. Neither were between condition means different at the mid-intervention point, but the post-intervention mean for F.D. families (0.47) was significantly larger ($p < .01$) than that for P.S. families (0.17). Thus, according to archival data, the proportion of contacts involving children in the P.S. condition declined significantly over time while remaining constant for families in the F.D. condition. This effect was small, however: Condition and time accounted for only 6% and 7%, respectively, of the variance in contacts involving children.

Amount of contact between the primary intervention agent and other intervention agents working with the family (parent interview source) was significantly greater for F.D. families; treatment condition accounted for 14% of the variance in this variable. The archival measure--number of contacts between the primary intervention agent and other intervention agents, showed a significant Condition x Time interaction. Tests of the simple main effect for condition revealed significant differences favoring the F.D. group at both time points. Condition accounted for 25% of the variance. The simple main effect for time showed a significant decrease from mid- to post-intervention only within the F.D. condition. Thus, it appeared that F.D. intervention agents had significantly more contact with other intervention agents than did P.S. agents. Although this contact decreased significantly over time for F.D. agents, it remained higher than for P.S. condition intervention agents.

To summarize, intervention agents in the Family Diversion condition had significantly more frequent, longer-duration contact with family members than did agents in the Protective Services condition. According to parent interviews, parents in the F.D. condition were more involved in the intervention; the archival measure of the proportion of contacts involving parents showed no significant differences between condition, although nonsignificant trends paralleled the difference in the interview variable. Parent interviews also reported that children were more involved in the F.D. intervention. Archival proportion of contacts involving children showed a significant decline in children's involvement within the P.S. condition over the second half of the intervention, resulting in a condition difference at the post-intervention point. Contact between the primary intervention agent and other intervention agents working with the family was greater for the F.D. condition, according to both archival and parent interview measures. The archival data further showed a significant decrease in this type of contact between mid- and post-intervention within the F.D. condition.

Differences in Intervention Strategy

Two-way analyses of variance were performed on each of 14 variables assessing the strategies used by intervention agents in the two treatment groups. Table 23 summarizes the ANOVAs on two archival measures: proportion of contacts involving assessment and proportion of contacts involving monitoring. Significant Condition x Time interactions were found in each. For assessment, tests of the simple effects for time and condition showed a significant decrease within the Family Diversion condition during the second half of the intervention. Assessment activities did not decrease

Table 23

Summary of Condition x Time ANOVAs on Intervention Strategy Variables: Assessment and Monitoring

Variable	Significant effects	F	df	$\hat{\omega}^2$	Cell means: Mid	Cell means: Post
Assessment (archival)	Condition x Time	4.27*	1, 29	.05		
	Simple effects for condition			.01		
	Mid	0.00	1, 47			
	Post	5.67*	1, 47			
	Simple effects for time			.05		
	F.D.[a]	11.75**	1, 29		.23	.02
	P.S.[b]	0.00	1, 29		.23	.23
Monitoring (archival)	Condition x Time	16.91***	1, 29	.20		
	Simple effects for condition			.00		
	Mid	7.42**	1, 43			
	Post	0.92	1, 43			
	Simple effects for time			.00		
	F.D.[a]	4.69*	1, 29		.28	.45
	P.S.[b]	12.59**	1, 29		.62	.33

[a] n for Family Diversion condition = 16.

[b] n for Protective Services condition = 15.

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

in the Protective Services condition, yielding a significant difference between conditions at the post-intervention time point. It should be noted that the Condition x Time interaction did not reflect a particularly large effect: The interaction accounted for only 5% of the variance in assessment activities.

A Condition x Time interaction in the opposite direction was found for monitoring activities. Tests of the simple effects for time and condition showed a significant increase within the F.D. condition and a significant decrease in the P.S. condition. Additionally, the two conditions were found to be significantly different at the mid-intervention point but not different at the post-intervention point. Thus, during the first half of the intervention, monitoring activities constituted a larger part of the intervention activity with P.S. group families. Monitoring activities then increased significantly with F.D. families and decreased significantly with P.S. families, resulting in no between-group differences at the post-intervention time point. The Condition x Time interaction accounted for 20% of the variance in monitoring activities.

The remaining measures of intervention strategy consisted of both archival- and parent interview-source data assessing the importance of six strategies to the interventions in the two groups. Interview data consisted of parents' ratings of the frequency with which various strategies were used in the intervention; archival data reflected the proportion of intervention contacts in which the strategy had been recorded as an intervention technique. As discussed in Chapter III, little evidence of convergence between interview and archival sources was found for these variables. Therefore, both sets of variables were used to test for

differences between the two types of intervention. Table 24 provides a summary of the two-way ANOVAs for the six intervention strategies, each assessed by both parent interview and archival source data.

Use of contracting showed a significant main effect for condition favoring the F.D. group on both interview and archival data. Contracting accounted for 15% and 17%, respectively, of the variance in the measures of use of contracting.

On the use of advocacy, the interview source variable revealed a significant main effect for condition, accounting for 18% of the variance. The archival variable showed no significant effects, but the direction of nonsignificant differences between the treatment group means favored the F.D. group, paralleling the significant difference on the interview source variable.

This pattern was repeated with three other pairs of variables. On use of recreation, the archival variable showed a significant main effect for condition, favoring the F.D. group, which accounted for 9% of the variance. The effect was not significant in the interview variable, but trends were parallel. Similarly, on use of direct service, the interview variable revealed a significant main effect for condition which favored the F.D. group and accounted for 9% of the variance. The archival variable showed a nonsignificant but parallel trend. On use of directives, the archival variable showed a significant main effect for condition accounting for 10% of the variance. The direction of differences on this variable indicated greater use of directives in the P.S. condition. Nonsignificant but parallel results were found in the interview variable.

A significant Condition x Time interaction was discovered in the archival measure of counseling strategy. Examination of simple effects

Table 24

Summary of Condition x Time ANOVAs on Variables Measuring Intervention Strategy

Variable	Data source	Significant effect	F	df	Treatment group means: Family Diversion[a]	Treatment group means: Protective Services[b]	$\hat{\omega}^2$
Contracting	Interview	Condition	11.09**	1, 26	10.82	6.38[c]	.15
Contracting	Archival	Condition	13.45***	1, 29	.12	.02	.17
Advocacy	Interview	Condition	13.20**	1, 26	11.22	7.25[c]	.18
Advocacy	Archival	None	-----	-----	.16	.09	--
Recreation	Interview	None	-----	-----	6.03	5.30[c]	--
Recreation	Archival	Condition	7.28**	1, 29	.18	.03	.09
Direct service	Interview	Condition	6.58*	1, 26	2.41	1.42[c]	.09
Direct service	Archival	None	-----	-----	.08	.03	--
Directive	Interview	None	-----	-----	1.69	2.20[c]	--
Directive	Archival	Condition	8.02**	1, 29	.07	.39	.10
Counseling	Interview	None	-----	-----	2.94	2.67[c]	--

Table 24 (cont'd.)

Variable	Data source	Significant effect	F	df	Treatment group means: Family Diversion[a]	Treatment group means: Protective Services[b]	$\hat{\omega}^2$
Counseling	Archival	Condition x Time	4.53*	1, 29			.05
		Simple effects for Condition					.02
		Mid	4.06*	1, 44	.20	.49	
		Post	0.08	1, 44	.27	.31	
		Simple effects for Time					.00
		F.D.	0.80	1, 29	--	--	
		P.S.	4.80*	1, 29	--	--	

[a] n = 16.

[b] n = 15.

[c] n = 12 for interview source variables.

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

showed a significantly greater use of counseling in the P.S. group during the first half of the intervention as well as a significant decrease in its use over the second half in this group. The magnitude of effect was small, however: The interaction accounted for only 5% of the variance in use of counseling. No significant effects were found in the interview report of counseling strategy. Moreover, the apparent nonsignificant differences between means on the interview variable were in the opposite direction.

To summarize, there was evidence of treatment group differences on some, but not all, of the intervention strategy variables. According to both archival and interview sources, use of contracting was greater in the F.D. group. Greater use of advocacy, recreation, and direct service in the F.D. group was found on data from one of the sources, each, but not from both. Similarly, use of directives was greater in the P.S. group according to archival but not interview source data. In all cases, both sources of data revealed parallel trends in direction of differences between conditions.

There was also some evidence of differential sequencing of intervention strategy in the two groups. Archival data on three variables--assessment, monitoring, and counseling--revealed significant Condition x Time interactions. Use of assessment remained constant across time in the P.S. group while decreasing significantly in the F.D. group, producing a significant difference between groups at the post-intervention time point. Use of monitoring was significantly lower in the F.D. group for the first half of the intervention but increased significantly over time in this group while decreasing significantly in the P.S. group. Similarly, use of counseling (archival source) was initially higher in the P.S.

group but decreased significantly over time to yield no significant treatment group differences at the post-intervention point. The magnitude of effect on archival record of counseling strategy was very small, accounting for only 5% of the variance. Moreover, the effect was not replicated in significance or trend with the interview source variable. In general, although there were many significant differences attributable to condition in the intervention strategy variables, the magnitude of these differences was small: No $\hat{\omega}^2$ exceeded .20.

Differences in Intervention Focus

A similar pattern of results was found in the two-way ANOVAs on variables assessing the focus of intervention. A summary of these analyses in presented in Table 25. Like the measures of intervention strategy, these measures consisted of both archival- and parent interview-source data assessing the extent to which the interventions in the two groups focused on each of seven dimensions. Interview data were parent-ratings of extent of focus; archival data reflected the proportion of contacts in which a particular intervention issue was mentioned in case records.

As can be seen in Table 25, a significant Condition x Time interaction was found in extent of focus on parent-child interaction (archival source). Examination of simple effects showed that focus on the issue was significantly greater in the P.S. group during the first half of the intervention but that it decreased significantly over time to reveal no difference between condition at the post-intervention point. It should be noted that the magnitude of effect for this interaction was small ($\hat{\omega}^2$ = .07) and that it was not replicated in significance on analysis

Table 25

Summary of Condition x Time ANOVAs on Variables Measuring Intervention Focus

Variable	Data source	Significant effect	F	df	Treatment group means: Family Diversion[a]	Treatment group means: Protective Services[b]	$\hat{\omega}^2$
Parent-child interaction	Archival	Condition x Time	6.29*	1, 29			.07
		Simple effects for Condition					.01
		Mid	4.45*	1, 47	.27	.52	
		Post	0.09	1, 47	.28	.23	
		Simple effects for Time					.02
		F.D.	0.00	1, 29	--	--	
		P.S.	10.50**	1, 29	--	--	
Parent-child interaction	Interview	None	-----	-----	13.76	15.17[c]	--
Child behavior	Archival	None	-----	-----	.26	.26	--
Child behavior	Interview	Condition	5.32*	1, 26	19.88	14.25[c]	.07
Material needs	Archival	Condition	5.82*	1, 29	.26	.08	.07
Material needs	Interview	Condition	7.59**	1, 26	12.32	7.75[c]	.10
		Time	5.77*	1, 26	-----	-----	.07

Table 25 (cont'd.)

Variable	Data source	Significant effect	F	df	Treatment group means: Family Diversion[a]	Treatment group means: Protective Services[b]	$\hat{\omega}^2$
Family health	Archival	None	-----	-----	.10	.18	--
Family health	Interview	Time	4.93*	1, 26	5.82	6.46[c]	.07
Parent education/ employment	Archival	None	-----	-----	.13	,08	--
Parent education/ employment	Interview	None	-----	-----	6.32	4.59[c]	--
Child school	Archival	None	-----	-----	.22	.10	--
Child school	Interview	Condition	9.02**	1, 26	5.66	3.38[c]	.13
Parent mental health	Archival	Condition	7.14**	1, 29	.11	.42	.09
Parent mental health	Interview	None	-----	-----	2.32	2.63[c]	--

[a] n = 16.

[b] n = 15.

[c] n = 12 for interview source variables.

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

of the parent interview variable, although the trends were parallel.

Focus on child behavior (interview source) was significantly greater in the F.D. condition. Newman-Keuls post hoc tests revealed that this difference was lodged in the first time period ($p < .05$) between the F.D. mean of 21.38 and the P.S. mean of 14.67. The condition means at the post-intervention point (F.D. $M = 18.38$; P.S. $M = 13.83$) were not significantly different. No significant effects were found for focus on child behavior from the archival source.

Effects on material needs focus were found for both archival and interview source data. For the archival source, there was a significant main effect for condition favoring the F.D. group. Newman-Keuls post hoc test showed that this effect lay in the condition difference at the post-intervention time point ($p < .01$) between the F.D. mean of 0.25 and the P.S. mean of 0.01. The condition means at the mid-intervention point (F.D. $M = 0.26$; P.S. $M = 0.15$) were not significantly different. For parent interview source data, there were significant main effects due to both condition and time. Newman-Keuls test revealed a greater focus on material needs in the F.D. intervention at both time points ($p < .05$). Additionally, there was a significant decrease in material needs focus in the F.D. group from the mid-intervention point ($M = 13.13$) to the post-intervention point ($M = 11.50$) ($p < .05$). Neither time nor condition accounted for more than 10% of the variance in either archival or interview measures of focus on material needs.

No condition effects were found for either source measuring family health focus. Interview data showed a significant time effect, with attention to this issue decreasing in both groups from mid-intervention ($M = 6.47$) to post-intervention ($M = 5.78$). No significant effects for

parent education/employment were found.

Child school focus (interview source) showed a significant main effect for condition favoring the F.D. group. Although this effect was not significant in the archival data, the trends were parallel. Condition accounted for 13% of the variance in the interview source variable.

Focus on parent mental health (archival source) revealed a significant main effect for condition favoring the P.S. group. Newman-Keuls tests placed this effect at the mid-intervention point, between the F.D. mean of 0.08 and the P.S. mean of 0.46 ($p < .01$). No condition differences were found at the post-intervention point (F.D. $M = 0.14$; P.S. $M = 0.37$). This effect was not significant in the interview source data, although trends were parallel.

In summary, evidence of treatment group differences in the extent of focus on various intervention issues was found on some, but not all, variables. Only the significant condition difference on material needs focus was replicated in both archival and parent interview source variables. On both, the direction of differences indicated greater attention to material needs in the Family Diversion condition. The interview variable assessing the extent of focus on child behavior showed a significantly higher level of focus on this issue in the F.D. condition during the first half of the intervention. Similarly, interview data revealed a greater focus on child school issues in the F.D. condition. Archival measures of focus on these issues showed no significant treatment differences, although the trend for child school was parallel. The archival measures of parent mental health and parent-child interaction focus indicated greater attention to these issues in the Protective Services condition during the first half of the intervention. No differences were

found on the interview variables. No condition effects were revealed on either measure of family health or parent education/employment focus. Overall, there were significant differences attributable to condition on a number of the intervention focus variables. The magnitude of these differences was, however, small: No $\hat{\omega}^2$ exceeded .13.

Summary of Differences in Intervention Process

The analyses presented in this section have indicated numerous statistically significant differences in the interventions received by families in the two groups (Family Diversion [F.D.] and Protective Services [P.S.]). The most striking difference was in amount of contact between families and their primary intervention agents: F.D. families had over seven times more contacts lasting an average of 2.5 times longer than the P.S. families received. Statistically significant differences between the two conditions were also found on the parents' reported level of involvement in the intervention, the level of involvement of children in the intervention (according to parent interviews and archival records), and the amount of contact between the primary and other family intervention agents (according to parent interviews and archival records). Differences on all these variables showed greater contact and involvement for F.D. families.

Condition differences were also found in the types of intervention strategies used, although many of these differences were small and most were not replicated between parent interview and archival sources of information. Non-significant trends on all variables were, however, in parallel directions. Both sources reported a greater use of contracting in the F.D. intervention. Condition differences in the following strategies

were reported by only one source, as noted: advocacy (parent interview), recreation (archival), direct service (parent interview), and directive (parent interview). F.D. families apparently received more advocacy, recreation, and direct service but less directive intervention than did families in the P.S. condition. According to archival source data, counseling was used more in the P.S. condition than in the F.D. condition during the first half of the intervention, but no condition differences during the second half were found.

Several differences between the conditions on areas of intervention focus were found, as well, although the significance of effects was not generally replicated between parent interview and archival information. A greater focus on material needs in the F.D. intervention was reported by both data sources. According to parent interview data, the F.D. intervention also focused more on child school issues throughout the intervention period and on child behavior during the first half of the intervention. Archival data revealed greater attention to parent mental health and to parent-child interaction in the P.S. condition during the first half of the intervention; no differences between conditions during the second half of the intervention were found. No condition differences were discovered for focus on family health or parent education/employment.

Results indicating differences between conditions in the sequencing of intervention activities were also found. Assessment activities declined significantly over time in the F.D. intervention but remained constant in the P.S. intervention. Monitoring activities, however, increased over time in the F.D. condition while declining in the P.S. condition. Use of counseling, focus on parent-child interaction, and involvement of children in the intervention declined over time in the

F.D. condition, although it remained significantly higher than that found in the P.S. condition. (It should be noted that these interactions were not replicated across both sources of information but were each found in either archival or interview source data.)

In general, analyses of measures of the intervention process indicated significant differences in the types of intervention received by families in the two experimental conditions. The most substantial difference was in amount of family-intervention agent contact, although there was evidence of differences in intervention strategy and focus, as well. However, one should be cautious of overinterpreting these apparent differences. A total of 37 univariate analyses of variance were computed on data involving 31 families. As was reported in Tables 14, 17, 18, 19, and 20, the 37 measures of intervention process were not independent, and the levels of Type I error in the analyses of variance discussed above are essentially unknown.

Differences in Intervention Outcome

In order to assess differences in outcome between the two interventions (Family Diversion and Protective Services), analyses of variance were performed on each of the archival, interview, and environmental rating measures described in Chapter III. Each of these variables was assessed at several points before, during, and after the intervention. Each ANOVA thus had two factors: condition and time. Results of these analyses are presented in this section.

Differences on Archival Outcome Variables

Protective Services records. Two variables retrieved from P.S. records assessed the extent of further "official" abuse or neglect among the families in the two intervention groups: (a) number of complaints to Protective Services per month and (b) highest assessed risk level for each family for each time period. These variables were measured relevant to three periods of time: one year prior to intervention, the 18-week period during intervention, and one year following termination of the intervention. No condition differences were found on either variable. Significant main effects for time were revealed for both.

Table 26 presents the cell and marginal means for number of P.S. complaints per month. The two-way ANOVA revealed only a significant main effect for time ($F(2, 58) = 17.95$, $p < .001$). Time accounted for 27% of the variance in P.S. complaints per month. Newman-Keuls post hoc test revealed significant differences on this variable between pre-intervention and one-year follow-up ($p < .01$) and between during intervention and one-year follow-up ($p < .01$). A significant drop between pre- and during-intervention time periods was expected, as all families were required for referral criteria to have had at least one complaint during the year prior to intervention. However, no such significant decrease was found.

Table 27 contains the cell and marginal means for highest P.S.-assessed risk for each time period. The two-way ANOVA revealed only a significant main effect for time ($F(2, 58) = 25.16$, $p < .001$). Time accounted for 34% of the variance in P.S.-assessed risk. Newman-Keuls post hoc tests showed significant differences between pre-intervention and during-intervention ($p < .01$), between pre-intervention and one-year

Table 26

Cell and Marginal Means for Number of Complaints to Protective Services per Month

Condition	Pre-Intervention (1 year)	During Intervention (18 weeks)	Follow-up (1 year)	Marginal
Family Diversion (n = 16)	0.23	0.19	0.04	0.15
Protective Services (n = 15)	0.22	0.14	0.02	0.13
Total (N = 31)	0.23	0.17	0.03	

Table 27

Cell and Marginal Means for Level of Protective-Services Assessed Risk (Highest in Each Time Period)

Condition	Pre-Intervention (1 year)	During Intervention (18 weeks)	Follow-up (1 year)	Marginal
Family Diversion (n = 16)	3.40	1.70	0.94	2.01
Protective Services (n = 15)	3.70	1.90	0.80	2.13
Total (N = 31)	3.55	1.80	0.87	

follow-up ($p < .01$), and between during-intervention and one-year follow-up ($p < .05$). As mentioned earlier, the drop in risk between pre- and during-intervention was an expected result due to the fact that all families had an assessed risk score above two prior to referral to the project. This drop could therefore be interpreted as reflecting, at least in part, regression to the mean following pre-selection on relatively extreme scores.

Eight of the F.D. condition families and seven of the P.S. condition families were the subject of P.S. complaints during the intervention period. This difference was not significant [$\chi^2(1, N = 31) = 0.03$]. By the end of one-year follow-up, 10 F.D. families and 11 P.S. families had been re-reported. This difference, too, was not significant [$\chi^2(1, N = 31) = 0.42$].

Probate Court records. Two variables retrieved from Probate Court records assessed the level of court involvement in the lives of members of families in the two intervention groups: (a) number of petitions for abuse/neglect or delinquency per month and (b) percentage of time that one or more children were placed out of a family's home by order of the court. These variables were measured at one year prior to intervention, during the 18-week intervention period, and at one-year follow-up. No condition differences were found on either variable. Significant main effects for time were discovered for both.

Table 28 presents the cell and marginal means for number of Probate Court petitions per month. The two-way ANOVA revealed only a significant main effect for time [$F(2, 58) = 3.16$, $p < .05$]. Time accounted for 4% of the variance in Probate Court petitions per month. Newman-Keuls post hoc tests showed a significant increase on this variable between pre-intervention and during-intervention ($p < .05$).

Table 28

Cell and Marginal Means for Number of Probate Court Petitions per Month

Condition	Pre-Intervention (1 year)	During Intervention (18 weeks)	Follow-up (1 year)	Marginal
Family Diversion (n = 16)	0.01	0.08	0.03	0.04
Protective Services (n = 15)	0.01	0.05	0.02	0.03
Total (N = 31)	0.01	0.07	0.03	

Table 29

Cell and Marginal Means for Percentage of Time One or More Children Were Placed Out of Home by Court Order

Condition	Pre-Intervention (1 year)	During Intervention (18 weeks)	Follow-up (1 year)	Marginal
Family Diversion (n = 16)	0.00	10.19	18.56	13.19
Protective Services (n = 15)	0.00	4.27	18.07	7.45
Total (N = 31)	0.00	7.33	18.32	

Table 29 contains the cell and marginal means for percentage of time that a child was placed out of the home by court order. The two-way ANOVA revealed only a significant main effect for time [$F(2, 58) = 6.19$, $p < .01$]. Time accounted for 10% of the variance in percentage of time a child was placed out of the home. Newman-Keuls post hoc tests found significant increases between pre-intervention and one-year follow-up ($p < .01$) and between during-intervention and follow-up ($p < .05$).

Two families in each condition had children removed from their homes during the intervention period. By the end of one-year follow-up, three families in each condition had children removed. Obviously, there were no significant differences between conditions on the proportion of families who had children removed.

School absence records. The percentage of time that each school-age child was absent from school was retrieved from school records. The percentage absent for each child was combined to create a within-family average. This variable was measured relevant to each of the three time periods: one-year pre-intervention, 18-weeks during intervention, and one-year follow-up. Table 30 contains the cell and marginal means for percentage of time absent from school. Table 31 presents the summary of the two-way analysis of variance on this variable.

As can be seen in Table 31, a significant Condition x Time interaction was found. This interaction effect accounted for 13% of the variance in percent absent from school. Tests for simple effects revealed no significant differences between conditions in any of the three time periods. The simple effect for time was significant in both conditions. Within the F.D. condition, $F(2, 46) = 7.84$, $p < .01$; within the P.S. condition, $F(2, 46) = 8.33$, $p < .01$. Newman-Keuls post hoc tests showed

Table 30

Cell and Marginal Means for Percentage of Time Absent from School

Condition	Pre-Intervention (1 year)	During Intervention (18 weeks)	Follow-up (1 year)	Marginal
Family Diversion (n = 13)	15.59	8.79	8.82	11.07
Protective Services (n = 12)	9.88	12.06	12.75	11.56
Total (N = 25)	12.85	10.36	10.71	

Table 31

Analysis of Variance Table for Percentage of Time Absent from School

Source	df	SS	MS	F	p	$\hat{\omega}^2$
Condition	1	4.60	4.60	0.02	.88	--
Subjects within Condition	23	4477.87	194.69			
Time	2	90.67	45.34	1.78	.18	--
Condition x Time	2	361.88	180.94	7.11	.01	.13
Time x Subjects within Condition	46	1170.92	25.46			

significant decreases within the F.D. condition between the pre-intervention and during-intervention periods ($p < .01$) and between pre-intervention and follow-up ($p < .01$). Post-hoc tests revealed no significant differences over time within the P.S. condition.

Summary of Differences on Archival Outcome Variables. No significant differences between treatment groups were found on any of the Protective Services, Probate Court, or school absence record variables. Significant effects due to time were found on each. A significant drop in number of P.S. complaints per month was discovered between during-intervention and one-year follow-up. On level of P.S.-assessed risk, significant successive decreases were found between each of the three time periods. Number of Probate Court petitions per month increased significantly between the pre- and during-intervention periods. Percentage of time that a child was placed out of the home showed a significant increase between the during-intervention period and one-year follow-up. A significant Condition x Time interaction was found on percentage of time absent from school. Further analysis showed a significant decrease in school absence between pre- and during-intervention in the Family Diversion condition.

Differences on Parent Interview Outcome Variables

A total of 28 outcome variables were derived from interviews with parents. These variables addressed family patterns and interactions between family members and with individuals outside the family. The interviews were conducted at three time points: pre-intervention, mid-intervention, and post-intervention. Differences between conditions and over time were assessed through univariate two-way analyses of variance. Results of these analyses are described in this section.

Differences on within-family interaction. Seven variables addressed positive and negative interactions between members of each family. Cell means for each of these variables are displayed in Table 32. Two-way analyses of variance on each of them failed to find any significant main effects for condition. No significant effects of any type were found on the following variables: positive parent-child interaction, positive sibling interaction, positive parent-parent interaction, negative parent-child interaction, negative sibling interaction, and negative parent-parent interaction. A significant main effect for time [$F(2, 52) = 3.87$, $p < .05$] was found on parent-child recreation outside the home. Time accounted for 7% of the variance on this measure. Newman-Keuls post hoc tests showed significant increases between pre- and post-intervention ($p < .05$) and between during- and post-intervention ($p < .05$) measures. The apparent increase in recreation outside the home may have reflected a seasonal effect of increased outdoor activity during spring and summer months.

Differences on family-home involvement. Five variables assessed the degree of involvement in home activities of various family members. Cell means for each of these variables are presented in Table 33. Two-way ANOVAs found no significant effects due to time, condition or the Condition x Time interaction on any of these variables.

Differences on outside-family interaction. Nine variables addressed the frequency and quality of interactions between family members and individuals outside the family. Cell means for each of these variables are displayed in Table 34. Two-way ANOVAs found no significant effects for any of the following variables: child-relative interaction, positive child-school experience, parent-friend interaction, parent-neighbor

Table 32

Cell Means for Parent Interview Variables Assessing Within-Family Interaction

Dependent Variable	Pre-Intervention	Mid-Intervention	Post-Intervention
Positive parent-child interaction			
Family Diversion (n = 16)	17.19	19.88	17.38
Protective Services (n = 12)	16.33	16.92	15.25
Positive sibling interaction			
Family Diversion (n = 14)	9.00	9.13	9.63
Protective Services (n = 11)	8.75	8.33	8.33
Positive parent-parent interaction			
Family Diversion (n = 5)	18.14	23.29	22.71
Protective Services (n = 6)	19.25	21.50	15.00
Parent-child recreation			
Family Diversion (n = 16)	6.50	6.25	7.88
Protective Services (n = 12)	7.00	7.33	8.75
Negative parent-child interaction			
Family Diversion (n = 16)	24.38	22.00	21.69
Protective Services (n = 12)	24.42	26.92	23.42
Negative sibling interaction			
Family Diversion (n = 14)	5.38	5.00	4.88
Protective Services (n = 11)	5.58	5.82	5.58
Negative parent-parent interaction			
Family Diversion (n = 5)	11.29	10.00	10.57
Protective Services (n = 6)	11.25	11.00	6.75

Table 33

Cell Means for Parent Interview Variables Assessing Family-Home Involvement

Dependent Variable	Pre-Intervention	Mid-Intervention	Post-Intervention
Children home alone			
Family Diversion (n = 16)	7.50	6.56	7.50
Protective Services (n = 12)	6.25	7.08	7.92
Child-home involvement			
Family Diversion (n = 16)	22.75	23.19	22.94
Protective Services (n = 12)	21.92	22.08	22.67
Child-chore involvement			
Family Diversion (n = 16)	8.56	8.88	8.81
Protective Services (n = 12)	7.58	7.58	8.00
Parent-home involvement			
Family Diversion (n = 16)	13.06	13.81	12.69
Protective Services (n = 12)	13.08	13.25	12.75
Parent involvement with child's friends			
Family Diversion (n = 16)	8.69	9.25	9.88
Protective Services (n = 12)	7.33	7.92	7.42

Table 34

Cell Means for Parent Interview Variables Assessing Outside-Family Interaction

Dependent Variable	Pre-Intervention	Mid-Intervention	Post-Intervention
Child-relative interaction			
Family Diversion (n = 16)	26.19	25.50	27.19
Protective Services (n = 12)	27.92	28.17	29.33
Child-peer interaction			
Family Diversion (n = 16)	15.81	17.56	18.75
Protective Services (n = 12)	15.08	17.25	18.83
Positive child-school experience			
Family Diversion (n = 13)	15.57	14.79	15.00
Protective Services (n = 11)	16.50	15.57	16.90
Parent-friend interaction			
Family Diversion (n = 16)	10.19	10.00	10.31
Protective Services (n = 12)	9.50	9.33	10.50
Positive family-neighbor interaction			
Family Diversion (n = 16)	14.00	14.75	13.00
Protective Services (n = 12)	11.83	11.25	12.42
Negative child-school experience			
Family Diversion (n = 13)	16.36	10.86	10.00
Protective Services (n = 11)	16.10	17.20	14.60
Child-adult conflict			
Family Diversion (n = 16)	1.63	1.25	1.06
Protective Services (n = 12)	1.42	1.42	1.67
Parent-relative conflict			
Family Diversion (n = 16)	2.25	2.13	1.75
Protective Services (n = 12)	2.08	2.42	1.92
Parent-neighbor conflict			
Family Diversion (n = 16)	1.94	1.56	1.75
Protective Services (n = 12)	1.50	1.83	1.67

interaction, conflicts with relatives, or conflicts with neighbors. For child-peer interaction, there was a significant main effect due to time [$F(2, 52) = 5.83$, $p < .01$] accounting for 11% of the variance. Newman-Keuls post hoc tests revealed significant differences between pre- and during-intervention ($p < .05$) and between pre- and post-intervention levels ($p < .01$). This increase between pre- and during -intervention may have reflected a seasonal effect of the progressing school year on children's friendships and interactions with peers.

Significant Condition x Time interactions were found on the remaining two variables. The analysis of variance summary for negative child-school experience is presented in Table 35. As can be seen, there was a significant interaction effect [$F(2, 44) = 4.36$, $p < .05$]. Examination of simple main effects showed significant condition differences at mid-intervention [$F(1, 49) = 8.78$, $p < .01$] and at post-intervention [$F(1, 49) = 4.62$, $p < .05$]. Both differences indicated fewer negative school experiences in the Family Diversion condition. Additionally, a significant simple effect for time was found within the F.D. group [$F(2, 44) = 10.64$, $p < .01$]. Newman-Keuls post hoc tests showed that pre-intervention levels were different from both mid-intervention ($p < .01$) and post-intervention levels ($p < .01$).

A Condition x Time interaction was also found on child-adult conflict. Table 36 contains the ANOVA summary for this variable. Examination of simple effects revealed no differences between condition at any of the three time points. However, there was a significant simple effect for time within the Family Diversion condition [$F(2, 52) = 116.88$, $p < .01$]. Newman-Keuls post hoc tests showed that, for the F.D. group, pre-intervention levels were significantly higher than both mid-

Table 35

Analysis of Variance Table for Negative Child-School Experience

Source	df	SS	MS	F	p	$\hat{\omega}^2$
Condition	1	222.03	222.03	4.55	.04	.04
Subjects within Condition	22	1074.42	48.84			
Time	2	230.78	115.39	7.36	.01	.13
Condition x Time	2	136.48	68.24	4.36	.02	.07
Time x Subjects within Condition	44	689.41	15.67			

Table 36

Analysis of Variance Table for Child-Adult Conflict

Source	df	SS	MS	F	p	$\hat{\omega}^2$
Condition	1	0.72	0.72	0.42	.53	--
Subjects within Condition	26	45.31	1.74			
Time	2	0.86	0.43	1.73	.19	--
Condition x Time	2	2.27	1.13	4.58	.02	.08
Time x Subjects within Condition	52	12.88	0.25			

intervention ($p < .01$) and post-intervention levels ($p < .01$).

It should be noted that the magnitude of effects on both negative child-school experience and child-adult conflict was small. As can be seen in Tables 35 and 36, no $\hat{\omega}^2$ associated with any effect exceeded .13.

Differences on family resources. Seven variables assessed the level of resources available to each family from relatives, friends, and employment. Cell means for each of these variables are presented in Table 37. Two-way ANOVAs discovered no significant effects for any of the following variables: help from relatives, babysitting help from friends, material help from friends, advice from friends, use of paid babysitter, or parent looking for work.

For parent employment, a significant Condition x Time interaction was found [$F(2, 52) = 6.17$, $p < .01$]. The ANOVA summary for this variable is contained in Table 38. Tests of simple effects revealed no significant differences between conditions at any of the three time points. A significant simple effect for time was found within the Family Diversion condition [$F(2, 58) = 4.48$, $p < .05$]. Newman-Keuls post hoc tests showed differences between post-intervention levels and both pre-intervention ($p < .01$) and mid-intervention levels ($p < .01$) in the F.D. group. There was an apparent increase in employment between mid- and post-intervention among the F.D. group. The magnitude of effect was small, however: The Condition x Time interaction accounted for only 8% of the variance in parent employment.

Summary of differences on parent interview outcome variables. Few significant effects involving condition were found on interview outcome variables. Of 28 univariate ANOVAs, only three revealed significant

Table 37

Cell Means for Parent Interview Variables Assessing Family Resources

Dependent Variable	Pre-Intervention	Mid-Intervention	Post-Intervention
Help from relatives			
Family Diversion (n = 16)	8.75	8.38	7.56
Protective Services (n = 12)	9.58	9.58	8.08
Babysitting help from friends			
Family Diversion (n = 16)	5.94	5.38	5.25
Protective Services (n = 12)	4.67	4.92	4.75
Material help from friends			
Family Diversion (n = 16)	6.44	5.88	5.50
Protective Services (n = 12)	5.00	5.25	5.25
Advice from friends			
Family Diversion (n = 16)	3.25	3.06	2.81
Protective Services (n = 12)	2.42	2.58	2.58
Use of paid babysitter			
Family Diversion (n = 16)	7.69	7.38	7.88
Protective Services (n = 12)	7.92	8.00	7.75
Parent employment			
Family Diversion (n = 16)	1.69	1.50	2.38
Protective Services (n = 12)	2.08	2.42	1.67
Parent looking for work			
Family Diversion (n = 16)	2.50	2.44	2.50
Protective Services (n = 12)	1.75	2.25	1.92

Table 38

Analysis of Variance Table for Parent Employment

Source	df	SS	MS	F	p	$\hat{\omega}^2$
Condition	1	0.72	0.72	0.42	.53	--
Subjects within Condition	26	45.31	1.74			
Time	2	0.86	0.43	1.73	.19	--
Condition x Time	2	2.27	1.13	4.58	.02	.08
Time x Subjects within Condition	52	12.88	0.25			

Table 39

Cell Means for Home Environment Rating

Condition	Pre-Intervention	Mid-Intervention	Post-Intervention
Family Diversion (n = 16)	1.94	1.00	1.25
Protective Services (n = 12)	1.67	1.50	1.17

Condition x Time interactions. The analysis of negative school experience showed significant simple effects for condition at mid- and post-intervention; both indicated fewer negative experiences in the Family Diversion condition. Additionally, a significant simple effect for time was found within the F.D. condition indicating a significant decrease in negative school experiences between the pre- and mid-intervention time points.

On child-adult conflict, a significant Condition x Time interaction was also found. Simple effects tests showed no condition differences, but a significant time effect within the F.D. condition was found. Here, again, there was a significant decrease in child-adult conflict between the pre- and mid-intervention time points.

The analysis of parent employment revealed a Condition x Time interaction, as well. Simple effects tests showed no significant condition differences at any time point. There was, however, a significant simple effect for time in the F.D. condition. Post hoc tests indicated that there was a significant increase in parent employment between the mid- and post-intervention points within the F.D. condition.

Differences on Home Environment Rating

An environmental rating of potentially harmful features of the family's home environment was completed after each interview. Home environment ratings were done at three time points: pre-intervention, mid-intervention, and post-intervention. Cell means for home environment rating are presented in Table 39. Two-way analysis of variance on this variable revealed only a significant effect for time [$F(2, 52) = 3.26$, $p < .05$] accounting for 5% of the variance. Post hoc tests failed to show significant differences on simple contrasts.

Summary of Differences in Intervention Outcome

Very few outcome differences involving experimental condition were found. Of 34 univariate two-way ANOVAs, only 4 revealed significant Condition x Time interactions. One archival variable, percentage of time absent from school, revealed a decrease in absences within the Family Diversion condition between the pre- and during-intervention time periods. There were, however, no significant differences between conditions at any of the three time points.

Three parent interview variables showed significant Condition x Time interactions. On negative school experience, significant condition differences were found at the mid- and post-intervention points. Both indicated fewer negative school experiences in the F.D. group. Additionally, there was a significant decrease in the F.D. condition between pre- and mid-intervention. Child-adult conflict revealed no condition differences but did show a decrease from pre- to mid-intervention in the F.D. condition. Parent employment also showed no condition differences but did reveal an increase from mid- to post-intervention in the F.D. condition.

Given the large number of univariate tests performed on variables which, as was shown in Chapter III, were not entirely independent, it was possible that the significant condition differences were spurious, reflecting correlations among the dependent variables. To test this possibility, the variables were adjusted to reflect a comparable time period (total during-intervention period) and correlations among them were computed. The resulting matrix of intercorrelations is presented in Table 40. As can be seen, none of the correlations was significantly different from zero.

Table 40

Matrix of Intercorrelation Among Variables Reflecting Significant Condition Differences

Variable	2	3	4
1. Percent absent from school	.17	.26	.29
2. Negative child-school experience	--	.05	.21
3. Child-adult conflict		--	.13
4. Parent employment			--

Note. No correlations were significantly different from zero at $p < .05$.

The lack of intercorrelation supported the notion that the four dependent variables reflected real outcome differences between the two interventions. Several cautions should be kept in mind, however: (a) A large number of univariate tests were conducted on a small sample of families, escalating the probability of Type I error to unknown levels; (b) Direct condition differences were found on only one variable--negative child-school experience; the remaining significant Condition x Time interactions reflected only different patterns across time between the two conditions; and (c) The magnitude of effect attributable to the interactions was, in all cases, small: $\hat{\omega}^2$ did not exceed .13 for any of the four dependent variables.

The major findings of the analyses described above will be reviewed in Chapter V. Limitations of the research will be discussed, and implications for further research and intervention will be explored.

CHAPTER V

DISCUSSION

The results of analyses described in Chapter IV indicated few differences in outcome which could be attributed to the comparison between the Family Diversion (F.D.) and Protective Services (P.S.) interventions. This chapter offers a discussion of these results and an exploration of intervention and research implications of the study. The major findings relevant to outcome variables are reviewed in the first section. Section two presents an evaluation of the internal validity of the results. Section three offers a discussion of the generalizability of the intervention effects. In section four, implications of the research for intervention in the problem of child abuse are explored. The last section reviews implications of the study for future research.

Major Findings

As detailed in Chapter IV, the two interventions were compared on a total of 34 measures of outcome. Significant Condition x Time interactions were found for four dependent variables. On the archival measure of school absence, there was a significant decrease within the F.D. condition between pre- and post-intervention which remained stable through one-year follow-up. A significant simple effect for time was found in the P.S. condition, although post-hoc tests on simple contrasts revealed

no differences between means. Direction of the time effect in this condition was positive, with school absence apparently increasing from pre-intervention through one-year follow-up. No simple condition differences at any time point were found. The Condition x Time interaction accounted for 13% of the variance in school absence rates.

The parent interview variable, negative child-school experience, also revealed a significant Condition x Time interaction. The F.D. condition exhibited a significant decrease in negative school experience between pre- and mid-intervention which remained stable from mid- to post-intervention. No simple time effect was found in the P.S. condition. On this variable, significant simple effects for condition at both mid- and post-intervention showed less negative school experience in the F.D. condition. The Condition x Time interaction accounted for 7% of the variance, time explained 13%, and condition accounted for 4%.

A significant interaction was found on another interview variable, child-adult conflict. A significant decrease between pre- and mid-intervention was located in the F.D. condition; this decrease remained stable through post-intervention assessment. No simple effect for time was found in the P.S. condition. Additionally, no simple effects for condition were detected at any time point. The Condition x Time interaction accounted for 8% of the variance in child-adult conflict.

The interview measure of level of parent employment also revealed a significant interaction. A significant increase in employment was found in the F.D. condition between mid- and post-intervention. No simple time effects were discovered in the P.S. condition. There were also no simple effects for condition at any time point. The Condition x Time interaction accounted for 8% of the variance in parent employment.

Univariate two-way analyses of variance revealed no significant effects involving condition on any of the other 28 outcome variables. No differences were found on archival measures of Protective Services involvement (complaints or assessed risk) or Probate Court involvement (petitions or child removal). None of the interview variables assessing within-family interaction (parent-child, parent-parent, or sibling) or home involvement (parent or child) showed condition-related effects. Neither positive outside-family interaction nor negative outside-family interaction involving parents appeared to be affected by either intervention. Only negative outside-family interactions involving children (negative child-school experience and child-adult conflict, discussed above) showed effects due to condition. None of the interview variables assessing informal family resources (help from friends or relatives) revealed differences attributable to intervention. Similarly, no significant effects on home environment rating were found.

In summary, few of the hypothesized differences in outcome were confirmed. Intervention appeared to have no effect on officially labeled abuse or neglect, with approximately 50% of the families in each condition re-reported to Protective Services during the 18-week intervention period. By the end of one-year follow-up, 68% of the families in both conditions had been re-reported. During intervention, 13% of the families in each condition experienced court-ordered removal of a child; by one-year follow-up, 20% in both conditions had had children removed.

In terms of Belsky's (1980) ecological model, no intervention effects at the microsystem (within-family) level were found. At the exosystem level, intervention showed some impact on child-school interaction (archival report of absences and parent-reported negative child-school

experience), child-adult conflict, and parent employment. With the exception of employment, no parent-centered exosystem interactions (parent-friend, parent-relative, parent-neighbor) revealed effects attributable to intervention. Additionally, no positive child-centered exosystem interaction (positive child-school, child-peer, child-relative) showed a significant intervention effect.

In sum, intervention appeared to have impact only on a narrow range of exosystem variables. It should be noted that all significant effects attributable to intervention favored the Family Diversion condition. The F.D. intervention apparently succeeded in (a) decreasing school absence, (b) decreasing children's negative school experience, (c) decreasing children's conflicts with adults outside the family, and (d) increasing parents' employment levels. However, the magnitude of these effects was small: The Condition x Time interaction accounted for 7% to 13% of the variance in the above outcome measures.

The validity and generalizability of these results will be discussed in the next two sections. Internal validity issues relevant to random assignment, subject mortality, instrumentation, and the interaction of condition and history will be addressed first, followed by discussions of the following external validity issues: (a) treatment fidelity, (b) measurement validity, (c) power of the statistical tests, (d) representativeness of the referred sample, and (e) reactive arrangements.

Internal Validity of Results

To determine whether the significant effects reviewed above could be attributed conclusively to intervention differences, the research design was examined for potential threats to internal validity. The random

assignment of families to the two intervention conditions controlled for most of these threats. As detailed in Chapter IV, tests of pre-existing differences on all available variables found no between-condition differences which approached a liberal level of significance ($p < .10$). This randomization check verified that the assignment process succeeded in producing two experimental groups that were essentially equivalent prior to intervention. This randomized equivalence controlled for internal validity threats arising from selection, maturation, testing, and regression effects. Several other threats, however, could not be controlled by random assignment.

Subject Mortality

Differential subject mortality constituted a rival explanation for effects on interview variables. As described in Chapter III, three families could not be interviewed (two refused; one involved a non-English-speaking parent whose child was removed from the home early in the intervention). All three were in the P.S. condition. Thus, it is conceivable that this differential mortality was in some way systematic and that the loss of these families from analyses involving interview variables could have artifactually produced or obscured condition differences. In fact, there was some evidence for this: Two of the three P.S. families who could not be interviewed had children removed from their homes (one during intervention; one during one-year follow-up). The fact that interview data for these P.S. "failure" families was unobtainable could have biased the experimental comparisons on interview variables in favor of the P.S. intervention. It should be stressed, however, that archival data for these families were available and that they were included in these analyses.

Instrumentation

Potential instrumentation biases also constituted a threat to the internal validity of the research. As was described in Chapter III, interviewers were not blind to the condition assignments of the families. The nature of the assessment task and the conversational, exploratory style of the interviews precluded control over this information. The interviewers received intensive training and monitoring in an attempt to detect and limit biases, but these efforts may not have been completely successful. The relatively high levels of interrater agreement on interview outcome variables (.66 to .95 for parent-source interviews) and the fairly strong evidence of discriminant validity lent credibility to these measures, although levels of bias shared among interviewers or the existence of complex patterns of bias could not be assessed.

Archival variables from Protective Services records also may have been affected by instrumentation biases. These records were maintained by the P.S. caseworkers who made referrals to the research project and who delivered services to families in the P.S. condition. They obviously were not blind to condition and may have recorded biased information about P.S. complaints and assessed risk. Within the context of a comparative evaluation of P.S. and F.D. intervention, motivation for biased record-keeping could have been high. Efforts were made to limit caseworkers' evaluation anxiety, but there was no way to determine the effectiveness of these efforts or to independently assess P.S. complaints or level of risk.

Condition x History Interaction

A final threat to the internal validity of the research was attributable to differential history effects in the two interventions. This problem also involved the referring P.S. caseworkers. The F.D. intervention plan called for diversion of families from the P.S. intervention and labeling process. Once a family had been assigned to the F.D. condition, the referring P.S. caseworker was to have no further contact with the family unless a new complaint was received. Although the agency and caseworkers agreed to this procedure, they did not uniformly adhere to it. In at least seven cases, the referring P.S. caseworker made "monitoring" visits to a family after F.D. intervention had begun. Evidence of special P.S. monitoring of F.D. families through school officials, doctors, and neighbors was also found. This unanticipated P.S. contact and monitoring could have had several effects, all irrelevant to the F.D. intervention: (a) increased probability of re-involvement with Protective Services due to the increased risk of observation of abuse or neglect; (b) increased labeling by various sectors of the family's exosystem (schools, doctors, neighbors, etc.); (c) positive or negative effects due to direct intervention by the P.S. caseworker during a monitoring contact; and (d) effects on the credibility of the F.D. intervention. The magnitude of these potential effects was unmeasurable, and their plausibility as rival explanations for condition differences (or lack thereof) unknown. This contamination undoubtedly weakened the internal validity of comparisons between the two interventions.

Summary of Factors Affecting Internal Validity

To summarize, successful random assignment of families to the two intervention conditions controlled for threats to internal validity involving selection, maturation, testing, and regression. Several other threats remained potential rival explanations for the research results. Differential subject mortality was a possible problem on interview outcome variables: Inability to interview three P.S. families, two of whom had children removed by the end of one-year follow-up, could have biased the experimental comparisons in favor of the P.S. intervention. Instrumentation biases due to non-blind interviewers and P.S. record-keepers also constituted a threat to internal validity; interviewer biases would presumably have favored the F.D. intervention, while P.S. record biases would likely have favored the P.S. intervention. Finally, unanticipated monitoring of F.D. families by P.S. caseworkers may have resulted in extraneous Condition x History interaction effects. This special monitoring could have yielded a variety of effects irrelevant to the F.D. intervention, most of which would appear to have favored the P.S. condition. In short, with the exception of possible instrumentation effects due to non-blind interviewers, most potential biases appeared to have favored the P.S. condition. Given that all significant effects were favorable to the F.D. condition, these biases were not plausible rival explanations for significant differences related to condition. However, they could have operated against the discovery of additional positive effects attributable to F.D. intervention.

External Validity of Results

The extent to which the results of this experiment could be generalized to other populations, settings, measurement variables, and replications of the intervention was examined in relation to several potential threats to the external validity of the research. These external validity issues will be addressed in the sections that follow.

Treatment Fidelity

The degree to which the results of this experiment could be replicated in other situations would depend largely on the reproducibility of important features of the Family Diversion and Protective Services interventions. Both interventions were individualized and loosely structured, characteristics implying difficulties in defining the independent variable, identifying critical features, and replicating the interventions' effects. The F.D. intervention model was designed to differ in several respects from the treatment-as-usual P.S. intervention. Extensive process monitoring assessed the degree to which the two interventions were actually distinguishable on a number of variables. These process variables measured the fidelity of the F.D. intervention, as implemented, to the F.D. intervention model.

The most basic feature on which the F.D. intervention model differed from P.S. treatment-as-usual was amount of contact between the intervention agent and family members. F.D. paraprofessional students were to have six to eight hours of contact per week with family members; P.S. intervention agents were expected to have one to two hours of contact per month. As anticipated, the two conditions differed dramatically on this dimension. During the 18-week intervention, F.D. families received

an average of 57 contacts lasting an average of 96 minutes each. The P.S. families received an average of 7 contacts lasting an average of 38 minutes each. Amount of contact in the F.D. condition was slightly less than expected, while P.S. condition contact was slightly greater than anticipated. Differences between the two, however, were substantial.

The F.D. model, compared with P.S. treatment-as-usual, anticipated greater involvement of children in the intervention. Process monitoring confirmed this difference. In the F.D. condition, children were involved in an average of 53% of the contacts with family members; in the P.S. condition, children were involved in an average of 31%. Moreover, it was anticipated that children in the F.D. condition would actively participate in the intervention throughout the 18-week period; in the P.S. condition, children were expected to be involved initially, as sources of information about incidents of abuse or neglect. This pattern was also confirmed: The proportion of contacts with children in the P.S. group decreased significantly during the second half of the intervention while contact with children in the F.D. group remained constant. Additionally, parents in the F.D. condition reported a much higher level of intervention involvement among their children than did parents in the P.S. condition; condition effects on this interview variable accounted for 32% of the variance in child involvement.

The F.D. intervention model also called for more contact between the paraprofessional student and individuals in the family's exosystem. Both archival and parent interview measures confirmed this difference on contact with other intervention agents working with the family. In the F.D. condition, an average of 15% of the paraprofessionals' contacts were with individuals outside the family; in the P.S. condition, an average of 1%

of the primary intervention agents' contacts were of this type. Parents reported a difference which accounted for 14% of the variance in contact with other intervention agents.

The two conditions were expected to differ in the process and timing of intervention activities. The F.D. model delineated a flexible sequence of assessment, initiation of intervention, monitoring of intervention, and termination. P.S. treatment-as-usual was expected to consist primarily of monitoring contacts throughout the intervention. Differences in intervention sequence were confirmed by process variable analyses. The proportion of contacts involving assessment was not significantly different between the two conditions during the first nine weeks of intervention; during the second half, however, the proportion in the F.D. group dropped significantly to an average of 2% while remaining constant at an average of 23% in the P.S. group. Monitoring was involved in a significantly greater proportion of P.S. group contacts during the first half of the intervention (P.S. $\underline{M}$ = .62; F.D. $\underline{M}$ = .28). During the second half, monitoring increased significantly in the F.D. group (to an average of .45), while decreasing significantly in the P.S. group (to an average of .33). In the F.D. intervention, assessment occurred primarily during the first half of the 18-week period while monitoring was proportionately more frequent in the second half. This pattern was expected from the F.D. intervention model. In P.S. treatment-as-usual, monitoring was involved in a greater proportion of contacts during the first half while proportion of assessment contacts remained constant.

Differences in the use of various intervention strategies were also anticipated. Specifically, the F.D. model prescribed use of contracting and advocacy strategies, with recreation encouraged as a context for

assessment and direct service permissible as an adjunct to other intervention activities. Use of directives and counseling by the paraprofessionals was discouraged. P.S. treatment-as-usual was expected to consist of directives and counseling (by referral), with low levels of advocacy and direct service in response to family crisis calls. Archival and parent interview data provided evidence of treatment fidelity on this dimension. Contracting was used significantly more in the F.D. condition, according to both parent and archival information. Significantly greater use of advocacy, recreation, and direct service in the F.D. intervention was found in either parent or archival data, with nonsignificant but parallel trends found in the other. Directives were significantly more common in the P.S. condition, according to archival reports (with nonsignificant parallel trends in parent interview data). Archival data showed a greater use of counseling in the P.S. condition only during the first half of the intervention.

The two conditions were expected to differ somewhat on the types of family issues that would comprise the intervention focus. The F.D. intervention model encouraged a broad focus, encompassing not only parent-child interaction but also issues of material needs, family health, parent education and employment, and child behavior and school experience. Traditionally-defined mental health issues were seen as outside the scope of the F.D. intervention. P.S. treatment-as-usual was expected to focus more directly on parent-child interaction and on the mental health problems of individual family members. Archival and parent interview data provided some evidence of fidelity on this dimension. Both sources of information reported significantly more attention to material needs in the F.D. intervention. Parents reported significantly greater focus on child school

issues and child behavior in the F.D. group. Archival reports indicated proportionately more attention to parent mental health and to parent-child interaction in the P.S. group during the first half of the intervention only. No condition differences on family health or parent education/employment were found.

Process monitoring provided considerable evidence of the fidelity of the F.D. implementation to the F.D. intervention model. Additionally, monitoring of the P.S. treatment-as-usual generally confirmed notions about P.S. intervention that had been based on informal observation. Substantial differences were found between the two interventions on amount of contact between intervention agents and family members, use of various intervention activities and strategies, and extent of intervention focus on various family issues. Questions about which of the intervention features were critical to the differences on outcome could not be addressed in this research. The small number of families and the large variance on both family and intervention descriptors would have made exploratory correlational analyses meaningless. Systematic variation of intervention components coupled with multivariate analyses of relationships between family characteristics, intervention descriptors, and measures of outcome would be needed to address these issues.

Measurement Validity

The degree to which the results of this experiment could be generalized to other measures of outcome would depend on the validity of the measurement techniques used. In order to assess the validity of the outcome measures, multiple measurement strategies were used. Interviews with parents, children, and paraprofessional students allowed examination

of convergent and discriminant validity for self-report variables in terms of multitrait multimethod matrices.

As described fully in Chapter III, instrument development and the evaluation of the psychometric properties of the resulting measures constituted a major component of this research. The 28 variables developed from items contained in the parent outcome interview were subjected to a variety of tests of psychometric adequacy. Internal consistency of the multi-item scales was generally acceptable, with levels of α ranging from .59 to .90. Five of the outcome interview variables consisted of single items. It should be noted that two of the variables which revealed significant condition-related effects were single-item variables--child-adult conflict and parent employment. These variables could contain unknown levels of idiosyncratic error variance which could decrease their replicability in other research situations. The remaining interview variable displaying significant condition effects--negative child-school experience--had an internal consistency estimate of α = .77.

Interrater reliability of the 28 outcome interview variables was also assessed and found to be generally acceptable, with interrater *rs* ranging from .65 to .95 on parent-source data. Interrater agreement on the three interview variables revealing significant condition-related effects was as follows: negative child-school experience (*r* = .80), child-adult conflict (*r* = .88), parent employment (*r* = .91).

Convergent and discriminant validity of these variables was assessed in terms of multitrait multimethod matrices presenting correlations among parent- , child- , and paraprofessional-source responses. Convergence of parent- and child-source data was acceptably high for all variables, ranging from .70 to .95. Convergence of parent- and paraprofessional-source

data ranged from .13 to .97. Parent- and paraprofessional-source convergence on child-adult conflict was .13; parent- and child-source convergence on this variable was .89. Paraprofessionals were apparently responding to a concept different from that perceived by the within-family sources. Convergence on negative child-school experience was .88 between parent- and child-source and .84 between parent- and paraprofessional-source. Convergent validity of parent employment was .87 between parent- and child-source and .82 between parent- and paraprofessional-source.

The level of method variance exhibited in the interview variables was assessed by examination of discriminant validity. Correlations among parent-source variables ranged from .00 to .47, with 7 of the 44 correlations exceeding .30. In no case did a heterotrait monomethod correlation exceed the relevant convergent validity correlation value. Thus, the level of extraneous method variance in the parent source variables appeared to be moderately low.

Method variance shared across all sources of information was a potential problem since all three sources were interviewed by the same person. Halo effects or other biases were expected to be a problem to some degree. Examination of heterotrait heteromethod correlations allowed assessment of the magnitude of this problem. Extraneous correlations between parent- and child-source data ranged from .02 to .54, with 18 of the 88 correlations above .30. Between parent and paraprofessional sources, correlations ranged from .01 to .81, with 21 of the 88 values above .30. In only one case, involving the single-item variable--child-adult conflict, did a heterotrait heteromethod correlation exceed the relevant convergent validity correlation. As mentioned earlier, this variable showed a lack of convergence between parent and paraprofessional sources.

In general, there was evidence of a reasonable level of convergent validity on most of the outcome interview variables: Parent responses showed consistently high convergence with child responses and, with a few exceptions, high levels of convergence with paraprofessional responses. These variables also showed a generally acceptable level of discriminant validity, although there was evidence of some extraneous method variance both within sources and shared among sources. Two of the interview variables which revealed significant condition-related effects (negative child-school experience and parent employment) exhibited particularly high convergent validity correlations and low levels of method variance. The third significant outcome variable--child-adult conflict--showed no convergence between parent and paraprofessional sources, although parent-child convergence was high. Validity of this variable was thus more questionable.

Multiple measurement strategies could not be used in the other areas of outcome assessment. No estimate of the validity of the home environment rating could be obtained; lack of variance on this instrument made it a less than satisfactory measure of physical environment characteristics. Similarly, the validity of the archival measures of outcome could not be assessed. No independent measures of school absence, Protective Services complaints and risk, or Probate Court petitions and removal of children were obtained. Although various features of school record-keeping could have operated to bias archival records of absences, these biases were considered relatively minor and irrelevant to intervention effects. School absence records were seen as having acceptable face validity.

Validity issues surrounding the archival measures of official outcome were more complex and directly related to intervention. First, as discussed at length in Chapter I, archival measures of P.S. complaints and Probate Court petitions reflected only the number of times a family had been reported to an official agency on suspicion of abuse or neglect. These variables may have been valid indicators of the level of labeling a family had received, but they were not valid measures of levels of abuse or neglect. They were undoubtedly subject to a variety of biases related to a family's socioeconomic status, neighborhood, health care provider, etc. as well as to general community norms and mores regarding reporting child maltreatment. The replicability of intervention effects on archival measures of reports to P.S. or Probate Court could not be determined. These measures could be assumed to vary across neighborhoods, communities, and occasions and thus be more or less sensitive to intervention effects, more or less valid as indicators of family problems, and more or less biased by irrelevant family characteristics.

Archival measures of P.S. risk and court-ordered removal of children from their homes were, similarly, potentially valid indicators of level of agency response to complaints received. Again, for the reasons stated above, these measures were not valid indicators of levels of abuse or neglect. These variables were, additionally, subject to biases stemming from agency characteristics (caseload sizes, foster home availability, budget cuts, organizational and community norms about child removal, etc.) that could be assumed to vary geographically and temporally.

Viewed in this way, the failure to find significant intervention effects on the "official" outcome variables was not surprising. The sensitivity and responsiveness of these measures to family-level

intervention appeared extremely low. Their validity as measures of anything other than level of agency labeling was negligible.

To summarize, acceptable levels of convergent and discriminant validity in the parent interview variables supported the contention that the condition-related effects of this experiment could be generalized to other similar measures of outcome. One exception was on the variable assessing child-adult conflict, on which parent-paraprofessional convergence was very low. It should be noted that potential generalizability of these measures has been assessed only in regard to interview assessment techniques; generalizability to other types of measures, such as behavioral observations, has not been addressed.

Although the validity of archival school absence records could not be assessed, this measure was thought to have adequate face validity. The home environment rating revealed low variance levels and was found to be an inadequate measure of physical home environment. The archival variables assessing levels of P.S. and Probate Court involvement revealed no significant effects related to condition and were thought to be insensitive and unresponsive to intervention at the individual family level. Moreover, they would probably vary geographically and temporally in their sensitivity, validity, and susceptibility to irrelevant biases. The generalizability of intervention effects (if found) on these variables would thus appear doubtful.

Power of the Statistical Tests

The degree to which the results of this experiment could be replicated with samples of varying sizes would involve the power of the statistical tests. A major limitation of the current research was the small

number of families who participated. The small N (31 families), combined with the relatively large variances discovered on most variables and the small magnitude of effects generally anticipated in child abuse intervention, caused the power of the statistical tests to be quite low. For the detection of a small (equivalent to .20 SD) main effect due to condition at p = .05, the power of the F test was only .08. The probability of detecting a small Condition x Time interaction effect at p = .05 was .09. The power of the F test of the main effect for time was .11 for small effects at p = .05.

If a medium effect (equivalent to .50 SD) were hypothesized, the power of the statistical tests improved somewhat. At p = .05, the power of the F test for condition effects was .26; the power of the F test for the Condition x Time interaction was .36; and the power of the F test for time effects was .45. A large hypothesized effect (equivalent to .80 SD) would have increased power to .56 for the condition effect, .76 for the interaction, and .83 for the time effect (all at p = .05).

Thus, with the small N of 31 families, differences had to be on the order of .80 SD for the probability of detecting a significant effect to exceed .50 (at p = .05). Obviously, the probability of detecting a time effect or a Condition x Time interaction was somewhat higher than the probability of finding a significant condition effect; use of the repeated measures design decreased the magnitude of the error terms for tests of these effects and thus increased their power. However, even time or Condition x Time interaction effects had low probabilities of discovery with the samll-to-medium differences expected in child abuse intervention.

It was thus possible that, with an increase in N, more differences on intervention outcome could have been detected. Examination of

nonsignificant trends on outcome variables discovered three interview variables for which this might have been the case: child home alone, negative parent-child interaction, and positive parent-parent interaction. Analyses of all three revealed Condition x Time interactions which approached significance. Comparisons of cell means indicated that effects on all three would have favored the F.D. intervention.

It would have been desirable to increase the number of families involved in the experiment to attain more reasonable levels of power. However, unrealistic increases in N would have been required to raise the probability of detecting a small effect to reasonable levels. For example, doubling the N to 62 would have raised the probability of detecting a small Condition x Time interaction from .09 to .15; with an N of 100, the probability of detecting a small interaction effect would have been only .22 (all at $p = .05$). The utility of such small increases in power would require evaluation against the feasibility of recruiting a larger number of families. Difficulties in maintaining adequate referral rates from Protective Services demonstrated that, in the setting and design context of the current research, an increase in N would not have been possible.

Representativeness of Referred Families

The generalizability of the experimental results to other populations of "abusing and neglecting" families would depend on the representativeness of the sample of families who participated in the research. As described in Chapter II, the sample was explicitly limited to families referred from the protective services agency in a particular county during a specified period of time. Further, families were to have been those

in which some level of abuse or neglect had been substantiated and were not to be those in which immediate life-threatening conditions warranted court-ordered child removal. Additionally, family members were required to voluntarily consent to participate in the project. Although, after referral, only two families refused to participate, an unknown number may have refused explicitly or implicitly before being referred by the P.S. caseworker. Families who were generally uncooperative with the P.S. worker or who refused to talk with a Family Diversion Project representative were not referred. Thus, the population to which results could be generalized was deliberately limited to a subset of families in contact with the protective services agency.

Referral of families meeting these criteria was not automatic, however: P.S. caseworkers made subjective decisions in referring families to the research project. It was likely that caseworkers made systematic choices which further limited the representativeness of the sample. The referral decision process was not monitored, and little appropriate information about the population of families in contact with P.S. could be obtained. However, there was some indication that the families referred to the project were not representative of the total population fitting the referral criteria.

Most striking was the number of referred families who had been reported to Protective Services on previous occasions--19 of the 31 families (61%). Six of the 31 had been intermittently involved with P.S. for more than five years prior to referral to the research project. Additionally, 9 of the 31 families (29%) had previously had children removed from their homes by court order. Unfortunately, no comparable data were available for the total pool of families reported to P.S.

during the referral period. The extent of previous involvement in the P.S. system was quite unanticipated and seemed, from informal observation, to be unrepresentative.

On a related dimension, a number of families appeared to be widely known as "problem families" to a variety of community agencies. At the time of referral, 8 families were involved with professional therapists, 6 families were involved in the criminal justice system (4 adults and 3 juveniles), and two families were receiving public health nursing and nutritionist services. Four families were in weekly contact with five or more separate helping agencies. No comparison data were available, but the level of community agency involvement was unexpected and appeared unrepresentative.

Nearly half the referred families (45%) had a child identified by the P.S. caseworker as delinquent or "pre-delinquent." No comparison data on other families reported to P.S. were available, but this proportion, too, seemed unrepresentative. Comparisons of referred families with aggregated agency statistics for the referral period found no discernible differences on proportions of other types of presenting problems. (It should be noted, however, that the data were not strictly comparable in categorization or in time frame.)

Comparisons between referred families and P.S. aggregated statistics on source of report found several possible differences. Twice as many of the referred families had been reported by school officials (23% of those referred vs. 10% of the total) and police officers (10% of those referred vs. 5% of the total). Considerably fewer had been reported by relatives (3% of those referred vs. 16% of the total). Five times as many had been self-reported by the parent (20% of those referred vs.

5% of the total). As noted in Chapter II, among the referred families, these parent-reports tended to involve a request for removal of a child with whom the parent was having difficulties.

Examination of family demographics revealed that most of the referred families were poor (29 of the 31 were being supported by AFDC, Social Security, or Unemployment Insurance) and that the majority had single parents (18 had single mothers; 2 had single fathers). While these proportions would have been extreme in a general population, they appeared representative of families officially labeled as abusing or neglecting. No comparative data on age of children were available, but a substantial proportion of the referred families had older children: 11 of 31 had teen-aged children over 12; 23 had school-aged children between six and twelve. However, a number had young children as well: 10 families had pre-school children aged three to five; 13 had infants aged two or younger.

To summarize, there was some indication that the families referred by P.S. caseworkers to the research project were not representative of the total population of families reported to P.S. They may have had more extensive prior contact with the protective services system in terms of previous reports to P.S. and previous instances of court-ordered child removal. More broadly, they may have had more involvement with other kinds of helping agencies (therapists, public health services, the criminal justice system). A particularly high proportion had children identified as delinquent or pre-delinquent. Additionally, they appeared more likely to have been reported by school or police officials or by parent self-referral and less likely to have been reported by non-parent relatives. No appropriate comparison data were available to confirm

these possible instances of atypicality; judgments were based largely on informal observation.

Several hypotheses predicting systematic referral biases could be generated. One might anticipate that P.S. caseworkers would refer less serious cases of abuse or neglect to a new, untested project relying on undergraduate paraprofessionals as intervention agents. Little evidence supporting this hypothesis was found. Alternatively, given the chronic shortage of in-house and community resources available for families on P.S. caseloads, one might expect a new project to be used as a last-resort option for chronic problem families with whom a variety of other interventions had failed. The high levels of prior P.S. contact, previous child removal, and involvement with community agencies among the referred families appeared to support this latter hypothesis.

An additional factor may have contributed to the referral of a disproportionate number of families with delinquent or pre-delinquent children to the project. The Family Diversion Project was modeled after and operated in conjunction with the Adolescent Diversion Project, which offered services to delinquent youths diverted from Probate Court. The adolescent project had operated in the community for five years prior to the initiation of the family project; many P.S. caseworkers were familiar with it and knew of the association between the two projects. Several P.S. workers initially perceived the Family Diversion Project as a delinquency prevention program. Repeated efforts to correct this misperception may not have been completely successful. Caseworkers may also have judged the F.D. intervention model to be more appropriate for families with children at risk of delinquency. Systematic case-sorting along these lines could also have accounted for the apparent over-representation of families reported by schools, police, and parent self-referral.

The probability that the families who participated in the research were unrepresentative of the total population of families reported to Protective Services placed obvious limitations on the generalizability of the results. Different effects might have been discovered if referrals had been limited to families with no previous P.S. history or if the Family Diversion Project had not been associated with a delinquency project. Specifically, the apparent success of the F.D. intervention in reducing school absence, negative child-school experience, and child-adult conflict might not have been discovered with a less delinquent sample. Additionally, effects would probably have been different had nonvoluntary families been involved.

Reactive Arrangements

The ability to generalize the research results to settings outside the context of a research project would depend on the reactivity of the experimental arrangements. In this experiment, all participants--F.D. paraprofessionals, P.S. caseworkers, and family members--were aware that they were involved in a research project. The extent to which this awareness could have affected the research findings was probably different for each of them.

The reactivity of the research setting for both F.D. paraprofessionals and P.S. caseworkers could have been considerable. These intervention agents knew that their activities were being monitored and that their efforts would be evaluated, to a certain degree, on the basis of their families' progress. The extent to which this knowledge affected the quality of the interventions could not be assessed.

Reactivity for family members was probably lower. Initially, awareness that they were involved in an experiment may have been high, particularly for families in the experimental F.D. condition. Similarly, disappointment or anger may have initially affected families in the control P.S. condition. Over the 18-week intervention period, however, the salience of these issues undoubtedly faded. The ability of motivational factors attributable to Hawthorne effects to change the complex, overlearned behaviors involved in family interactions would appear to be low.

Summary of Factors Affecting External Validity

A number of factors presented potential threats to the generalizability of the research findings. First, the individualized, loosely-structured nature of the interventions (both P.S. and F.D.) raised concerns with replicability. Extensive monitoring of the intervention process in both conditions produced information about the fidelity of both interventions to their models as well as tests of differences between them. As anticipated, the F.D. intervention involved much more contact with family members; greater involvement of children and people outside the family; greater use of contracting, advocacy, recreation, and direct service as intervention strategies; and greater attention to material needs, child-school issues, and child behavior. The P.S. intervention involved much lower levels of contact; less involvement of individuals other than parents; greater use of monitoring, directives, and counseling as intervention strategies; and greater attention to parent mental health and parent-child interaction issues.

Irrelevant responsiveness of measures posed another threat to external validity. Assessment of the validity of the interview measures was made possible by a multiple measurement strategy, in which parents, children, and paraprofessionals all provided information about family patterns. Convergent and discriminant validity on these measures was generally adequate; one exception was on the child-adult conflict variable, which showed high parent- child-source convergence but no convergence between parent- and paraprofessional-sources. The home environment rating revealed little variance and was found to be an inadequate measure of physical home characteristics. School absence records, although undoubtedly containing some measurement error, were seen as having adequate face validity. Archival records of Protective Services and Probate Court contact were seen as potentially valid measures of family labeling and of agency response to labeling. Their validity as measures of family abuse and neglect was seriously questioned. These indicators were seen as responsive to a variety of irrelevant factors (political climate, community norms, socio-economic biases, etc.) that could severely limit their generalizability as measures of intervention outcome.

Statistical power presented a serious problem to the generalizability of the research results. The small N, combined with the relatively large variances discovered on most variables and the small magnitude of effects generally anticipated in child abuse intervention, caused the power of the statistical tests to be quite low. Had it been possible to substantially increase the number of families, additional significant intervention effects probably would have been found.

Another threat to the external validity of the results was the probability that the families referred to the research project were not

representative of the population of families reported to P.S. In addition to the referral criteria made explicit in Chapter II, it appeared that the referring P.S. caseworkers made systematic case-sorting decisions on the basis of other factors as well. Specifically, a seemingly disproportionate number of referred families had histories of P.S. involvement and court-ordered child removal. Additionally, a number were highly involved with other community agencies. An apparently large proportion had children identified as delinquent or pre-delinquent. There also appeared to be an over-referral of families initially reported to P.S. by school officials, police officers, and parent self-referral. The generalizability of intervention effects to other populations could be questionable, especially the effects on delinquency-related variables such as school absence, negative child-school experience, and child-adult conflict.

Threats to external validity due to reactive arrangements of the experimental setting were seen as relatively minor, given the length of the intervention and the complexity of the outcome variables. Possible reactive effects on the motivation of the intervention agents and, perhaps, on the quality of the interventions could have placed limitations on generalizability to institutionalized, non-research settings.

Implications for Intervention

The Family Diversion intervention model, when compared with P.S. treatment-as-usual, appeared to be successful in (a) decreasing children's absence from school, (b) decreasing children's negative school experience, (c) reducing children's conflicts with adults outside the family, and (d) increasing parents' employment levels. The F.D. intervention had

no measurable impact on interactions within families or on official indices of agency-identified abuse or neglect. With the exception of parent employment, no effects on parent-centered variables were found. Similarly, few effects involved increases in positive family-member activities; most reflected decreases in negative events. Several hypotheses about the nature of the discovered effects and related implications for future family interventions will be discussed below.

Exosystem versus Microsystem Effects

All effects attributable to the intervention occurred on variables measuring family interactions with the exosystem. No significant impact on microsystem variables was found. Several explanations for this failure to affect within-family patterns and interactions were tenable. First, as several authors have concluded (Helfer, 1970; Steele & Pollock, 1968), within-family patterns may be so complex and well-established that only intensive, long-term psychotherapy has a chance of changing them. This is indeed a possibility, but such a negative prognosis does not offer much hope for families whose major intervention resource is a protective services agency.

It is possible, however, that the 18-week intervention period was not long enough for contracting efforts to have a measurable impact on interactions among family members. As anticipated in the F.D. intervention model, contracting was the major strategy which paraprofessionals used to change patterns of interaction within the families. The initiation of contracting interventions required that family members have developed enough trust in the paraprofessional to have agreed to identify behaviors of concern, negotiate a contract, and attempt to carry it out.

In most cases this level of trust was not established quickly or easily. Most contracting interventions were initiated during the second half of the intervention, after the paraprofessional's credibility had been established through successful implementation of an advocacy intervention. This late initiation left little time for monitoring and reformulating contracts or for observing their effects on family interactions. A somewhat longer intervention period, of perhaps six to eight months, might have provided adequate time for contracting interventions to be implemented and evaluated.

The 18-week period may also have been too short to allow the effects of changes on exosystem variables to be reflected in changes on microsystem variables. As noted above, the F.D. intervention effected positive changes in family interaction with several important elements of the exosystem (most notably, child school and parent employment). The situational stress theories of child abuse would predict parallel, but perhaps delayed, positive changes on microsystem variables as a result of improvement in a family's exosystem. Thus, increases in parent employment and decreases in child school absence and negative school experience could have reduced the family's stress due to poverty, isolation, and punitive community reaction and thus indirectly produced positive change in within-family interaction. A longer intervention and assessment period could, perhaps, have allowed these indirect effects to emerge.

Child-Centered versus Parent-Centered Effects

Most intervention effects involved child-centered interactions. With the exception of parent employment, no variables measuring parent-centered patterns revealed intervention effects. Characteristics of the F.D. paraprofessionals and informal norms of the F.D. project and its supervisory staff may have contributed to a stronger emphasis on child- issues than on parent-issues. First, the paraprofessionals were overwhelmingly young and middle-class. None were parents. They may have felt more at ease with the children in their assigned families than with the parents and more competent to intervene in children's activities than to attempt change with the parents. Additionally, the association of the Family Diversion Project with the Adolescent Diversion Project may have encouraged interventions to focus more on child- rather than parent-centered needs. The paraprofessionals were trained in a manner similar to that used with paraprofessionals working with adolescents; they used a similar training manual, and they were supervised by graduate students who had worked with the delinquency project. Training and supervision may have unintentionally encouraged intervention focus on child-centered activities and interactions.

Modification of training materials and activities plus supervision of paraprofessionals by individuals more experienced in working with adults might have encouraged more attention to parent-centered intervention issues. Utilization of different types of individuals as intervention agents might also have changed the intervention focus. Older paraprofessionals, more similar to family members in class and ethnic background, and with first-hand child-rearing experience, might have been more successful in interventions with parents.

Effects on Negative versus Positive Interactions

A third feature of the experimental results was the general lack of impact on positive exosystem or microsystem interactions. With the exception of parent employment, variables reflecting intervention effects involved the reduction of negative events rather than the enhancement of positive ones. This may not be atypical of problem-focused interventions. Although attempts were made in the F.D. intervention to encourage attention to the support and enhancement of positive aspects of families' lives, these efforts were not always successful. Families had been referred to the project because of problems they were experiencing, and the paraprofessionals and supervisors found these problems difficult to ignore on even a temporary basis.

Other community agencies and intervention agents also focused primarily on the families' problems. As discussed earlier, many of the families referred to the project were widely identified as "problem families" and were extensively involved with numerous intervention agents. Many of the paraprofessionals spent a considerable amount of time establishing contact with these agencies and dealing with problems identified by them. In one case, during the second week of intervention, the paraprofessional attended a meeting of representatives of eight separate agencies that were all intervening with one family. Each agency perceived a different set of problems as critical. The paraprofessional spent much of his time dealing with crises involving one agency or another and had little opportunity for positive intervention. This experience was not atypical. A number of paraprofessionals encountered similar, if not so extreme, situations.

Intervention with families who had not become so heavily involved with community agencies or so highly labeled as problems could, perhaps, have been more effective. The Family Diversion intervention model was not designed to be a last resort treatment for families for whom other interventions, including child removal, had failed. The paraprofessionals had neither the credibility, the experience, nor the time to disentangle families from the contradictory intervention plans of a variety of community agencies and still implement the F.D. model of contracting and positive advocacy. Other types of intervention, perhaps involving case managers empowered to organize and coordinate the efforts of several agencies on behalf of one family, might have been more appropriate for the highly labeled and agency-involved families described.

Lack of Impact on Official Outcome

A final point involved the failure of the F.D. intervention to show any impact on levels of "official" abuse and neglect. Official failure rates were high in both the F.D. and P.S. conditions: 50% of the families in each were re-reported to P.S. during the 18-week intervention period; by the end of one-year follow-up, 68% in both conditions had been re-reported. During intervention, 13% of the families in each condition experienced court-ordered removal of a child; by one-year follow-up, 20% had had children removed. Such failure rates were disappointing but were not dissimilar to the rates found in other interventions. Johnson (1977) found that 60% of families offerred P.S. services in two cities were re-reported within three years, most of them very quickly after intervention initiation. Berkeley Planning Associates (1977), in their evaluation of 11 national demonstration projects, discovered that 30% of 1,724 parents

committed further "severe abuse or neglect" while they were in treatments of various types.

Several authors have concluded from these high official failure rates that, as Johnson (1977) has stated, "there is no question that efforts to rehabilitate parents and prevent further neglect and/or abuse have generally failed"(p. 162). However, as noted earlier, the validity of these official variables as measures of the incidence of abuse and neglect has been seriously questioned. The high official failure rates may reflect primarily the intractibility of the abuse/neglect labeling conferred on families once they have entered the P.S. system. As Newberger and Bourne (1979) and Whiting (1977) have observed, this label is virtually impossible to remove. Once a family has been labeled as abusing or neglecting, any parental behavior, childhood injury, or family problem will be viewed as another instance of abuse or neglect.

As mentioned earlier, many of the families referred to the project were highly labeled and were known to a variety of community agencies as abusing or neglecting. For these families the F.D. intervention could hardly be termed a "diversion" project, as they were already deeply entangled in the labeling process. With these families, especially, the validity of the official records as indicators of actual abuse and neglect was doubtful. For highly labeled families, further application of the abuse label (by re-report to P.S.) was probably more a measure of label dissemination and interagency communication than of intrafamily abuse or neglect.

These last observations implied a basic problem in the diversion of families from the P.S. labeling system. Labeling appeared firmly entrenched and broadly disseminated for a number of families prior to the

effort to "divert" them from the P.S. system. Efforts to reduce further application of the labeling process to these families "permanently labeled" by inclusion in the state registry of child abusers (Whiting, 1977) appeared futile. It could be concluded that diversion after report to P.S. was pointless, since, by that point, abuse labels had already been firmly attached.

Diversion at an earlier point would appear desirable but difficult, since report to P.S. represents the first step in the systematic response to child abuse and neglect problems. Intervention at pre-report stages would more accurately be called prevention and, if targeted, would involve some sort of prediction of level of risk for abuse or neglect. As discussed in Chapter I, the problems and dangers of such risk prediction remain potentially more serious than the probable benefits (Duquette, 1982; Parke, 1982). The problem, then, is how to divert families from apparently harmful labeling processes when permanent application of the label is made at first identification of families at risk of labeling. Or, how does one prevent labeling without labeling?

Increasingly, researchers in the field appear to be advocating the use of general, non-targeted prevention efforts such as universal parent education (Elmer, 1982), universal day care (Gil, 1981), guaranteed full employment and minimum family income support (Gil, 1981; Kenniston, 1977), and abolition of corporal punishment in schools (Zigler, 1979). Garbarino (1981) and Parke (1982) have proposed that prevention efforts be targeted on specific geographic units at risk of high rates of abuse or neglect (states with high unemployment, counties with low social services expenditures, neighborhoods with high resident mobility) as a compromise between dangerous individual targeting and the inefficient use of

resources inherent in non-targeted efforts. These societal-level interventions appear to have long-term potential for improving the quality of family life, but they would require a major reordering of societal priorities, a strategy which Zigler (1979) has termed "an effort doomed to failure."

Several authors have advocated major changes in the protective services systems which have been developed over the last 10 to 15 years. Gil (1981) has advocated the elimination of specialized child abuse and protective services agencies and their integration into general supportive services available to all families. Solnit (1980) has suggested that mandated reporting of suspected child abuse be abolished on the grounds that it serves only to label and add further stress to families' lives and that it serously depletes P.S. resources for intervention and treatment for seriously dysfunctional families.

Selective diversion of families from the child abuse system could provide a realistic means of working toward integrated services, reducing the number of families pointlessly labeled, and conserving the resources available to protective services agencies. For diversion to be useful, however, several components seem essential. First, for the effort to constitute true diversion, it must occur before permanent labeling has been accomplished. Perhaps diversion after first report to a protective services agency, before a family has been listed with a central child abuse registry, could accomplish this objective. Second, it must truly divert from the labeling process: Some arrangement for expungement of P.S. records and guarantee of no report to the central registry would seem essential. Third, it must not create its own labeling process. The diversion of families from the P.S. labeling system to a diversion

program known in the community to serve only abusing and neglecting families would seem to reflect little improvement. An intervention project serving a variety of families and accepting cases diverted from P.S. as well could perhaps avoid becoming an additional labeling system. Finally, for a diversion intervention to be useful, it must be effective in producing desired changes at family microsystem and exosystem levels. Satisfaction of this last requirement would obviously demand more experimental research on intervention effectiveness. The Family Diversion intervention model developed in this research appeared to have some potential for effectiveness, at least at the family exosystem level. Modification in terms of length, type of paraprofessional, and focus of paraprofessional training might enhance its effectiveness in improving other aspects of family functioning. Systematic research on intervention features critical to effectiveness is needed; suggestions will be discussed in the next section.

Implications for Further Research

As documented in Chapter I, systematic reseerch investigating the effects of various interventions on child abuse and neglect has been rare. Research to date has been characterized by biased or nonexistent control groups, inadequate descriptions of the intervention process, outcome measures of questionable reliability and validity, and inappropriate statistical analyses. As the Berkeley Planning Associates (1977) have pointed out, "evaluation of treatment services for abusive and neglectful parents constitutes a major gap in the child abuse and neglect literature" (p. 62).

The research and measurement methodologies described in Chapters II and III appeared to constitute a substantial improvement over the methods commonly used in this field. The use of an experimental design controlled for many of the threats to internal validity which have plagued previous research. Multiple measurement strategies allowed for assessment of the reliability and validity of many of the outcome variables. Careful process monitoring provided descriptions of the experimental and control interventions and allowed for evaluation of treatment fidelity. Measurement at several points in time enabled examination of trends in both the intervention process and the outcome variables. These methodological features provided useful information for the evaluation of the Family Diversion intervention model and showed potential for utility in the evaluation of other intervention modalities as well.

The results of the research also indicated potential utility for the Family Diversion intervention model. Compared with Protective Services treatment-as-usual, the F.D. intervention showed positive effects on several, although by no means all, outcome variables. Further research would be needed to investigate the promise of intervention effectiveness with (a) larger samples, (b) different populations, (c) variations of the intervention model, and (d) other measures of outcome. Specific suggestions for further research will be discussed below.

Larger Samples

As described in an earlier section, lack of statistical power was a major problem in detecting significant effects attributable to the F.D. intervention. The relatively small N (31 families), combined with the

comparatively large variances discovered on most variables and the small magnitude of effects anticipated in child abuse intervention, caused the power of the statistical tests to be quite low. Had the statistical power been greater, it is probable that additional intervention effects would have been discovered. Thus, a more powerful test of the intervention model is needed.

The most straightforward method of increasing statistical power would be to increase the sample size. In practice, this may turn out to be problematic. As mentioned earlier, it proved difficult to obtain referrals of the 31 families who participated in this experiment. Agency administrators had anticipated no problems in obtaining that number of referrals in three months; however, the rate of referrals from individual caseworkers was much lower than expected, and nearly five months was required. No clear reasons for the lower rates could be ascertained: Caseworkers appeared positive toward the project; there was no discernible change in patterns of cases reported to P.S.; no new, competing projects were initiated during the referral period. Whatever the cause, similar problems have been reported by other researchers (Kadushin & Martin, 1981). Referral difficulties may necessitate the development of new strategies for increasing sample size.

One potential solution would be replication of the experiment in a larger jurisdiction, with a larger pool of reported families from which referrals could be drawn. Alternatively, organizational strategies aimed at increasing rates of referral from individual caseworkers could be developed. Greater involvement of caseworkers in project development might increase their willingness to refer families for diversion. Explicit P.S. agency policy advocating diversion of specific types of families

might also help, although careful monitoring would be required to assess the appropriateness of referrals and to detect "net-widening" effects (referral of families in which there had been no substantiation of abuse or neglect). Extending the time during which referrals would be accepted could also increase the total sample. However, changes across time in characteristics of the families, the paraprofessionals, the intervention process, and the referring agency could limit the internal and external validity of combined analyses. Again, careful monitoring and analysis of time effects would be required.

As described earlier, a large increase in sample size would be necessary to provide an adequate test of the small effects anticipated in child abuse intervention. Given the difficulties encountered in obtaining adequate referrals, one might search for alternate methods of increasing statistical power. One such method might involve blocking on relevant variables prior to random assignment of families to experimental conditions. This could reduce initial between-group variance and thus enhance the power of between-group tests. However, blocking would present additional problems. First, it is unclear what matching variables would be useful in increasing group equivalence. Second, with referrals occurring over time and with agencies expecting fairly quick intervention response, it is unclear how matching prior to condition assignment could be accomplished. Delaying intervention with a family until a matched referral had been received hardly seems practical. Analysis of covariance could be used as a post hoc matching procedure, but, here again, relevant covariates have not been identified.

If statistical tests are to have a reasonable chance of detecting intervention effects, there seems little alternative to the use of larger

samples. Could ways of obtaining them be found, larger samples would also allow for multivariate analyses, which would provide simultaneous tests of intervention effects on a variety of outcome measures. Larger samples would also provide data for exploratory correlational analyses of the relationships between family characteristics, variations in intervention process, and outcome. Such analyses could suggest which intervention features have which effects for which kinds of families and could generate hypotheses for further experimental evaluation.

Different Populations

The generalizability of the effects of the Family Diversion intervention to different types of protective services populations also needs to be assessed. As discussed earlier, many of the families referred to the current research project appeared to be highly labeled, with extensive prior P.S. and Probate Court history, and heavily involved with numerous community agencies. The model was originally designed for intervention before labeling had become so extensive. Evaluation of F.D. intervention effects on families with little previous P.S. history is still needed. Replication of the intervention model with families diverted after first report to P.S. seems particularly promising.

Replication in other geographic locations is also needed. As mentioned earlier, there is reason to believe that a disproportionate number of families with delinquent or pre-delinquent children were referred to the project. Replication in a jurisdiction where the Family Diversion Project was not associated with a project serving delinquent youths might provide a test of the intervention with a less delinquent population. Geographic differences in child abuse and neglect laws, protective

services agency policies and procedures, and reported families' characteristics would also allow for tests of generalizability across these dimensions. In any replication of the intervention, it would be essential to monitor the referral process and to assess the degree to which the referred families were representative of the total population of families reported to the protective services agency.

Also needed are systematic evaluations of the effects of the intervention model with different types of families. With sufficient sample sizes, correlational analyses could indicate, for a given intervention, the relationships between family characteristics and outcome measures. Results of these analyses could be used to further refine the diversion referral criteria for experimental tests of intervention effects on specific types of P.S.-reported families.

Variations of the Intervention Model

Systematic evaluation of variations of the Family Diversion intervention model is also needed. As described in the previous section, there is some indication that modification of several intervention features could yield effects on additional outcome measures: a longer intervention period; intervention agents more similar to referred parents in age, socioeconomic status, and parenting experience; variations in paraprofessional training and supervision to encourage more attention to parent-centered issues. Experimental evaluation of these and other variations in the intervention could result in progressive refinement of the model to yield a more effective intervention.

In any replication, it would be essential to continue monitoring the fidelity of the intervention as implemented to the intervention model.

It would also appear important to continue to compare the effects of further refinements of the F.D. intervention to the effects of treatment-as-usual and to monitor the intervention process of the comparison treatment. Without monitoring the process of the control intervention, one can learn little about the factors critical to outcome.

With sufficient sample sizes, correlational analyses could also indicate relationships between intervention features and outcome effects. Results of these analyses could be used to further refine the intervention model for additional experimental evaluation.

Other Measures of Outcome

Assessment of the effects of the Family Diversion intervention on other types of outcome measures is also needed. With sufficient resources, observational methodologies such as those being developed by Burgess and Conger (1977, 1978a, 1978b) and Robison and Solomon (1979) could be used. Although expensive and time-consuming to obtain, such observations could provide invaluable information about the validity of self-reported interview measures.

Additionally, a more useful measure of family home environment is needed. The adequacy and safety of families' physical environments is a major concern of many child abuse and neglect interventions. A measure sensitive to variations and changes in physical features is needed in order to assess intervention effects on this dimension.

In any intervention research, it would be essential to continue the multiple measurement strategy described in Chapter III. Questionable reliability and validity of outcome measures has remained a major obstacle to useful evaluation of child abuse intervention. Continuous assessment of psychometric adequacy of measurement is still needed.

Systems Research

In addition to further experimental evaluation of intervention models, research on various aspects of the protective services system is also needed. Continuing from the work of Giovannoni and Becerra (1979), further exploration of the P.S. decision-making process could provide directions for intervention at the agency level. Particularly needed is research on the impact of political, economic, and organizational factors on intervention and labeling decisions. If, as was speculated in a previous section, official measures of abuse and neglect indicate more about community- and agency-level processes than they do about family abuse and neglect, ways of altering these processes must be found.

Similarly, research on the community-wide labeling of "problem" families is needed. The process by which families become labeled by schools, protective services agencies, the criminal justice system, and other community agencies and organizations appears to be well-established and systematic. However, little is known as to what family characteristics lead to this labeling, how labeling is communicated from agency to agency, how agencies respond to labeled families, and what effects this labeling process has on family functioning. Information about this process might provide direction for attempts to extricate families from it and for efforts to develop interventions effective in reducing child abuse and neglect.

APPENDICES

APPENDIX A

ADMINISTRATIVE AGREEMENT

FAMILY DIVERSION PILOT PROJECT

The Adolescent Diversion Project of Michigan State University and Children's Protective Services of the Ingham County Department of Social Services are planning a pilot program of services for neglecting and abusing families. The following points are aimed at clarifying the roles and responsibilities of the two agencies in this endeavor.

The Adolescent Diversion Project will do the following:

1. Provide services to 16 families referred from Children's Protective Services. Sixteen upper-level undergraduate students at M.S.U. will each be assigned to one of these families. They will work with the families 6 to 8 hours per week over a period of 18 weeks. The services will be goal-oriented, aimed at obtaining resources needed by the family, teaching them self-advocacy skills, and resolving conflicts among family members through behavioral contracting. All services will be provided in the homes of the families and in the community, with meetings arranged between the student and the family. The students will be enrolled in Psychology 371-373, a three-quarter course offered to juniors and seniors at M.S.U. They will receive 10 weeks of training in the following intervention skills: assessment,

family advocacy, behavioral contracting, and case termination. After assignment to a family, each student will receive two hours per week of group and individual supervision from the staff of the Diversion Project.

2. Provide for full protection of the rights of the families participating in the project by adhering strictly to HEW guidelines for the protection of human subjects.

   All families will be voluntary, informed participants. They will receive a full explanation of the project from a member of the Diversion Project staff. Parents and children over age 12 will sign forms guaranteeing them the necessary participant rights and granting the project staff access to their records at Protective Services and Probate Court and to school attendance records. (See Participation Agreement Form, attached.)

   All records kept by the Adolescent Diversion Project will be filed in a double-blind system, assuring security. Data gathered by the project will be released only in aggregate form to protect the anonymity of the participants.

3. Notify Children's Protective Services within one week of each referral of the acceptance or rejection of the family by the project. In order to evaluate the effectiveness of this pilot program, it will be necessary to refer approximately half the referred families back to Protective Services for other appropriate action. These families will not receive services from the project but will be interviewed periodically by the Diversion Project staff. The decision to accept or reject a given family will be made on a completely random basis. This process will be explained to the families before they aggre to participate.

4. Provide reports on the progress of each of the 16 families receiving services to Children's Protective Services at 4-week intervals. Additionally, Protective Services will be notified immediately of situations which threaten the life of any child in the project and of any instances of early withdrawal of a family from the project.
5. Provide Children's Protective Services with a report of the evaluation of the new program by September 1, 1981.

Children's Protective Services will agree to do the following:

1. Refer 32 to 35 families to the Adolescent Diversion Project between October 15, 1980 and January 15, 1981. All cases referred to the project will first be investigated by Protective Services staff. Cases appropriate for referral will be those which would ordinarily receive intervention from Protective Services but will not include those in which immediate danger to a child would warrant court action.
2. Provide normal services as needed to the families not accepted by the project.
3. Provide no direct services or referrals to other agencies to the 16 families accepted by the project. If an additional report of abuse or neglect regarding one of these families is received during the 18-week intervention period, the Adolescent Diversion Project staff will be consulted about further actions in the case.
4. Following the successful completion of the 18-week intervention and the receipt of a case termination report from the Adolescent Diversion Project, close each family's case with Children's Protective Services.
5. Allow staff from the Adolescent Diversion Project access to Protective Services case records for all families referred to the project, as granted by the families' signed release-of-information forms, subject to relevant Children's Protective Services statutes.

APPENDIX B

STUDENT AGREEMENT

MSU ADOLESCENT DIVERSION PROJECT

I am interested in being involved in the MSU Adolescent Diversion Project and I hereby agree to participate in an assessment session which will take place on Thursday, May 18, 1980 and a behavioral assessment session which will take place at a later date.

If I am selected, this agreement signifies my intention to be involved in the MSU Adolescent Diversion Project. It is my understanding that this project involves a three-term commitment involving Psychology 371 for Fall 1980 and Psychology 372 for Winter 1981 and Psychology 373 for Spring 1981 for four hours credit each. My work in this course will include participation in the initial training segment (6-8 weeks) as well as intensive work with an individual adolescent to whom I am assigned. The course will involve an average of 8-10 hours of involvement per week.

If I am selected for the Diversion Project, there are several special conditions of this course which I agree to abide with. First, I fully understand that all the information concerning the youth with whom I will be working is to be held in the strictest confidence. Second, I agree to participate in the course and field work Fall term through the end of finals week, Winter term beginning with the start of registration and through the end of finals week, and Spring term beginning with the

start of registration and through the end of finals week. Third, grading for this course will be based on my demonstration of responsibility in class and in field work, class attendance, and following ethical standards. Fourth, I understand that I will be asked to complete further assessment procedures during the course of the project.

If I am not selected for this Project, I agree to participate in the follow-up assessment (approximately one hour) at the end of Spring term, for which I will be paid $12. Finally, I am aware that I will be notified of my acceptance or non-acceptance into the course by August 31, 1980.

_____ _____

Professor William S. Davidson II Student

_____

Date

APPENDIX C

FAMILY DIVERSION PROJECT REFERRAL FORM

Family _____ Referring Caseworker _____

1. Please provide a brief description of the family's presenting problems.

2. What is your assessment of the risks to the children in this family?

3. If this family is not accepted into the Family Diversion Project, what actions/referrals/services would you pursue for this case?

4. Do members of this family have special problems that we should be aware of? (Handicaps, language problems, custody issues, etc.)

Please attach a copy of the DSS-133 Services Transaction Form, listing family members' names, dates of birth, current address and phone number and directions to family's home, if necessary.

APPENDIX D

FAMILY DIVERSION PROJECT

PARTICIPATION AGREEMENT

This fall, Michigan State University and the Ingham County Children's Protective Services are starting a new program for families in this community. The idea for the program is to provide an alternative to Protective Services for local families. This project involves several things. First, some of the families in the program will be working with volunteers. The volunteers will be working on a lot of different things depending on the kinds of changes which need to be made for particular families. This might include working out hassles between members of your family, helping you get community services that you need, finding things to do in your free time, helping you work on your living situation, and so on. Second, not all of the families who decide to be in this program will be working with a volunteer. About half of the families will be working with a volunteer between six and eight hours per week on the kinds of things described above. The rest of the families will be returned to Protective Services. Whether or not you will be working with a volunteer will be decided by lottery and in no way reflects what we think of you. When you successfully complete the program on __/__/__, your Protective Services case will be closed.

This form is for you to indicate that you want to participate in the program. It's important for you to know exactly what you're agreeing to.

1. We hereby indicate that we are participating in this project voluntarily and understand that we have the right to withdraw if we see fit.
2. We understand that this project is being evaluated and that our input will be an important part of that evaluation. We, therefore, agree to provide honest and accurate information to the project staff.
3. We agree to be interviewed by the project staff on 6 occasions: once within two days, once in nine weeks, once in eighteen weeks, once in six months, once a year later, and once a year after that. We understand that this information, as all information, will be kept confidential. We also understand that each family member interviewed will be paid $5.00 for each interview.
4. We agree to work with a volunteer should one be assigned. We understand that this will involve six to eight hours per week. We understand that the volunteer will be able to work around our schedule.
5. We hereby give permission for the project staff to examine and record the Protective Services and court records for the _____ family. It is also understood that this information will be handled confidentially and anonymously. This permission applies to all records from 1980 through 1983.

_____ _____

_____ _____

Parent(s)

_____

_____ _____

Project Staff

_____

_____ _____

Children Date

APPENDIX E

WEEKLY PROGRESS REPORT

_____ ___/___/___

Parent's Initials Date

_____ _____

Volunteer's Name Report #

I. What were your plans for this week? (What did you hope to accomplish?)

II. How did these activities and plans fit into your long range goals?

III. What did you actually accomplish?

IV. Plans for next week (What do you want to accomplish next week?)

APPENDIX F

GRADING CRITERIA

Weekly grades will be determined as follows:

During Training:

Attendance	(4.0 or 0.0)	= 1/3 of grade
Oral Questions	(4.0 or 3.0)	= 1/3 of grade
Written Questions	(4.0 or 3.0)	= 1/3 of grade

After Case Assignment:

Case Responsibility		= 50% of grade
Attendance	(4.0 or 0.0)	= 10% of grade
Oral Questions	(4.0 or 3.0)	= 10% of grade
Written Questions	(4.0 or 3.0)	= 10% of grade
Class Discussion		= 10% of grade
Weekly Progress Report	(4.0 or 0.0)	= 10% of grade

After Training:

Case Responsibility		= 50% of grade
Attendance	(4.0 or 3.0)	= 10% of grade
Class Discussion		= 30% of grade
Weekly Progress Report	(4.0 or 0.0)	= 10% of grade

Weekly Grade will be an automatic 0.0 for any absence.

Case Responsibility includes:

(1) Attempted goals

(2) Follow-through on class suggestions

(3) Number of hours spent with family

(and diligence and flexibility in contacting family members to arrange times to meet)

(4) Perseverance

(5) Responsiveness to family's needs

(6) Log Book records

Necessary but not sufficient to pass course:

(1) Interviews (once every 9 weeks after case assignment)

(2) Measures (twice per term)

(3) Mid-term report at 9 weeks

(4) Final report at termination (18 weeks)

(5) Confidentiality!!!

APPENDIX G

RELEASE OF SCHOOL RECORDS

MSU FAMILY PROJECT

_____ is participating in a research project through the Department of Psychology at Michigan State University. As part of the project _____ and his/her parents are hereby releasing school records to the project staff.

We hereby give permission for the Project staff to examine and record the school grades, attendance records, number of credits earned, and suspension records for _____ for school years 19__, 19__, 19__, and 19__. We understand that this information will be handled confidentially and anonymously.

Youth _____ Date ____/____/____

Parent _____ Project Staff _____

Birthday ____/____/____

_____
School this year -- Grade

_____
School last year -- Grade

APPENDIX H

OUTCOME INTERVIEWING CUES

The following points should be kept in mind at all times:

During the last 2 months

For each member of the family

How often?

What else?

Family Routines

Typical day

Meals

Daytime activities

Evening activities

Bedtime

Chores

Weekends

Parent-Child

Activities together

Talk - about what?

Arguments, hassles

Punishment

Supervision

Siblings

Activities together

Arguments, hassles, fights

Babysitting

Parent-Parent

Activities together

Arguments, hassles, fights

Child-School/Daycare

Likes/dislikes

Things good at

Problems, trouble with teachers or other kids

Absences, lateness

Parent involvement

Child-Friends

Activities

Arguments, fights, get in trouble with

Parent-Employment/School

Typical hours

Likes/dislikes

Relationship with people at work/school

Absences, lateness

Problems

Parent-Friends

Activities

Talk

Get help from

Relatives

Contact/activities with

Conflicts, hassles

Get help from

Neighbors

Activities

Conflicts, hassles

Get help from

Services (who, for what, how often, likes/dislikes, effectiveness)

Babysitters

Medical

Transportation

Money

Legal

Repairs/maintenance/housekeeping

Advice

Somebody to talk to

Changes (last 2 months)

Who/what involved

Reactions of others

Things better/worse now

APPENDIX I

OUTCOME INTERVIEW ITEMS

1-3. I.D.

4. Condition

1	2
Protective Services	Family Diversion

5. Source

1	2	3
Parent	Child	Paraprofessional

6. Time

1	2	3	4
First Interview	Second Interview	Third Interview	Fourth Interview

7. Card number 1

ALL QUESTIONS REFER TO THE LAST 2 MONTHS

Parent-Home Involvement: Mother

8. How often does mother fix meals for children?

1	2	3	4	5
Never	Less than once/week	1-2 times per week	3-6 times per week	Daily

* (No mother in home = 9)

9. How often does mother help children get ready for bed?

1	2	3	4	5
Never	Less than once/week	1-2 times per week	3-6 times per week	Daily

* (No mother in home = 9)

10. How often does mother discipline children?

1	2	3	4	5
Never	Less than once/week	1-2 times per week	3-6 times per week	Daily

* (No mother in home = 9)

11. How often does mother teach children some skill?

1	2	3	4	5
Never	Less than Once/week	1-2 times per week	3-6 times per week	Daily

* (No mother in home = 9)

12. How often does mother take children shopping?

1	2	3	4	5
Never	Once per month	2-3 times per month	Weekly	Several times per week

* (No mother in home = 9)

13. How often does mother engage in recreational activity with children outside the home? (Include eating out.)

1	2	3	4	5
Never	Once per month	2-3 times per month	Weekly	Several times per week

* (No mother in home = 9)

14. How often does mother interact with children's friends? (negatively or positively)

1	2	3	4	5
Never	Once per month	2-3 times per month	Weekly	Several times per week

* (No mother in home = 9)

15. How often does mother play with children at home?

1	2	3	4	5
Never	Less than once/week	1-2 times per week	3-6 times per week	Daily

* (No mother in home = 9)

16. How often is mother home on weekday evenings (5:30-11 p.m. Sunday through Thursday)

1	2	3	4	5
Never	Less than once/week	1-2 times per week	3-4 times per week	Always

* (No mother in home = 9)

17. How often is mother home on weekend evenings? (5:30-11 p.m. Friday or Saturday)

1	2	3	4	5
Never	1-2 times per month	3-4 times per month	1 evening per week	Both evenings every week

* (No mother in home = 9)

18. How often is mother home on weekday afternoons (after school -- 3-5:30 Monday through Friday)

1	2	3	4	5
Never	Less than once/week	1-2 times per week	3-4 times per week	Always

* (No mother in home = 9)

19. How often does mother eat breakfast with children?

1	2	3	4	5
Never	Less than once/week	1-2 times per week	3-6 times per week	Daily

* (No mother in home = 9)

20. How often does mother eat dinner with children?

1	2	3	4	5
Never	Less than once/week	1-2 times per week	3-6 times per week	Daily

* (No mother in home = 9)

<u>Parent-Home Involvement: Father</u>

21. How often does father fix meals for children?

1	2	3	4	5
Never	Less than once/week	1-2 times per week	3-6 times per week	Daily

* (No father in home = 9)

22. How often does father help children get ready for bed?

1	2	3	4	5
Never	Less than once/week	1-2 times per week	3-6 times per week	Daily

* (No father in home = 9)

23. How often does father discipline children?

1	2	3	4	5
Never	Less than once/week	1-2 times per week	3-6 times per week	Daily

* (No father in home = 9)

24. How often does father teach children some skill?

1	2	3	4	5
Never	Less than once/seek	1-2 times per week	3-6 times per week	Daily

* (No father in home = 9)

25. How often does father take children shopping?

1	2	3	4	5
Never	Once per month	2-3 times per month	Weekly	Several times per week

* (No father in home = 9)

26. How often does father engage in recreational activity with children outside the home? (Include eating out.)

1	2	3	4	5
Never	Once per month	2-3 times per month	Weekly	Several times per week

* (No father in home = 9)

27. How often does father interact with children's friends? (negatively or positively)

1	2	3	4	5
Never	Once per month	2-3 times per month	Weekly	Several times per week

* (No father in home = 9)

28. How often does father play with children at home?

1	2	3	4	5
Never	Less than once/week	1-2 times per week	3-6 times per week	Daily

* (No father in home = 9)

29. How often is father home on weekday evenings (5:30-11 p.m. Sunday through Thursday)

1	2	3	4	5
Never	Less than once/week	1-2 times per week	3-4 times per week	Always

* (No father in home = 9)

30. How often is father home on weekend evenings (5:30-11 p.m. Friday or Saturday)

1	2	3	4	5
Never	1-2 times per month	3-4 times per month	1 evening per week	Both evenings every week

* (No father in home = 9)

31. How often is father home on weekday afternoons (after school -- 3-5:30 Monday through Friday)

1	2	3	4	5
Never	Less than once/week	1-2 times per week	3-4 times per week	Always

* (No father in home = 9)

32. How often does father eat breakfast with children?

1	2	3	4	5
Never	Less than once/week	1-2 times per week	3-6 times per week	Daily

* (No father in home = 9)

33. How often does father eat dinner with children?

1	2	3	4	5
Never	Less than once/week	1-2 times per week	3-6 times per week	Daily

* (No father in home = 9)

Parent Employment/School: Mother

34. How many hours per week is mother employed (in school) outside the home?

1	2	3	4	5
None	1-19 hours	20-39 hours	40 hours	More than 40 hours

* (No mother in home = 9)

35. How often does mother work in evening (5-10 p.m.)?

1	2	3	4	5
Never	1-3 times per month	Once per week	2-4 times per week	5 or more times/week

* (No mother in home = 9)

36. How often does mother work at night (after 10 p.m.)?

1	2	3	4	5
Never	1-3 times per month	Once per week	2-4 times per week	5 or more times/week

* (No mother in home = 9)

37. To what extent does mother like job?

1	2	3	4	5
Strongly Dislikes	Dislikes Somewhat	Neutral	Likes Somewhat	Strongly Likes

* (No mother in home or mother doesn't have job = 9)

38. How often does mother socialize with people from work during non-work hours?

1	2	3	4	5
Never	Once per month	2-3 times per month	Weekly	Several times per week

* (No mother in home or mother doesn't have job = 9)

39. How often does mother talk with people at work about non-work-related things (on breaks, lunch, etc.)?

1	2	3	4	5
Never	1-3 times per month	1-4 times per week	Once per day	Several times per day

* (No mother in home or mother doesn't have job = 9)

40. To what extent is mother looking for a job? (or new job, if working)

1	2	3	4	5
Not interested in job	Has talked about looking	Planning specific action	Taking some action	Making intense effort

* (No mother in home = 9)

41. How often does mother have conflicts or arguments with co-workers?

1	2	3	4	5
Never	Once per month	2-3 times per month	Weekly	Several times per week

* (No mother in home or mother doesn't have job = 9)

42. How often does mother get in trouble with employer or supervisor?

1	2	3	4	5
Never	Once per month	2-3 times per month	Weekly	Several times per week

* (No mother in home or mother doesn't have job = 9)

43. How often is mother late for work?

1	2	3	4	5
Never	Once per month	2-3 times per month	Weekly	Several times per week

* (No mother in home or mother doesn't have job = 9)

44. How often does mother miss work?

1	2	3	4	5
Never	Once per month	2-3 times per month	Weekly	Several times per week

* (No mother in home or mother doesn't have job = 9)

Parent Employment/School: Father

45. How many hours per week is father employed (in school) outside the home?

1	2	3	4	5
None	1-19 hours	20-39 hours	40 hours	More than 40 hours

* (No father in home = 9)

46. How often does father work in evening (5-10 p.m.)?

1	2	3	4	5
Never	1-3 times per month	Once per week	2-4 times per week	5 or more times/week

* (No father in home = 9)

47. How often does father work at night (after 10 p.m.)?

1	2	3	4	5
Never	1-3 times per month	Once per week	2-4 times per week	5 or mor times/week

* (No father in home = 9)

48. To what extent does father like job?

1	2	3	4	5
Strongly Dislikes	Dislikes Somewhat	Neutral	Likes Somewhat	Strongly Likes

* (No father in home or father doesn't have job = 9)

49. How often does father socialize with people from work during non-work hours?

1	2	3	4	5
Never	Once per month	2-3 times per month	Weekly	Several times per week

* (No father in home or father doesn't have job = 9)

50. How often does father talk with people at work about non-work-related things (on breaks, lunch, etc)?

1	2	3	4	5
Never	1-3 times per month	1-4 times per week	Once per day	Several times per day

* (No father in home or father doesn't have job = 9)

51. To what extent is father looking for a job? (or new job, if working)

1	2	3	4	5
Not inter-ested in job	Has talked about looking	Planning specific action	Taking some action	Making intense effort

* (No father in home or father doesn't have job = 9)

52. How often does father have conflicts or arguments with co-workers?

1	2	3	4	5
Never	Once per month	2-3 times per month	Weekly	Several times per week

* (No father in home or father doesn't have job = 9)

53. How often does father get in trouble with employer or supervisor?

1	2	3	4	5
Never	Once per month	2-3 times per month	Weekly	Several times per week

* (No father in home or father doesn't have job = 9)

54. How often is father late for work?

1	2	3	4	5
Never	Once per month	2-3 times per month	Weekly	Several times per week

* (No father in home or father doesn't have job = 9)

55. How often does father miss work?

1	2	3	4	5
Never	Once per month	2-3 times per month	Weekly	Several times per week

* (No father in home or father doesn't have job = 9)

Parent Interactions

56. How often do parents go out together without children?

1	2	3	4	5
Never	Once per month	2-4 times per month	1-2 times per week	More than twice/week

* (Only 1 parent in home = 9)

57. How often do parents eat breakfast together?

1	2	3	4	5
Never	Less than once/week	1-2 times per week	3-6 times per week	Daily

* (Only 1 parent in home = 9)

58. How often do parents eat dinner together?

1	2	3	4	5
Never	Less than once/week	1-2 times per week	3-6 times per week	Daily

* (Only 1 parent in home = 9)

59. How often do parents do house/yardwork together?

1	2	3	4	5
Never	1-3 times per month	Once per week	More than once/week	Daily

* (Only 1 parent in home = 9)

60. How often do parents do recreational things together at home? (TV, hobbies, games, etc.)

1	2	3	4	5
Never	Less than once/week	1-2 times per week	3-6 times per week	Daily

* (Only 1 parent in home = 9)

61. How often do parents go shopping together?

1	2	3	4	5
Never	Once per month	2-3 times per month	Once per week	More than once/week

* (Only 1 parent in home = 9)

62. How often do parents argue about children?

1	2	3	4	5
Never	1-3 times per month	Once per week	2-6 times per week	Daily

* (Only 1 parent in home = 9)

63. How often do parents argue about housekeeping?

1	2	3	4	5
Never	1-3 times per month	Once per week	2-6 times per week	Daily

* (Only 1 parent in home = 9)

64. How often do parents argue about money?

1	2	3	4	5
Never	1-3 times per month	Once per week	2-6 times per week	Daily

* (Only 1 parent in home = 9)

65. How often do parents argue in general?

1	2	3	4	5
Never	Less than once/week	Weekly	Daily	More than once/day

* (Only 1 parent in home = 9)

66. How often does one parent leave the house in anger after an argument with the other parent?

1	2	3	4	5
Never	Once per month	2-3 times per month	Once per week	More than once/week

* (Only 1 parent in home = 9)

67. How often does one parent strike the other in anger?

1	2	3	4	5
Never	Once per month	2-3 times per month	Once per week	More than once/week

* (Only 1 parent in home = 9)

68. How often do parents play with children together at home?

1	2	3	4	5
Never	Less than once/week	1-2 times per week	3-6 times per week	Daily

* (Only 1 parent in home = 9)

69. How often do parents (together) engage in recreational activities with children outside the home?

1	2	3	4	5
Never	Once per month	2-3 times per month	Weekly	Several times per week

* (Only 1 parent in home = 9)

1-3. I.D.

4. Condition

1	2
Protective Services	Family Diversion

5. Source

1	2	3
Parent	Child	Paraprofessional

6. Time

1	2	3	4
First Interview	Second Interview	Third Interview	Fourth Interview

7. Card number 2

Parent-Friend Involvement

8. How often do parents spend time with other couples?

1	2	3	4	5
Never	Less than once/month	1-3 times per month	Once per week	More than once/week

* (Only 1 parent in home = 9)

9. How often does family do recreational things with other families (parents and children)?

1	2	3	4	5
Never	Less than once/month	1-3 times per month	Once per week	More than once/week

10. How often does mother go out alone with friends in evening?

1	2	3	4	5
Never	Less than once/month	1-3 times per month	Once per week	More than once/week

* (No mother in home = 9)

11. How often does mother spend time in daytime with friends?

1	2	3	4	5
Never	Less than once/month	1-3 times per month	Once per week	More than once/week

* (No mother in home = 9)

12. How often do mother's friends eat dinner with family?

1	2	3	4	5
Never	Less than once/month	1-3 times per month	Once per week	More than once/week

* (No mother in home = 9)

13. How often do mother's friends spend evenings at house?

1	2	3	4	5
Never	Less than once/month	1-3 times per month	Once per week	More than once/week

* (No mother in home = 9)

14. How often does mother talk with friend on phone?

1	2	3	4	5
Never	Less than once/week	1-2 times per week	Daily	More than once/day

* (No mother in home = 9)

15. How many close friends does mother associate with?

1	2	3	4	5
None	One	Two-three	Four-five	More than 5

* (No mother in home = 9)

16. How many other mothers does mother associate with?

1	2	3	4	5
None	One	Two-three	Four-five	More than 5

* (No mother in home = 9)

17. How often does father go out alone with friends in evening?

1	2	3	4	5
Never	Less than once/month	1-3 times per month	Once per week	More than once/week

* (No father in home = 9)

18. How often does father spend time in datime with friends?

1	2	3	4	5
Never	Less than once/month	1-3 times per month	Once per week	More than once/week

* (No father in home = 9)

19. How often do father's friends eat dinner with family?

1	2	3	4	5
Never	Less than once/month	1-3 times per month	Once per week	More than once/week

* (No father in home = 9)

20. How often do father's friends spend evenings at house?

1	2	3	4	5
Never	Less than once/month	1-3 times per month	Once per week	More than once/week

* (No father in home = 9)

21. How often does father talk with friend on phone?

1	2	3	4	5
Never	Less than once/week	1-2 times per week	Daily	More than once/day

* (No father in home = 9)

22. How many close friends does father associate with?

1	2	3	4	5
None	One	Two-three	Four-five	More than 5

* (No father in home = 9)

23. How many other fathers does father associate with?

1	2	3	4	5
None	One	Two-three	Four-five	More than 5

* (No father in home = 9)

Family-Neighbor Involvement

24. How many neighbors do parents know by name?

1	2	3	4	5
None	One	Two-three	Most within one block	All within one block

* (No neighbors within ½ mile = 9)

25. How often do parents visit a neighbor's home?

1	2	3	4	5
Never	Less than once/month	1-2 times per month	Once per week	More than once/week

* (No neighbors within ½ mile = 9)

26. How often do neighbors visit family's home?

1	2	3	4	5
Never	Less than once/month	1-2 times per month	Once per week	More than once/week

* (No neighbors within ½ mile = 9)

27. How often do parents have conflicts or arguments with neighbors?

1	2	3	4	5
Never	Less than once/month	1-2 times per month	Once per week	More than once/week

* (No neighbors within ½ mile = 9)

28. How often does neighbor watch children?

1	2	3	4	5
Never	1-3 times per month	Once per week	More than once/week	Daily

* (No neighbors within ½ mile = 9)

29. How often does parent watch neighbor's children?

1	2	3	4	5
Never	1-3 times per month	Once per week	More than once/week	Daily

* (No neighbors within ½ mile or neighbors don't have children = 9)

30. How often do children play with neighborhood children?

1	2	3	4	5
Never	1-3 times per month	Once per week	More than once/week	Daily

* (No neighbors within ½ mile or neighbors don't have children = 9)

31. How often do parents talk with neighbor in yard or street (or hallway of apartment building)?

1	2	3	4	5
Never	1-3 times per month	Once per week	More than once/week	Daily

* (No neighbors within ½ mile = 9)

Family-Relative Involvement (Including children's parent, if lives away)

32. How often does parent talk with relative on phone?

1	2	3	4	5
Never	1-3 times per month	Once per week	More than once/week	Daily

* (No relatives living = 9)

33. How often does family visit relative's home?

1	2	3	4	5
Never	Less than once/month	1-3 times per month	1-2 times per week	More than twice/week

* (No relatives living = 9)

34. How often do relatives visit family's home?

1	2	3	4	5
Never	Less than once/month	1-3 times per month	1-2 times per week	More than twice/week

* (No relatives living = 9)

35. How often do children spend night at relatives' house?

1	2	3	4	5
Never	Less than once/month	1-3 times per month	1-2 times per week	More than twice/week

* (No relatives living = 9)

36. How often do children spend time with relative in evenings?

1	2	3	4	5
Never	Less than once/month	1-3 times per month	1-2 times per week	More than twice/week

* (No relatives living = 9)

37. How often do children spend time with relative in daytime?

1	2	3	4	5
Never	Less than once/month	1-3 times per month	1-2 times per week	More than twice/week

* (No relatives living = 9)

38. How many relatives live within 20 miles of family? (count only adults)

1	2	3	4	5
None	One	Two-three	Four-five	More than 5

39. How many relatives does parent see at least once per week? (adults)

1	2	3	4	5
None	One	Two-three	Four-five	More than 5

40. How many relatives does parent talk with on phone at least once per week? (adults)

1	2	3	4	5
None	One	Two-three	Four-five	More than 5

41. How often do parents have conflicts or arguments with relatives?

1	2	3	4	5
Never	Less than once/month	1-2 times per month	Once per week	More than once/week

* (No relatives living = 9)

Informal Family Resources

42. How often do friends or neighbors babysit for children during day?

1	2	3	4	5
Never	Less than once/month	1-3 times per month	1-2 times per week	More than twice/week

43. How often do friends or neighbors babysit for children in evening?

1	2	3	4	5
Never	Less than once/month	1-3 times per month	1-2 times per week	More than twice/week

44. How often do friends or neighbors babysit for children overnight?

1	2	3	4	5
Never	Less than once/month	1-3 times per month	1-2 times per week	More than twice/week

45. How often do relatives babysit for children during day?

1	2	3	4	5
Never	Less than once/month	1-3 times per month	1-2 times per week	More than twice/week

46. How often do relatives babysit for children in evening?

1	2	3	4	5
Never	Less than once/month	1-3 times per month	1-2 times per week	More than twice/week

47. How often do relatives babysit for children overnight?

1	2	3	4	5
Never	Less than once/month	1-3 times per month	1-2 times per week	More than twice/week

48. How many friends or neighbors would babysit for children with no advance notice (i.e., in an emergency, etc.)?

1	2	3	4	5
None	One	Two-three	Four-five	More than 5

49. How many relatives would babysit for children with no advance notice?

1	2	3	4	5
None	One	Two-three	Four-five	More than 5

50. How often do friends or neighbors help family with repairs or maintenance on home, car, etc.?

1	2	3	4	5
Never	Less than once/month	Once per month	2-3 times per month	Once per week

51. How often do relatives help family with repairs or maintenance on home, car, etc.?

1	2	3	4	5
Never	Less than once/month	Once per month	2-3 times per month	Once per week

52. How often do friends or neighbors lend money to family members?

1	2	3	4	5
Never	Less than once/month	Once per month	2-3 times per month	Once per week

53. How often do relatives lend money to family members?

1	2	3	4	5
Never	Less than once/month	Once per month	2-3 times per month	Once per week

54. How often do friends or neighbors help family with transportation?

1	2	3	4	5
Never	Less than once/month	1-3 times per month	1-2 times per week	More than twice/week

55. How often do relatives help family with transportation?

1	2	3	4	5
Never	Less than once/month	1-3 times per month	1-2 times per week	More than twice/week

56. How often do friends or neighbors give or lend food, clothing, or other things to family?

1	2	3	4	5
Never	Less than once/month	Once per month	2-3 times per month	Once per week

57. How often do relatives give or lend food, clothing, or other things to family?

1	2	3	4	5
Never	Less than once/month	Once per month	2-3 times per month	Once per week

58. How often do friends or neighbors help family with hassles with school, police, landlords, doctors, lawyers, welfare, etc.?

1	2	3	4	5
Never	Less than once/month	Once per month	2-3 times per month	Once per week

59. How often do relatives help family with hassles with school, police, landlords, doctors, lawyers, welfare, etc.?

1	2	3	4	5
Never	Less than once/month	Once per month	2-3 times per month	Once per week

60. How often do friends or neighbors help parents deal with their children? (with advice or direct action)

1	2	3	4	5
Never	Less than once/month	1-3 times per month	1-2 times per week	More than twice/week

61. How often do relatives help parents deal with their children?

1	2	3	4	5
Never	Less than once/month	1-3 times per month	1-2 times per week	More than twice/week

1-3. I.D.

4. Condition

1	2
Protective Services	Family Diversion

5. Source

1	2	3
Parent	Child	Paraprofessional

6. Time

1	2	3	4
First Interview	Second Interview	Third Interview	Fourth Interview

7. Card number 3 (through 9 - one per child)

Answer the rest of the questions about each child, one at a time. Start with the youngest.

8-9. Child's age. Code exact digits.

Parent-Child Interaction

10. How often does parent play with child?

1	2	3	4	5
Never	Less than once/week	1-2 times per week	3-6 times per week	Daily

11. How often does parent talk with child about day-to-day things?

1	2	3	4	5
Never	Less than once/week	1-2 times per week	3-6 times per week	Daily

12. How often does parent instruct child in some skill or activity?

1	2	3	4	5
Never	Less than once/week	1-2 times per week	3-6 times per week	Daily

13. How often does parent inquire about child's school or daycare experience?

1	2	3	4	5
Never	Less than once/week	Once per week	2-3 times per week	Daily

* (Child not in school or daycare = 9)

14. How often does parent reward or praise child for desired behavior?

1	2	3	4	5
Never	Less than once/week	Several times/week	Daily	Several times/day

15. How often do parent and child share recreational activities outside the home?

1	2	3	4	5
Never	Once per month	2-3 times per month	Weekly	Several times per week

16. How often do parent and child do house- or yard-work together?

1	2	3	4	5
Never	Once per month	2-3 times per month	Weekly	Several times per week

17. How often does parent interact with child's friends?

1	2	3	4	5
Never	Once per month	2-3 times per month	Weekly	Several times per week

18. How often does child do something that seriously upsets parent?

1	2	3	4	5
Never	Less than once/week	1-2 times per week	3-6 times per week	Daily

19. How often do parent and child argue about school or homework?

1	2	3	4	5
Never	Once/month	2-4 times per month	Several times/week	Daily

* (Child not in school = 9)

20. How often do parent and child argue about bedtime?

1	2	3	4	5
Never	Less than once/week	1-2 times per week	3-6 times per week	Daily

21. How often do parent and child argue about chores?

1	2	3	4	5
Never	Less than once/week	1-2 times per week	3-6 times per week	Daily

22. How often do parent and child argue about child's out-of-home behavior (friends, activities, where he/she goes, etc.)?

1	2	3	4	5
Never	Once/month	2-4 times per month	Several times/week	Daily

23. How often do parent and child argue in general?

1	2	3	4	5
Never	Once/week or less	2-6 times per week	Daily	More than once/day

24. How often does parent use physical punishment to control child?

1	2	3	4	5
Never	Once/month or less	2-4 times per month	Several times/week	Daily

25. How often does parent use loss-of-privileges to control child?

1	2	3	4	5
Never	Once/month or less	2-4 times per month	Several times/week	Daily

26. How often does parent use verbal reprimand or lecture to control child?

1	2	3	4	5
Never	Once/month or less	2-4 times per month	Several per week	Daily

27. To what extent do parents know specific things the child does at school/daycare/babysitter's?

1	2	3	4	5
Not at all	Vaguely mention one thing	Specifically mention one thing	Vaguely mention several	Specifically mention several

* (Child spends no time away from parent = 9)

28. To what extent do parents know specific things the child does in free time?

1	2	3	4	5
Not at all	Vaguely mention one thing	Specifically mention one thing	Vaguely mention several	Specifically mention several

29. To what extent do parents know where child is when not at home?

1	2	3	4	5
Not at all	Have vague guess	Usually know generally	Usually know specifically	Know specifically all the time

* (Child spends no time away from home = 9)

30. How often is child alone (or with younger sibs) at home in daytime (7 a.m. - 5 p.m.) for less than 2 hours?

1	2	3	4	5
Never	Once/month or less	2-4 times per month	Several times/week	Daily

31. How often is child alone (or with younger sibs) at home in daytime for more than 2 hours?

1	2	3	4	5
Never	Once/month or less	2-4 times per month	Several times/week	Daily

32. How often is child alone (or with younger sibs) at home in evening (5 - 10 p.m.)?

1	2	3	4	5
Never	Once/mont or less	2-4 times per month	Several times/week	Daily

33. How often is child alone (or with younger sibs) over night?

1	2	3	4	5
Never	Once/month or less	2-4 times per month	Several times/week	Daily

34. How many of child's friends do parents know?

1	2	3	4	5
None	One	Some	Most	All

Sibling Interactions

35. How often does child spend time with sibs in indoor activities?

1	2	3	4	5
Never	Less than once/week	1-2 times per week	3-6 times per week	Daily

* (No sibs = 9)

36. How often does child spend time with sibs in outdoor activities?

1	2	3	4	5
Never	Less than once/week	1-2 times per week	3-6 times per week	Daily

* (No sibs = 9)

37. How often does child engage in purchased or organized recreational activities with sibs (movies, pinball, sports teams, etc.)?

1	2	3	4	5
Never	1-3 times per month	1-2 times per week	3-6 times per week	Daily

* (No sibs = 9)

38. How often does child watch younger sibs when parent is home?

1	2	3	4	5
Never	Less than once/week	1-2 times per week	3-6 times per week	Daily

* (No younger sibs = 9)

39. How often does child watch younger sibs when parent is <u>not</u> home?

1	2	3	4	5
Never	Once/month or less	2-4 times per month	Several times/week	Daily

* (No younger sibs = 9)

40. How often do child and sib(s) argue?

1	2	3	4	5
Never	Once/week or less	Several times/week	Daily	More than once/day

* (No sibs = 9)

41. How often do child and sib(s) get into physical fights?

1	2	3	4	5
Never	Once/month or less	2-4 times per month	Several times/week	Daily

* (No sibs = 9)

Child's Home Involvement

42. How often does child eat breakfast at home?

1	2	3	4	5
Never	Once/week or less	2-3 times per week	4-6 times per week	Daily

43. How often does child eat dinner at home?

1	2	3	4	5
Never	Once/week or less	2-3 times per week	4-6 times per week	Daily

44. How often does child sleep at home?

1	2	3	4	5
Never	Once/week or less	2-3 times per week	4-6 times per week	Daily

45. How often does child get up on time in morning?

1	2	3	4	5
Never	Once/week or less	2-3 times per week	4-6 times per week	Daily

* (Child has no set time to get up = 9)

46. How often does child go to bed on time in evening?

1	2	3	4	5
Never	Once/week or less	2-3 times per week	4-6 times per week	Daily

* (Child has no set bedtime = 9)

47. How often does child spend weekday evenings at home (Sunday - Thursday)?

1	2	3	4	5
Never	Less than once/week	1-2 times per week	3-4 times per week	Always

48. How often does child spend weekend evenings at home (Friday - Saturday)?

1	2	3	4	5
Never	1-2 times per month	3-4 times per month	1 evening per week	Both evenings every week

49. How often does child spend weekday afternoons (after school) at home?

1	2	3	4	5
Never	Less than once/week	1-2 times per week	3-4 times per week	Always

50. How often does child help with meal preparation/cleanup?

1	2	3	4	5
Never	Once/week or less	Several times/week	Daily	More than once/day

51. How often does child help with housecleaning?

1	2	3	4	5
Never	2-3 times per month or less	Weekly	Several times/week	Daily

52. How often does child help with outdoor yardwork or other outdoor chores?

1	2	3	4	5
Never	Once/month or less	2-3 times per month	Weekly	Several times/week

* (Family has no outdoor chores = 9)

Child's School/Daycare Involvement

53. How often has child missed school in last month?

1	2	3	4	5
None	1-2 days	3-5 days	6-10 days	More than 10 days

* (Child not in school or daycare = 9)

54. How often has child been late for school in last month?

1	2	3	4	5
None	1-2 times	3-5 times	6-10 times	More than 10 times

* (Child not in school or daycare = 9)

55. How many times has parent been contacted by school about problems with child in last month?

1	2	3	4	5
None	Once	Twice	Three times	More than 3 times

* (Child not in school or daycare = 9)

56. How often does child get into trouble with teachers at school?

1	2	3	4	5
Never	Once/month or less	2-4 times per month	Several times/week	Daily

* (Child not in school or daycare = 9)

57. How well is child doing in school academically?

1	2	3	4	5
Failing all subjects	Passing a few subjects	Passing most subjects	Average work in all classes	Above average in one or more classes

* (Child not in school = 9)

58. How well does child like teachers?

1	2	3	4	5
Dislikes all teachers	Dislikes one or more	Is neutral about all	Likes one or more	Likes all teachers

* (Child not in school or daycare = 9)

59. How often does child participate in extracurricular activities?

1	2	3	4	5
Never	Once/month or less	2-3 times per month	Weekly	Several times/week

* (Child not in school = 9)

60. To what extent is child good at physical education or activity periods?

1	2	3	4	5
Not at all	Very little	O.K.	Pretty good	Very good

* (Child not in school or daycare = 9)

61. How often does child get into arguments or fights with other kids at school?

1	2	3	4	5
Never	Once/month or less	2-4 times per month	Several times/week	Daily

* (Child not in school or daycare = 9)

Child-Peer Involvement

62. How often does child spend time with friends in afternoon?

1	2	3	4	5
Never	Once/month or less	2-4 times per month	Several times/week	Daily

63. How often does child spend time with friends in evening?

1	2	3	4	5
Never	Once/month or less	2-4 times per month	Several times/week	Daily

64. How often does child spend time at friend's house?

1	2	3	4	5
Never	Once/month or less	2-4 times per month	Several times/week	Daily

65. How often do child's friends spend time at family's house?

1	2	3	4	5
Never	Once/month or less	2-4 times per month	Several times/week	Daily

66. How many close friends does child have?

1	2	3	4	5
Never	One	Two-three	Four-five	More than 5

67. How often does child get in fights with peers?

1	2	3	4	5
Never	Once/month or less	2-4 times per month	Several times/week	Daily

68. How often does child get in trouble with friends?

1	2	3	4	5
Never	Once/month or less	2-4 times per month	Several times/week	Daily

Child-Adult Interacations

69. How often does child spend time with adult neighbors?

1	2	3	4	5
Never	Once/month or less	2-4 times per month	Several times/week	Daily

70. How often does child spend evenings with paid babysitter?

1	2	3	4	5
Never	Once/month or less	2-4 times per month	Several times/week	Daily

71. How often does child stay overnight with paid babysitter?

1	2	3	4	5
Never	Once/month or less	2-4 times per month	1-2 times per week	More than twice/week

72. How often does child stay with paid babysitter in daytime?

1	2	3	4	5
Never	Once/month or less	2-4 times per month	Several times/week	Daily

73. To what extent does child like babysitter?

1	2	3	4	5
Strongly dislikes	Dislikes somewhat	Neutral	Likes somewhat	Strongly likes

* (Child doesn't stay with babysitter = 9)

74. How often does child spend evenings with relatives?

1	2	3	4	5
Never	Once/month or less	2-4 times per month	Several times/week	Daily

75. How often does child stay overnight with relatives?

1	2	3	4	5
Never	Once/month or less	2-4 times per month	Several times/week	Daily

76. How often does child spend daytime with relatives?

1	2	3	4	5
Never	Once/month or less	2-4 times per month	Several times/week	Daily

77. To what extent does child like to stay with relatives?

1	2	3	4	5
Strongly dislikes	Dislikes somewhat	Neutral	Likes somewhat	Strongly likes

78. How often does child stay with parent's friend (unpaid)?

1	2	3	4	5
Never	Once/month or less	2-4 times per month	Several times/week	Daily

79. How often does child get into trouble with adults in neighborhood?

1	2	3	4	5
Never	Once/month or less	2-3 times per month	1-2 times per week	More than twice/week

80. How often is child punished by adult other than teachers or parent he/she lives with?

1	2	3	4	5
Never	Once/month or less	2-3 times per month	1-2 times per week	More than twice/week

APPENDIX J

HOME ENVIRONMENT RATING

Check any of the following conditions which you observed in the family's home.

_____ Broken windows

_____ House uncomfortably cold

_____ Decaying food left around house

_____ Insects inside home

_____ Sharp objects in reach of children under age 5

_____ Objectionable odor

_____ Lack of electricity

_____ Lack of running water or plumbing

_____ Garbage and trash in yard (or in hallway outside apartment)

_____ Animal excrement in house

_____ Lack of basic furniture (beds, stove, refrigerator)

_____ Poisons or medicine in reach of children under age 5

_____ House extremely cluttered

_____ Children dirty

_____ Children's clothes dirty or torn

_____ Children's clothes inappropriate for weather

_____ Children appear to have no toys or other personal possessions

Please describe any other features of home environment or children's appearance that you think are important

APPENDIX K

INTERVENTION PROCESS INTERVIEWING CUES

First, decide who the family's primary intervention agent is. For experimental families, ("2" as the fourth digit in the I.D. number), this will be the paraprofessional. For control families ("1" as the fourth digit), you will need to figure out who is working with the family.

I. Intervention agent's contacts with family

   A. Frequency and duration of time spent--in-person and phone

   B. What activities--SPECIFIC

   C. Which family members involved

   D. Topics of conversation--with each family member

   E. Contacts with individuals outside family

   F. Source's feelings about relationship between intervention agent and each family member

   G. Complaints

II. What is intervention agent doing for/with family? SPECIFICS

   A. Recreation

   B. Counseling

   C. Monitoring

   D. Direct services

   E. Contracting

   F. Advocacy

   G. Other activities

III. Other services or helping people involved with family. Get SPECIFICS about which agency, type of individual, activities, frequency of contact, source's feeling about service, etc.

APPENDIX L

INTERVENTION PROCESS INTERVIEW ITEMS

1-4. I.D.

5. Condition

1	2
Protective Services	Family Diversion

6. Source

1	2	3
Parent	Child	Paraprofessional

7. Time

1	2	3	4
First Interview	Second Interview	Third Interview	Fourth Interview

8. Card number 1

All questions refer to the family's primary intervention agent. For experimental families (condition = 2), this will be the paraprofessional. For control families (condition = 1), this will be whoever (a) has the most contact with the family and (b) is addressing the broadest range of family issues.

ALL QUESTIONS REFER TO THE LAST 2 MONTHS (SINCE THE LAST INTERVIEW)

Contacts with Intervention Agent

9. How often does intervention agent see family (or any family member)? (Don't include phone calls.)

1	2	3	4	5
once/month or less	2-4 times per month	5-7 times a month	Twice a week	More than twice/week

10. How much time does agent spend with family (or any family member)? (Don't include phone calls.)

1	2	3	4	5
Less than 1 hr./week	1 hour per week	2-3 hours per week	4-6 hours per week	7 or more hrs./week

11. How often do family members talk with agent on phone?

1	2	3	4	5
Once/month or less	2-4 times per month	5-7 times a month	Twice a week	More than twice/week

12. How often does agent call family?

1	2	3	4	5
Once/month or less	2-4 times per month	5-7 times a month	Twice a week	More than twice/week

13. How often does family member call agent?

1	2	3	4	5
Once/month or less	2-4 times per month	5-7 times a month	Twice a week	More than twice/week

14. How often has agent talked with child's teachers, counselors, or school administrators?

1	2	3	4	5
Never	Once	Twice	3-4 times	More than 4 times

15. How often has agent talked with family's landlord?

1	2	3	4	5
Never	Once	Twice	3-4 times	More than 4 times

16. How often has agent talked with other helping people involved with family (social workers, probation officers, therapists, doctors, etc.)?

1	2	3	4	5
Never	Once	Twice	3-4 times	More than 4 times

17. How often has agent talked with family's relatives (living outside home)?

1	2	3	4	5
Never	Once	Twice	3-4 times	More than 4 times

18. How often has agent talked with family's neighbors?

1	2	3	4	5
Never	Once	Twice	3-4 times	More than 4 times

19. How often has agent talked with parent's friends?

1	2	3	4	5
Never	Once	Twice	3-4 times	More than 4 times

20. How often has agent talked with children's friends?

1	2	3	4	5
Never	Once	Twice	3-4 times	More than 4 times

Focus of Intervention

To what extent has intervention focused on the following issues?

Use the following responses for all questions in this section:

1	2	3	4	5
Not at all	A very minor part	Part of, but not a major focus	One of the major foci	The major focus

21. Child's school attendance.

22. Child's school performance (grades).

23. Child's school behavior (fighting, sleeping, disruptions, etc.).

24. Child's nutrition.

25. Child's health or medical care.

26. Child's behavior at home.

27. Child's household chores.

28. Child's self-concept or feelings about self.

29. Child's attitude toward parent.

30. Child's free-time activities.

31. Child's friends.

32. Job for child.

33. Child's legal problems (court or police).

34. Sibling interactions.

35. Parents' interactions with each other.

36. Parent-child communication

37. Parent's involvement with children.

38. Parent's discipline strategy.

39. Parent's feelings about child(ren).

40. Parent's supervision of children.

41. Parent-child conflicts.

42. Parent's ability to control child.

43. Parent's restrictions on children's activities.

44. Parent's child-care skills or knowledge.

45. Parent's self-concept or feelings about self.

46. Parent's education.

47. Parent's job.

48. Recreational activities for parent.

49. Parent's friends.

50. Parent's legal problems (court, police, divorce, or child support).

51. Parent's health or medical care.

52. Parent's expectations of child.

53. Family's housekeeping standards.

54. Family's housing.

55. Family's income.

56. Family recreation (parent and children together).

57. Daycare or babysitter for children.

58. Family's transportation.

59. Clothes, toys, furniture, etc. for family.

60. Hassles with neighbors.

61. Hassles with landlord.

62. Hassles with relatives (including children's non-resident parent).

63. Hassles with school.

64. Hassles with community agency (Social Services, Unemployment, etc.).

1-4 I.D.

5. Condition

1	2
Protective Services	Family Diversion

6. Source

1	2	3
Parent	Child	Paraprofessional

7. Time

	2	3
	Second	Third

8. Card number 2

Intervention Strategies

To what extent has intervention involved the following strategies or activities?

Use the following responses for all questions in this section:

1	2	3	4	5
Not at all	A very minor part	Part of, but not a major strategy	One of the major strategies	The major strategy

9. Talking with parents about day-to-day things.

10. Talking with child(ren) about day-to-day things.

11. Counseling with parents (talking about feelings, heavy problems, etc.).

12. Counseling with child(ren).

13. Providing direct services to family (transportation, babysitting, clothes, etc.).

14. Engaging in recreational activities with parent.

15. Engaging in recreational activities with child(ren).

16. Engaging in recreational activities with parent and child(ren) together.

17. Checking up on how family is doing.

18. Telling family what needs to be changed.

19. Teaching parent some skill.

20. Teaching child some skill.

21. Getting resources for family (advocacy).

22. Teaching parent how to get resources (advocacy).

23. Teaching child how to get resources (advocacy).

24. Negotiating agreements between family members.

25. Negotiating agreements between family members and others outside the family.

26. Teaching parent to use contracting.

27. Teaching child to use contracting.

28. Trying to change parent's behavior.

29. Trying to change child's behavior.

30. Trying to change behavior of someone outside family.

1-4. I.D.

5. Condition

1	2
Protective Services	Family Diversion

6. Source

1	2	3
Parent	Child	Paraprofessional

7. Time

	2	3
	Second Interview	Third Interview

8. Card number 3

Mother's Involvement in Intervention

9. How often does mother have contact with intervention agent? (Don't include phone calls.)

1	2	3	4	5
Once/month or less	2-4 times per month	5-7 times a month	Twice a week	More than twice/week

10. How often does mother talk alone with intervention agent? (Don't include phone calls.)

1	2	3	4	5
Once/month or less	204 times per month	5-7 times a month	Twice a week	More than twice/week

11. To what extent is mother's interactions with children or child-rearing skills the focus of the intervention?

1	2	3	4	5
Not at all	A very minor part	Part of, but not a major focus	One of the major foci	The major focus

12. To what extent is mother's job/education/recreation the focus of the intervention?

1	2	3	4	5
Not at all	A very minor part	Part of, but not a major focus	One of the major foci	The major focus

13. To what extent is mother's mental health (feelings, personal problems, etc.) the focus of the intervention?

1	2	3	4	5
Not at all	A very minor part	Part of, but not a major focus	One of the major foci	The major focus

14. How involved is mother in planning the intervention?

1	2	3	4	5
Completely uninvolved	Minimally involved	Somewhat involved	Involved in most aspects	Involved in all aspects

15. To what extent does mother like the intervention agent?

1	2	3	4	5
Intensely dislikes	Dislikes	Okay	Likes	Intensely likes

* (Mother does not know agent = 9)

16. To what extent does mother approve of what agent is doing?

1	2	3	4	5
Strongly disapproves	Mildly disapproves	Doesn't care	Mildly approves	Strongly approves

* (Mother does not know agent = 9)

Father's Involvement in Intervention

17. How often does father have contact with intervention agent? (Don't include phone.)

1	2	3	4	5
Once/month or less	2-4 times per month	5-7 times a month	Twice a week	More than twice/week

18. How often does father talk alone with intervention agent? (Don't include phone.)

1	2	3	4	5
Once/month or less	2-4 times per month	5-7 times a month	Twice a week	More than twice/week

19. To what extent is father's interactions with children or child-rearing skills the focus of the intervention?

1	2	3	4	5
Not at all	A very minor part	Part of, but not a major focus	One of the major foci	The major focus

20. To what extent is father's job/education/recreation the focus of the intervention?

1	2	3	4	5
Not at all	A very minor part	Part of, but not a major focus	One of the major foci	The major focus

21. To what extent is father's mental health (feelings, personal problems, etc.) the focus of the intervention?

1	2	3	4	5
Not at all	A very minor part	Part of, but not a major focus	One of the major foci	The major focus

22. How involved is father in planning the intervention?

1	2	3	4	5
Completely uninvolved	Minimally involved	Somewhat involved	Involved in most aspects	Involved in all aspects

23. To what extent does father like the intervention agent?

1	2	3	4	5
Intensely dislikes	Dislikes	Okay	Likes	Intensely likes

* (Father does not know agent = 9)

24. To what extent does father approve of what agent is doing?

1	2	3	4	5
Strongly disapproves	Mildly disapproves	Doesn't care	Mildly approves	Strongly approves

* (Father does not know agent = 9)

Involvement of Children in Intervention: Youngest Child

25-26. Age of youngest child - exact digits.

27. How often does this child have contact with agent? (Don't include phone.)

1	2	3	4	5
Once/month or less	2-4 times per month	5-7 times a month	Twice a week	More than twice/week

28. How often does this child talk alone with agent? (Don't include phone.)

1	2	3	4	5
Once/month or less	2-4 times per month	5-7 times a month	Twice a week	More than twice/week

29. To what extent is this child's behavior the focus of the intervention?

1	2	3	4	5
Not at all	A very minor part	Part of, but not a major focus	One of the major foci	The major focus

30. To what extent is parent's interaction with this child the focus of the intervention?

1	2	3	4	5
Not at all	A very minor part	Part of, but not a major focus	One of the major foci	The major focus

31. To what extent is this child's school situation the focus of the intervention?

1	2	3	4	5
Not at all	A very minor part	Part of, but not a major focus	One of the major foci	The major focus

32. To what extent is this child's health or safety the focus of the intervention?

1	2	3	4	5
Not at all	A very minor part	Part of, but not a major focus	One of the major foci	The major focus

33. How involved is this child in planning the intervention?

1	2	3	4	5
Completely uninvolved	Minimally involved	Somewhat involved	Involved in most aspects	Involved in all aspects

34. To what extent does this child like the intervention agent?

1	2	3	4	5
Intensely dislikes	Dislikes	Okay	Likes	Intensely likes

* (Child does not know agent = 9)

Helping People/Services Involved with Family

Agency:

Type of Person (title or qualifications):

Name of Person:

Is this the intervention agent described on the codesheets (primary intervention agent)? _____ yes _____ no

How often does this person see family (or any family member)?

List all family members who have direct contact with this person:

Activities. What does this person do with the family or with family members? What issues have been addressed? What strategies have been used?

Family's feelings about this person (label which members feel a particular way).

Complaints.

Intervention Complaints

_____ Agent's role unspecified (Source doesn't know what agent is trying to do).

_____ Agent doesn't spend enough time with family.

_____ Family can't get ahold of agent when they want to.

_____ Agent can't get ahold of family.

_____ Family members don't show up for appointments.

_____ Agent doesn't show up for appointments.

_____ Agent takes up too much of family's time.

_____ Family member(s) don't like agent.

_____ Agent doesn't like family member(s).

_____ Agent doesn't understand family's way of life.

_____ Agent looks down on family.

_____ Agent isn't accomplishing anything.

_____ Family isn't cooperating with agent.

_____ Agent trying to force family to do things they don't want to do.

_____ Agent too young.

_____ Agent doesn't have children.

Other complaints mentioned by source.

REFERENCES

REFERENCES

Aber, J. L. (1980). The involuntary child placement decision: Solomon's dilemma revisited. In G. Gerbner, C. J. Ross, & E. Zigler (Eds.), Child abuse: An agenda for action (pp. 156-182). New York, NY: Oxford University Press.

Albee, G. W. (1980). Primary prevention and social problems. In G. Gerbner, D. J. Ross, & E. Zigler (Eds.), Child abuse: An agenda for action (pp. 106-117). New York, NY: Oxford University Press.

Alvy, K. T. (1975). Preventing child abuse. American Psychologist, 30, 921-928.

American Humane Association. (1978). National analysis of official child neglect and abuse reporting. Englewood, CO: Author.

American Humane Association. (1979). National analysis of official child neglect and abuse reporting, 1978. Englewood, CO: Author.

American Humane Association. (1981). Highlights of the 1979 national data. Englewood, CO: Author.

Arvanian, A. L. (1975). Dynamics of separation and placement. In N. B. Ebeling & D. A. Hill (Eds.), Child abuse: Intervention and treatment. Acton, MA: Publishing Sciences Group.

Ayoub, C. C. & Pfeifer, D. R. (1977). The prophylaxis of child abuse and neglect--an approach. Child Abuse and Neglect, 1, 71-75.

Bandura, A. & Walters, R. H. (1963). Social learning and personality development. New York, NY: Holt, Rinehart, & Winston.

Bean, S. L. (1975). The use of specialized day care in preventing child abuse. In N. B. Ebeling & D. A. Hill (Eds.), Child abuse: Intervention and treatment. Acton, MA: Publishing Sciences Group.

Baher, E. (1976). At risk: An account of the work of the Battered Child Research Department, National Society for Prevention of Cruelty to Children. Boston, MA: Routledge, Kegan Paul.

Becker, H. (1963). Outsiders: Studies in the sociology of deviance. New York, NY: Free Press.

Beezley, P. (1978). Developing a crisis nursery: Some practical considerations. In M. L. Lauderdale, R. N. Anderson, & S. E. Cramer (Eds.), Child abuse and neglect: Issues on innovation and implementation (DHEW Publication No. OHDS 78-30148). Washington, DC: U.S. Government Printing Office.

Bell, C. & Mlyniec, W.J. (1974). Preparing for a neglect proceeding: A guide for the social worker. Public Welfare, 32, 26-37.

Belsky, J. (1980). Child maltreatment: An ecological integration. American Psychologist, 35, 320-335.

Belsky, J. (1984). The determinants of parenting: A process model. Child Development, 55, 83-96.

Berkeley Planning Associates. (1977). Evaluation: National demonstration program in child abuse and neglect. Berkeley, CA: Author.

Besharov, D. J. (1983). Protecting abused and neglected children: Can law help social work? Child Abuse and Neglect, 7, 421-434.

Boisvert, M. J. (1972). The battered-child syndrome. Social Casework, 53, 475-480.

Bourne, R. (1979). Child abuse and neglect: An overview. In R. Bourne & E. H. Newberger (Eds.), Critical perspectives on child abuse. Lexington, MA: D. C. Heath.

Bourne, R. & Newberger, E. H. (1979). "Family autonomy" or "coercive intervention"? Ambiguity and conflict in the proposed standards for child abuse and neglect. In R. Bourne & E. H. Newberger (Eds.), Critical perspectives on child abuse. Lexington, MA: D. C. Heath.

Brandwein, H. (1973). The battered child: A definite and significant factor in mental retardation. Mental Retardation, 11, 50-51.

Breines, W. & Gordon, L. (1983). The new scholarship on family violence. Signs, 8, 490-531.

Bronfenbrenner, U. (1977). Toward an experimental ecology of human development. American Psychologist, 32, 513-531.

Burgess, R. (1978). Child abuse: A behavioral analysis. In B. Lakey & A. Kazdin (Eds.), Advances in child clinical psychology. New York, NY: Plenum Press.

Burgess, R. L. & Conger, R. D. (1977). Family interaction patterns related to child abuse and neglect: Some preliminary findings. Child Abuse and Neglect, 1, 267-277.

Burgess, R. L. & Conger, R. D. (1978a). Differentiating abusing and neglecting parents by direct observation of parent-child interaction. In M. L. Lauderdale, R. N. Anderson, & S. E. Cramer (Eds.), Child abuse and neglect: Issues on innovation and implementation (DHEW Publication No. OHDS 78-30148). Washington, DC: U.S. Government Printing Office.

Burgess, R. & Conger, R. (1978b). Family interaction in abusive, neglectful, and normal families. Child Development, 49, 1163-1173.

Campbell, D. T. & Fiske, D. W. (1959). Convergent and discriminant validation by the multitrait-multimethod matrix. Psychological Bulletin, 56, 81-103.

Camras, L. A., Grow, J. G., & Ribordy, S. C. (1983). Recognition of emotional expression by abused children. Journal of Clinical Child Psychology, 12, 325-328.

Cohn, A. H. (1979). Effective treatment of child abuse and neglect. Social Work, 24, 513-519.

Costa, J. & Nelson, G. K. (1978). Child abuse and neglect: Legislation, reporting, and prevention. Lexington, MA: D. C. Heath.

Crittenden, P. M. (1981). Abusing, neglecting, problematic, and adequate dyads: Differentiating by patterns of interaction. Merril-Palmer Quarterly, 27, 201-218.

Crittenden, P. M. (1983). The effect of mandatory protective daycare on mutual attachment in maltreating mother-infant dyads. Child Abuse and Neglect, 7, 297-300.

Curtis, G. (1963). Violence breeds violence--perhaps. American Journal of Psychiatry, 120, 386-387.

Daniel, J. H., Newberger, E. H., Reed, R. B., & Kotelchuck, M. (1978). Child abuse screening: Implications of the limited predictive power of abuse discriminants from a controlled family study of pediatric social illness. Child Abuse and Neglect, 2, 249-259.

De Lissovoy, V. (1979). Toward the definition of "abuse provoking child." Child Abuse and Neglect, 3, 341-350.

Derdyn, A. P. (1977). Child abuse and neglect: The rights of parents and the needs of their children. American Journal of Orthopsychiatry, 47, 377-387.

Doctor, R. M. & Singer, E. M. (1978). Behavioral intervention strategies with child abusive parents: A home intervention program. Child Abuse and Neglect, 2, 57-68.

Dougherty, N. (1983). The holding environment: Breaking the cycle of abuse. Social Casework, 64, 283-290.

Duquette, D. N. (1982). Protecting individual liberties in the context of screening for child abuse. In R. M. Starr (Ed.), Child abuse prediction: Policy implications (pp. 191-204). Cambridge, MA: Ballinger.

Ebbin, A. J.. Gollub, M. H., Stern, A. M., & Wilson, M. G. (1969). Battered child syndrome in Los Angeles General Hospital. American Journal of Diseases of the Child, 118, 660-667.

Egan, K. J. (1983). Stress management and child management with abusive parents. Journal of Clinical Child Psychology, 12, 292-299.

Egeland, B., Breitenbucher, M., & Rosenberg, D. (1980). Prospective study of life stress in the etiology of child abuse. Journal of Consulting and Clinical Psychology, 48, 195-205.

Egeland, B. & Sroufe, L. A. (1981). Developmental sequelae of maltreatment in infancy. In R. Rizley & Cicchetti, D. (Eds.), New directions for child development: Developmental perspectives in child maltreatment. San Francisco, CA: Jossey Bass.

Egeland, B., Sroufe, L. A. & Erickson, M. (1983). The developmental consequences of different patterns of maltreatment. Child Abuse and Neglect, 7, 459-469.

Egeland, B. & Vaughn, B. (1981). Failure of "bond formation" as a cause of abuse, neglect, and maltreatment. American Journal of Orthopsychiatry, 51, 78-84.

Elmer, E. (1967). Children in jeopardy: A study of abused minors and their families. Pittsburgh: University of Pittsburgh Press.

Elmer, E. (1979). A follow-up study of traumatized children. In R. Bourne & E. H. Newberger (Eds.), Critical perspectives on child abuse. Lexington, MA: D. C. Heath.

Elmer, E. (1982). Commentary. In R. M. Starr (Ed.), Child abuse prediction: Policy implications (pp. 205-213). Cambridge, MA: Ballinger.

Elmer, E. & Gregg, G. (1967). Developmental characteristics of abused children. Pediatrics, 40, 596-602.

Fanaroff, A., Kennell, J., & Klaus, M. (1972). Follow-up of low birth weight infants--the predictive value of maternal visiting patterns. Pediatrics, 49, 287-290.

Flannery, E. J. (1979). Synopsis: Standards relating to abuse and neglect. In R. Bourne & E. H. Newberger (Eds.), Critical perspectives on child abuse. Lexington, MA: D. C. Heath.

Friedman, S. (1972). The need for intensive follow-up of abused children. In C. Kempe & R. Helfer (Eds.), Helping the battered child and his family. Philadelphia: Lippincott.

Friedrich, W. N. & Einbender, A. J. (1983). The abused child: A psychological review. Journal of Clinical Child Psychology, 12, 244-256.

Gabinet, L. (1983a). Child abuse treatment failures reveal need for redefinition of the problem. Child Abuse and Neglect, 7, 395-402.

Gabinet, L. (1983b). Shared parenting: A new paradigm for the treatment of child abuse. Child Abuse and Neglect, 7, 403-411.

Gaensbauer, T. J. & Sands, K. (1979). Distorted affective communications in abused/neglected infants and their potential impact on caretakers. Journal of the American Academy of Child Psychiatry, 18, 236-250.

Gaines, R., Sandgrund, A., Green, A. H., & Power, E. (1978). Etiological factors in child maltreatment: A multivariate study of abusing, neglecting, and normal mothers. Journal of Abnormal Psychology, 87, 531-540.

Galdston, R. (1965). Observations on children who have been physically abused and their parents. American Journal of Psychiatry, 122, 440-443.

Garbarino, J. (1976). A preliminary study of some ecological correlates of child abuse: The impact of socioeconomic stress on mothers. Child Development, 47, 178-185.

Garbarino, J. (1977a). The price of privacy: An analysis of the social dynamics of child abuse. Child Welfare, 56, 565-575.

Garbarino, J. (1979b). The human ecology of child maltreatment: A conceptual model for research. Journal of Marriage and the Family, 39, 721-735.

Garbarino, J. & Crouter, A. (1978). Defining the community context of child maltreatment. Child Development, 49, 604-616.

Garbarino, J. & Ebata, A. (1983). The significance of ethnic and cultural differences in child maltreatment. Journal of Marriage and the Family, 45, 773-783.

Gardner, L. (1975). The Gilday Center: A method of intervention for child abuse. In N. B. Ebeling & D. A. Hill (Eds.), Child abuse: Intervention and treatment. Acton, MA: Publishing Sciences Group.

Geddis, D. C. Monghan, S. M., Muir, R. C., & Jones, C. J. (1979). Early prediction in the maternity hospital. Child Abuse and Neglect, 3, 757-766.

Gelles, J. (1973). Child abuse as psychopathology: A sociological critique and reformulation. American Journal of Orthopsychiatry, 43, 611-621.

Gelles, R. (1976). Demythologizing child abuse. Family Coordinator, 25, 135-141.

Gelles, R. J. (1979). Violence toward children in the United States. In R. Bourne & E. H. Newberger (Eds.), Critical perspectives on child abuse. Lexington, MA: D. C. Heath.

Gelles, R. (1980). A profile of violence toward children in the United States. In G. Gerbner, C. J. Ross, & E. Zigler (Eds.), Child abuse: An agenda for action. New York, NY: Oxford University Press.

Gelles, R. J. (1982). Problems in defining and labeling child abuse. In R. H. Starr (Ed.), Child abuse prediction: Policy implications. Cambridge, MA: Ballinger.

George, C. & Main, M. (1979). Social interactions of young abused children: Approach, avoidance, and aggression. Child Development, 50, 306-318.

Gil, D. G. (1970). Violence against children: Physical child abuse in the United States. Cambridge, MA: Harvard University Press.

Gil, D. G. (1971a). A sociocultural perspective on physical child abuse. Child Welfare, 50, 389-395.

Gil, D. G. (1971b). Violence against children. Journal of Marriage and the Family, 33, 637-648.

Gil, D. (1973). Child abuse prevention act. Journal of Clinical Child Psychology, 11, 7-10.

Gil, D. G. (1977). Child abuse: Levels of manifestation, causal dimensions, and primary prevention. Victimology, 2, 186-194.

Gil, D. G. (1979). Unraveling child abuse. In R. Bourne & E. H. Newberger (Eds.), Critical perspectives on child abuse. Lexington, MA: D. C. Heath.

Gil, D. (1981). The United States versus child abuse. In L. H. Pelton (Ed.), The social context of child abuse. New York, NY: Human Sciences Press.

Gil, E. (1982). Institutional abuse of children in out-of-home care. In R. Hanson (Ed.), Institutional abuse of children and youth. New York, NY: Haworth Press.

Giovannoni, J. M., Conklin, J., & Iiyama, P. (1978). Child abuse and neglect: An examination from the perspective of child development knowledge. San Francisco, CA: R&E Research Associates.

Giovannoni, J. M. & Becerra, R. M. (1979). Defining child abuse. New York, NY: Free Press.

Gray, J. D., Cutler, C. A., Dean, J. G., & Kempe, C. H. (1977). Prediction and prevention of child abuse and neglect. Child Abuse and Neglect, 1, 45-58.

Gray, J., Cutler, C., Dean, J., & Kempe, C. H. (1978). In Proceedings of the Second National Conference on Child Abuse and Neglect (Vol. 1, pp. 346-354). Washington, DC: Children's Bureau.

Green, A. (1968). Self-destruction in physically abused schizophrenic children: Report of cases. Archives of General Psychiatry. 19, 171-197.

Grodner, B. (1977). A family systems approach to treatment of child abuse: Etiology and intervention. Journal of Clinical Child Psychology, 1.

Groeneveld, L. P. & Giovannoni, J. M. (1977), Disposition of child abuse and neglect cases. Social Work Research and Abstracts, 13, 24-30.

Heckler, M. M. (1984). Introduction. Perspectives on child maltreatment in the mid '80s (DHHS Publication No. OHDS 84-30338). Washington, DC: U.S. Government Printing Office.

Helfer, R. E. (1970). A plan for protection: The child abuse center, Child Welfare, 49, 486-494.

Helfer, R. (1973). The etiology of child abuse. Pediatrics, 51, 777-779.

Helfer, R. E. Schneider, C., & Hoffmeister, J. K. (1977). Manual for use of the Michigan Screening Profile of Parenting. E. Lansing, MI: Michigan State University Press.

Herrenkohl, R. C., Herrenkohl, E. C., Egolf, B., & Seech, M. (1979). The repetition of child abuse: How frequently does it occur? Child Abuse and Neglect, 3, 67-72.

Hill, D. A. (1975). Child abuse: Early casefinding in a hospital setting. In N. B. Ebeling & D. A. Hill (Eds.), Child abuse: Intervention and treatment. Acton, MA: Publishing Sciences Group.

Hoffman, E. (1979). Policy and politics: The child abuse prevention and treatment act. In R. Bourne & E. H. Newberger (Eds.), Critical perspectives on child abuse. Lexington, MA: D. C. Heath.

Hoffman-Plotkin, D. & Twentyman, C. T. (1984). A multimodal assessment of behavioral and cognitive deficits in abused and neglected preschoolers. Child Development, 55, 794-802.

Holmes, M. (1977). Child abuse and neglect programs: Practice and theory. Rockville, MD: National Institute of Mental Health.

Holmes, T. H. & Rahe, R. H. (1967). The social readjustment rating scale. Journal of Psychosomatic Research, 11, 213-218.

Horowitz, B. & Wolock, I. (1981). Material deprivation, child maltreatment, and agency interventions among poor families. In L. H. Pelton (Ed.), The social context of child abuse and neglect. New York, NY: Human Sciences Press.

Hurwitz, A. (1978). Family advocates: Is there a need? In Child abuse and neglect: Issues on innovation and implementation. Washington, DC: Department of Health, Education, and Welfare.

Hyman, I. A. & Fina, A. (1983). The National Center for the Study of Corporal Punishment and Alternatives in the Schools: Moving from policy formation to implementation. Journal of Clinical Child Psychology, 12, 257-260.

Jayaratne, S. (1977). Child abusers as parents and children: A review. Social Work, 22, 5-9.

Johnson, C. (1977). Two community protective service systems: Nature and effectiveness of service intervention. Athens, GA: Regional Institute of Social Welfare Research.

Justice, B. & Duncan, D. F. (1976). Life crisis as a precursor to child abuse. Public Health Reports, 91, 110-115.

Justice, B. & Justice, R. (1976). The abusing family. New York, NY: Human Services Press.

Kadushin, A. & Martin, J. A. (1981). Child abuse: An interactional event. New York: Columbia University Press.

Kempe, C. H., Silverman, F. N., Steele, B. F., Droegemueller, W., & Silver, H. K. (1962). The battered child syndrome. Journal of the American Medical Association, 181, 17-24.

Kempe, C. (1973). A practical approach to the protection of the abused child and rehabilitation of the abusing parent. Pediatrics, 51, 804.

Kempe, L. H. & Helfer, R. E. (1972). Innovative therapeutic techniques. In C. H. Kempe & R. E. Helfer (Eds.), Helping the battered child and his family. Philadelphia, PA: J. B. Lippincott.

Keniston, K. & The Carnegie Council on Children (1977). All our children: The American family under pressure. New York, NY: Harcourt Brace Jovanovich.

Kimball, W. H., Stewart, R. B., Conger, R. D., & Burgess, R. L. (1980). A comparison of family interaction in single- versus two-parent abusive, neglectful, and control families. In T. Field, S. Goldberg, D. Stern, & A. Sostek (Eds.), High-risk infants and children: Adult and peer interactions. New York, NY: Academic Press.

Klaus, M. H. & Kennel, J. H. (1976). Maternal-infant bonding. St. Louis, MO: C. V. Mosby.

Klein, M. & Stern, L. (1971). Low birth weight and the battered child syndrome. American Journal of Diseases of Childhood, 122, 15-18.

Knight, M., Disbrow, M., & Doerr, H. (1978). Prediction of child abuse and neglect: Measures to identify parents' potential. In M. L. Lauderdale, R. N. Anderson, & S. E. Cramer (Eds.), Child abuse and neglect: Issues on innovation and implementation (DHEW Publication No. 78-30148). Washington, DC: US Government Printing Office.

Koluchova, J. (1972). Severe deprivation in twins: A case study. Journal of Child Psychology and Psychiatry, 13, 107-114.

Koluchova, J. (1976). The further development of twins after severe and prolonged deprivation: A second report. Journal of Child Psychology and Psychiatry, 17, 181-188.

Kotelchuck, M. (1982). Child abuse and neglect: Prediction and misclassification. In R. H. Starr (Ed.), Child abuse prediction: Policy implications. Cambridge, MA: Ballinger.

Lane, S. B. & Van Dyke, V. (1978). Lay therapy: Intimacy as a form of treatment for abusive parents. In Child abuse and neglect: Issues on innovation and implementation (DHEW Publication No. 78-30148). Washington, DC: U.S. Government Printing Office.

Lauer, B. (1974). Battered child syndrome: Review of 130 patients with controls. Pediatrics, 54, 67-70.

Levitt, J. M. (1978). A family systems approach to treatment of child abuse. In Child abuse and neglect: Issues on innovation and implementation (DHEW Publication No. 78-30148). Washington, DC: U. S. Government Printing Office.

Lieber, L. & Baker, J. M. (1977). Parents Anonymous: Self help treatment for child abusing parents. A review and evaluation. Child Abuse and Neglect, 1, 133-148.

Light, R. J. (1973). Abused and neglected children in America: A study of alternative policies. Harvard Educational Review, 43, 556-599.

Lynch, M. (1975). Ill-health and child abuse. Lancet, 2, 317-319.

Lystad, M. (1975). Violence at home: A review of the literature. American Journal of Orthopsychiatry, 45, 141-148.

Maden, M. F. & Wrench, D. F. (1977). Significant findings in child abuse research. Victimology, 2, 196-224.

Martin, H. P. (1982). The clinical relevance of prediction and prevention. In R. M. Starr (Ed.), Child abuse prevention: Policy implications. (pp. 175-190). Cambridge, MA: Ballinger.

Martin, H. & Beezley, P. (1976). Therapy for abusive parents: Its effects on the child. In H. P. Martin (Ed.), The abused child: A multidisciplinary approach to developmental issues and treatment. Cambridge, MA: Ballinger.

Martin, J. (1983). Gender-related behaviors of children in abusive situations. Saratoga, CA: R & E Publishers.

Mash, E. J., Johnston, C., & Kovitz, K. (1983). A comparison of the mother-child interactions of physically abused and non-abused children during play and task situations. Journal of Clinical Child Psychology, 12, 337-346.

McCabe, V. (1984). Abstract perceptual information for age level: A risk factor for maltreatment? Child Development, 55, 267-276.

Melnick, B. & Hurley, H. R. (1969). Distinctive personality attributes of child-abusing mothers. Journal of Consulting and Clinical Psychology, 33, 746-749.

Milowe, I. & Lourie, R. (1964). The child's role in the battered child syndrome. Journal of Pediatrics, 65, 1079-1081.

Mnookin, R. H. (1973). Foster care--in whose best interest? Harvard Educational Review, 43, 599-606.

Money, J., Annecillo, C., & Kelley, J. F. (1983). Abuse-dwarfism syndrome: After rescue, statural and intellectual catchup growth correlate. Journal of Clincial Child Psychology, 12, 279-283.

Morris, M & Gould, R. (1963). Role reversal: A necessary concept in dealing with "battered child syndrome." American Journal of Orthopsychiatry, 33, 298-299.

Morse, C, Sahler, O, & Friedman, S. (1970). A three-year follow-up of abused and neglected children. American Journal of Diseases of Childhood, 120, 439-446.

Nathan, H. (1965). Abused children. American Journal of Psychiatry, 122, 443.

National Center on Child Abuse and Neglect (1978). Child abuse and neglect: Issues on Innovation and Implementation (DHEW Publication No. 78-30148). Washington, DC: U.S. Government Printing Office.

Nelson, B. J. (1979). The politics of child abuse and neglect. Child Abuse and Neglect, 3, 99-105.

Nelson, B. J. (1984). Making an issue of child abuse: Political agenda setting for social problems. Chicago, IL: University of Chicago Press.

Newberger, E. H. (1983). The helping hand strikes again: Unintended consequences of child abuse reporting. Journal of Clinical Child Psychology, 12, 307-311.

Newberger, E. H. & Bourne, R. (1979). The legalization and medicalization of child abuse. In R. Bourne & E. H. Newberger (Eds.), Critical perspectives on child abuse. Lexington, MA: D. C. Heath.

Newberger, E. H. & Daniel, J. H. (1979). Knowledge and epidemiology of child abuse: A critical review of concepts. In R. Bourne & E. H. Newberger (Eds.), Critical perspectives on child abuse. Lexington, MA: D. C. Heath.

Office of the Comptroller General of the United States (1976). More can be learned and done about the well-being of children. Washington, DC: U.S. Government Printing Office.

Olson, R. J. (1976). Index of suspicion: Screening for child abusers. American Journal of Nursing, 76, 108-110.

Ounsted, C., Oppenheimer, R., & Lindsay, J. (1974). Aspects of bonding failure: The psychopathology and psychotherapeutic treatment of families of battered children. Developmental Medicine and Child Neurology, 16, 447-456.

Pallone, S. (1978). What kind of alternative delivery systems do we need? In Child abuse and neglect:Issues on innovation and implementation (DHEW Publication No. 78-30148). Washington, DC: U.S. Government Printing Office.

Parke, R. D. (1982). Theoretical models of child abuse: Their implications for prediction, prevention, and modification. In R. H. Starr (Ed.), Child abuse prediction: policy implications. Cambridge, MA: Ballinger.

Parke, R. D. & Collmer, C. W. (1975). Child abuse: An interdisciplinary analysis. Chicago, IL: University of Chicago Press.

Patterson, G. (1977). A performance theory of coercive family interaction. In L. G. Cairns (Ed.), Social interaction: Methods, analysis, and illustration. Chicago, IL: University of Chicago Press.

Pelton, L. H. (1978). Child abuse and neglect: The myth of classlessness. American Journal of Orthopsychiatry, 48, 608-617.

Pelton, L. H. (1981). Child abuse and neglect and protective intervention in Mercer County, New Jersey. In L. H. Pelton (Ed.), The social context of child abuse and neglect. New York, NY: Human Sciences Press.

Perry, M. A. Doran, L. D., & Wells, E. A. (1983a).Developmental and behavioral characteristics of the physically abused child. Journal of Clinical Child Psychology, 12, 320-324.

Perry, M. A., Wells, E. A., & Doran, L. D. (1983b). Parent characteristics in abusing and nonabusing families. Journal of Clinical Child Psychology, 12, 329-336.

Pfohl, S. (1977). The "discovery" of child abuse. Social Problems, 24, 310-323.

Polansky, N. (1976). Analysis of research on child neglect: The social work viewpoint. In Herner & Co. (Eds.), Four Perspectives on the status of child abuse and neglect research. Washington, DC: National Center on Child Abuse and Neglect.

Polansky, N. A., Borgman, R. D., De Saix, C., Sharlin, S. (1971). Verbal accessibility in the treatment of child neglect. Child Welfare, 50, 349-356.

Radbill, S. (1974). A history of child abuse and infanticide. In R. Helfer & C. H. Kempe (Eds.), The battered child. Chicago,IL: University of Chicago Press.

Robison, E. & Solomon, R. (1979). Some further findings on the treatment of the mother-child dyad in child abuse. Child Abuse and Neglect, 3, 247-251.

Rosenfeld, A. A. & Newberger, E. H. (1979). Compassion vs. control: Conceptual and practical pitfalls in the broadened definition of child abuse. In R. Bourne & E. H. Newberger (Eds.), Critical perspectives on child abuse. Lexington, MA: D. C. Heath.

Roth, F. (1975). Practice regimen for diagnosis and treatment of child abuse. Child Welfare,54, 268-273.

Rowe, P. (1983, September-October). Bridging the gap: From foster care to independent living. Children Today, pp. 28-29.

Sandgrund, A., Gaines, R., & Green, A. (1974). Child abuse and mental retardation: A problem of cause and effect. American Journal of Mental Deficiency, 79, 327-330.

Schneider, C. J. (1982). The Michigan Screening Profile of Parenting. In R. M. Starr (Ed.), Child abuse prediction: Policy implications (pp. 157-174). Cambridge, MA: Ballinger.

Schneider, C., Helfer, R. E., & Pollock, C. (1972). The predictive questionnaire: A preliminary report. In C. H. Kempe & Helfer, R. E. (Eds.), Helping the battered child and his family. Philadelphia, PA: Lippincott.

Seaberg, J. R. (1980). Physical child abuse: An expanded analysis. Saratoga, CA: Century Twenty One Publishing.

Shannon, C. & St. John, D. (1978). Volunteers as parental socialization agents: Applications within the military culture. In Child abuse and neglect:Issues on innovation and implementation (DHEW Publication No. 78-30148). Washington, DC: U.S. Government Printing Office.

Sherman, E. A., Phillips, M. H., Haring, B. L., & Shyne, A. W. (1973). Service to children in their own homes: Its nature and outcome. Child Welfare League of America.

Smetana, J. G., Kelly, M., & Twentyman, C. T. (1984). Abused, neglected, and nonmaltreated children's conceptions of moral and social-conventional transgressions. Child Development, 55, 277-287.

Soeffing, M. (1975). Abused children are exceptional children. Exceptional Children, 42, 126-133.

Solnit, A. J. (1980). Too much reporting, too little service: Roots and prevention of child abuse. In G. Gerbner, C. J. Ross, and E. Zigler (Eds.), Child abuse: An agenda for action. New York, NY: Oxford University Press.

Spearly, J. L. & Lauderdale, M. (1983). Community characteristics and ethnicity in the prediction of child maltreatment rates. Child Abuse and Neglect, 7, 91-105.

Spinetta, J. J. (1978). Parental personality factors in child abuse. Journal of Consulting and Clinical Psychology, 46, 1409-1414.

Spinetta, J. J. & Rigler, D. (1972). The child-abusing parent: A psychological review. Psychological Bulletin, 77, 296-304.

Starr, R. H. (1979). Child abuse. American Psychologist, 34, 872-878.

Starr, R. H. (1982). A research-based approach to the prediction of child abuse. In R. H. Starr (Ed.), Child abuse prediction:Policy implications. Cambridge, MA: Ballinger.

Steele, B. F. & Pollock, C. B. (1968). A psychiatric study of parents who abuse infants and small children. In R. E. Helfer & C. H. Kempe (Eds.), The battered child. Chicago, IL: University of Chicago Press.

Steinmetz, S. K. (1977). The cycle of violence: Assertive, aggressive, and abusive family interaction. New York, NY: Prager.

Steinmetz, S. K. & Straus, M. S. (1973). The family as cradle of violence. Society, 10, 50-56.

Sudia, C. E. (1981). What services do abusive and neglecting families need? In L. H. Pelton (Ed.), The social context of child abuse and neglect. New York, NY: Human Sciences Press.

Thomas, A., Chess, S., & Birch, H. (1968). Temperament and behavior disorders in children. New York, NY: New York University Press.

Thomas, B. R. (1982). Protecting abused children: Helping until it hurts. In R. Hanson (Ed.), Institutional abuse of children and youth. New York, NY: Haworth Press.

Tracy, J. J., Ballard, C., & Clark, E. H. (1975). Child abuse project: A followup. Social Work, 20, 398-399.

Tracy, J. J. & Clark, E. C. (1974). Treatment for child abusers. Social Work, 19, 338-342.

Viano, E. C. (1977). From the editor: Special issue: Child abuse and neglect. Victimology, 2, 175-180.

Vietze, P. M. O'Connor, S. Hopkins, J. B., Sandler, H. M., & Altemeier, W. A. (1982). Prospective study of child maltreament from a transactional perspective. In R. H. Starr (Ed.), Child abuse prediction: Policy implications. Cambridge, MA: Ballinger.

Wasserman, G. A., Green, A., & Allen, R. (1983). Going beyond abuse: Maladaptive patterns of interaction in abusing mother-infant pairs. Journal of the American Academy of Child Psychiatry, 22, 245-252.

What's happening to the American family--Attitudes and opinions of 302,602 respondents. (1978, April). Better Homes and Gardens. New York, NY: Meredith Corporation.

Whiting, L. (1977). The central registry for child abuse cases: Rethinking basic assumptions. Child Welfare, 56, 761-767.

Williams, G. (1980). Toward the eradication of child abuse and neglect at home. In G. Williams & J. Money, Traumatic abuse and neglect of children at home. Baltimore, MD: Johns Hopkins University Press.

Williams, G. J. R. (1983). Child abuse reconsidered: The urgency of authentic prevention. Journal of Clinical Child Psychology, 12, 312-319.

Young, L. (1964). Wednesday's children: A study of child neglect and abuse. New York, NY: McGraw-Hill.

Ziegert, K. A. (1983). The Swedish prohibition of corporal punishment: A preliminary report.Journal of Marriage and the Family, 45, 917-926.

Zigler, E. (1979). Controlling child abuse in America: An effort doomed to failure? In R. Bourne & E. H. Newberger (Eds.), Critical perspectives on child abuse. Lexington, MA: D. C. Heath.