FACTORS THAT PREDICT THE DECISION TO PLACE A CHILD

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This research was supported by the Children and Family Research Center, School of Social Work, University of Illinois at Urbana-Champaign, which is funded in part by the Illinois Department of Children and Family Services.

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Executive Summary

Child welfare workers must make the potentially life-changing determination of removing a child from their home and placing them in foster care. In doing so, workers must balance the child's need for safety with needs for family and permanency. This study built upon a previous cross-sectional design that used administrative data to explore factors that influence the decision to place a child.

Case record data, using the Child Endangerment Risk Assessment Protocol (CERAP) and the Family Assessment Factor Worksheet (FAFW), was added to the administrative data to allow for inclusion of additional variables. Due to using case record information, a smaller sample was used than in the earlier study. Based upon a review of the literature and available data in the administrative database as well as case records, 16 variables were included in this study. These variables were:

(a) child's age,

(b) child's race,

(c) child's gender,

(d) child's mental/behavioral status,

(e) caregiver characteristics (age, race),

(f) caregiver parenting skills,

(g) caregiver substance abuse,

(h) caregiver mental illness,

(i) family structure (parent marital status, family size, family dysfunction, social support),

(j) caregiver and child relationship,

(k) previous allegation history (number of previous total allegations, number of previous indicated allegations, number of previous indicated reports, abuse and neglect, risk to the child),

(l) severity of the most recent allegation (number of allegations in the most recent report, type of allegation identified as most severe in the most recent report, severity and/or frequency of abuse and neglect)

(m) initial reporter

(n) caseworker-client contacts (number of investigator home visits, number of other investigator contacts)

(o) caregiver's cooperation with agency staff, and

(p) geographic area (DCFS Region).

The study population consisted of two groups of children who were new to the child welfare system in fiscal years 1995 through 1998. The first group contained children with an indicated child abuse or neglect report who remained at home (intact family cases). The second group was children with an indicated report of child abuse or neglect who were placed in foster care (child cases).

For children who were placed, only those cases that opened with a first placement in Foster Home Boarding care (FHB), Foster Home Private Agency care (FHP), Foster Home Specialized care (FHS), or Home of Relative care (HMR) were selected. Children in intact family cases were defined as those cases in which the family as a whole received services from IDCFS, and there were no children in substitute care. The resulting data set consisted of 190 children who were placed in foster care and 203 children who received services in the home.

Forward conditional logistic regression analysis yielded a model that identified 9 variables that predicted the decision to place a child into substitute care. This model

accurately classified almost 78% of the intact family cases and nearly 86% of the placement cases, or 83.3% of all cases. Significant predictors of placement were:

- The child being an infant (less than 6 months of age).
- Family size.
- Caretaker to child interaction.
- Abuse and neglect history.
- The number of allegations in the most recent report.
- The reporter being anonymous
- The reporter working for the Department of Children and Family Services.
- The number of other contacts.
- The interaction variable of abuse and neglect history by risk of harm.

One of the strongest predicators for a child being placed in foster care was the child's age. If the child was an infant (0–6 months old) he/she was 5.5 times more likely to be placed into care than to remain in their home following an indicated report of abuse and/or neglect. Family structure was also predictive of the placement decision. The child's family size was indicative of placement. Children in homes with more than four persons in the family were 23% less likely to be placed in care. Children who were at risk based on caretaker to child interaction were 45% more likely to be placed into care.

A child's allegation history was predictive of placement outcomes. Surprisingly, a history of abuse and neglect decreased the odds of a child entering foster care. Children in families with a history of abuse and neglect were 50% less likely to come into care. Another negative predictor for entering care was the number of allegations in the most recent report. If there were 3 or more allegations in the most recent report, the child was less likely to be

placed in foster care. In fact, these children were at an 89% decreased probability of being placed in foster care compared to children with reports that contained 1 or 2 allegations.

Several case processing variables were predictive of child placement. In cases where the initial reporter of the suspected child abuse and neglect was anonymous, the child was 98% less likely to enter foster care. In contrast, if the Department of Children and Family Services made the initial report, the child was 4.5 times more likely to enter care. The number of other caseworker contacts made during the investigation was also a strong predictor of child placement. If 4 or more other contacts were made, the child was 5.6 times more likely to be placed into care. If abuse and neglect history and risk of harm were accounted for together, a child with an abuse and neglect history with the most severe allegation being risk of harm was 86% less likely to come into care.

While there are several limitations to this study, the results provide some useful insights into the decision to place a child. From a child welfare policy and practice point of view, the results of this study are positive. The variables included in the placement model are characteristics of the child, family, or child welfare system that one might expect. The child being an infant makes them more vulnerable to harm and is related to placement. Larger family size was not related to placement and may indicate the presence of more support for the caretaker. The more problematic the interaction between the caretaker and the child the more likely the child was placed. A larger number of contacts made by the worker in the process of investigating the report was related to a higher probability of placement. This may indicate the workers uncertainty about the child's safety and the need to collect as much information as possible to clarify the situation. Likewise, it is cause for hope that variables, such as the office that investigated the report and the race of the child or caretaker, did not enter the model. Some investigators find that these variables influence child welfare decision making when they should not (DHHS, 1997; Groeneveld & Giovanni, 1977). Neither of the two placement studies found variables of these types to be predictive of the placement decision.

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FACTORS IDENTIFIED IN THE LITERATURE

Much of the research conducted on the decision to place children in foster care is correlational. There are no experimental studies. In a review of the child welfare decision making literature, Jones (1993) observed that this body of research was plagued by numerous shortcomings including: (a) the regular use of small unrepresentative samples drawn from one or two sites; (b) the reliance on retrospective reports from interviewees that limited the usefulness of data; (c) the limited representation of the national child protective service population; (d) the use of secondary data in the form of agency records which created problems such as missing data and bias; and finally (e) the use of archival data with the accompanying problems of the reliability of abstractors and missing data in the case files. Jones (1993) observed that these limitations "affect the ability to draw definitive conclusions" (p. 242), thus "a clear interpretation of findings is often confused by the confounding of case characteristics . . ." (p. 245).

This review was conducted, in part, to identify the independent variables to be used in this study. A total of 24 studies were identified from several sources: (a) a comprehensive literature review on decision making (Jones, 1993), (b) the reference lists of journal articles, (c) Sociological Abstracts, and (d) discussions with knowledgeable child welfare researchers. Only studies conducted in the United States were reviewed. Studies with a sample size of fewer than 150 cases were excluded. Only one study identified seemed to parallel this current study. In this previous study, Zuravin and DePanfilis (1999) included an examination of multiple predictors of child protective service intake decisions for foster care placement. The results of this study indicated five significant predictors of foster care

placement--maltreatment type/number of types, maternal substance problems, maternal mental health difficulties, and two interactions, AFDC status by recurrence status and maternal mental health problems by maternal substance problems.

Ten of the studies were cross-sectional, seven of the studies were longitudinal, and one study incorporated case vignettes. It was not possible to identify the methodologies for two of the studies (Table 1). The most common data collection methods were case record review (8 studies) and interviews (7 studies). Four studies utilized administrative databases and two studies relied on other sources of secondary data. Other data collection strategies included an intake/decision form, case vignette/questionnaire, research database, and survey. In one study, the use of secondary data prohibited identification of the data collection methodology.

Metropolitan locations were over represented in this body of literature. The majority of the studies were conducted in the Northeast and Western regions of the United States. In addition to the four national studies, only two of the studies examined mid-western states. Goerge et al. (1986) utilized data from California, Illinois, Michigan, New York, and Texas, and Segal and Schwartz (1985) identified their sample as coming from "a large mid-western city."

Decision-making factors identified in the literature are divided into five categories: (a) safety—abuse and neglect, prior abuse and neglect complaint record, severity of injury, risk to the child, placement history, and problem intensification, (b) child characteristics—race, age, gender, emotional or behavioral problems, physical health problems, (c) parent characteristics--substance abuse, caretaker mental illness, caretaker physical illness, other parental characteristics, parenting ability unwillingness to care for a child, and parental request for services, (d) family characteristics—socioeconomic status, family structure, family size, family dysfunction, and availability of social support and (e) child welfare system characteristics--referral source, time of removal, resource availability, caseworker/client contacts, community conditions, geographic area, season, and child welfare policies.

Table 1 Summary of Studies Included in the Literature

Study	Type	Sample	Method	State
Barth et al., 1994	Longitudinal	8748 children, random	Administrative database	Metro California
Benedict et al., 1987	Longitudinal, 1st phase non-concurrent prospective study	689 children, stratified random	Case record review	Metro Maryland
Catalano, Lind, & Rosenblatt, 1999	Secondary data	Monthly data for 137 months	California Depts. of Employment Security and Social Services	California
DHHS, 1994	Cross-sectional	2109 families	Telephone interviews w/ caseworkers	National
English et al., 1997	Cross-sectional	200 CPS workers, random	Structured Interviews	Washington
Fanshel & Shinn, 1978	Longitudinal	624 children, sequential quota sampling	Surveys supplemented by interviews with social workers	New York City
Goerge et al., 1986	Longitudinal, Historical	208,000 children	Research database	CA, IL, MI, NY, TX
Groeneveld & Giovannoni, 1977	Secondary data	361 children	National Clearinghouse on CA/N database, administrative database	AZ, MT, NC, RI, TX
Jenkins & Diamond, 1975	Epidemiological	Random sample 2439 public welfare depts. Census data from 14 largest cities	Figures on placement are related to census data; Secondary data collected by Office of Civil Rights-survey	National
Jenkins & Norman, 1975	Longitudinal (first phase)	390 families	Case records, interviews	New York City
Lindsey, 1991 Lindsey, 1994	Unknown	9597 children	Secondary data	National
Katz et al., 1986	Cross-sectional, retrospective	185 children	Medical record review	Boston, MA
McMurtry & Lie, 1992	Retrospective, inclusive of 6 calendar years, 2-year longitudinal	Stratified random sample of 775 foster children	Case records	Maricopa County, AZ

Table 1 Summary of Studies Included in the Literature *(continued)*

Study	Type	Sample	Method	State
Mech, 1985	Unknown	8,779 children	Unknown	National
Nair et al., 1997	Randomized longitudinal cohort study	152 mother/infant dyads	Testing, toxicology screening, and focused interview	Baltimore, MD
Needell & Barth, 1998	Secondary data	26,460 foster infants; Random sample of 68,401 other infants	California Children's Services Archive	California
Phillips et al, 1971	Cross-sectional	309 children	Intake and decision form, interviews, expert opinions	PA, MA, NY
Rosen, 1981	Case vignettes	162 CPS workers	Questionnaire and case summaries	NJ, PA
Runyan et al., 1982	Cross-sectional, retrospective	7770 families	C/AN Central Registry Record Review	North Carolina
Schwab et al.,	Cross-sectional	2905 families	CPS risk assessment instruments	Texas, 2 regions
Segal & Schwartz, 1985	Cross-sectional comprising 6 years	424 children	Case files	Large Midwestern City
Walker, 1991	Cross-sectional Retrospective	960 African American children	Case records	New York, Detroit, Miami, Houston, Seattle
Wolock, 1982	Cross-sectional	289 cases random or all cases	11 CPS offices Survey & case vignettes, case files social indicator data	11 CPS offices in northern New Jersey
Zlotnick et al., 1998	Cross-sectional	195 children under age 4 chosen randomly	Telephone interviews and county social service records	Northern California
Zuravin & DePanfilis, 1999	Secondary data	1,035 families	Case records	Baltimore

Safety Factors

Abuse and neglect. Physical abuse, sexual abuse, emotional abuse, and neglect were repeatedly shown to be major reasons that children were admitted into foster care (Barth, Courtney, Berrick, & Albert, 1994; Fanshel & Shinn, 1978; Jenkins & Norman, 1975; Mech, 1985; Walker, Zangrillo, & Smith, 1991). Researchers found that children referred for neglect (Jenkins & Norman, 1975) and teenagers referred for abuse and neglect (Lindsey, 1991) were more likely to be placed in foster care than children referred for behavior problems. In a similar vein, DHHS (1997) found that cases involving substantiated abuse and neglect were more likely to result in placement in foster care (51%) than cases involving no substantiated abuse or neglect (21%).

DHHS (1997) discovered that children whose cases were opened due to an abuse or neglect allegation were more likely to receive services in their homes (64%) than children whose cases were opened for other reasons (54%). The data indicated that children whose cases were opened for reasons other than abuse or neglect tended to be older and their parents more often insisted on their removal. Thus, these children were more likely to be placed in foster care (46%) than children whose cases were opened for abuse and neglect (36%) were.

Similarly, Phillips et al. (1971) found that abuse or neglect were noted as the precipitating factor more often in decisions involving the receipt of services in the child's own home than in decisions related to placement (48% versus 34%). Phillips and his colleagues discovered that placement cases were more likely to receive grossly inadequate care in the areas of feeding, supervision and guidance, warmth and affection, protection from abuse, and concern regarding schooling. However, in other aspects of care the children who were placed were not considerably less advantaged than the children who received services in their own home in terms of attention to medical needs, concern for personal hygiene, and sleeping arrangements and supervision. Finally, Segal and Schwartz (1985) reported that for children in a short-term emergency treatment facility, the occurrence of physical or sexual abuse was the weakest predictor of placement.

The sole study that examined whether the type of abuse was predictive of separation outcomes concluded that the type of abuse did impact the likelihood of placement. Katz et al. (1986) found that children with non-physical injuries were more likely to be removed from their homes than children with physical injuries. The authors speculated that non-physical injuries such as the failure-to-thrive and neglect were seen as evidence of chronic problems rather than a single mishap.

Prior child abuse complaint/record. A history of injury was associated with judgements of the choice of interventions (Rosen, 1981). Katz et al. (1986) discovered that after controlling for other independent variables, a history of a previous abuse report was a significant determinant of placement outside of the home. Katz and his colleagues reported that children with a history of a previous accident were less likely to be sent home with services. Instead, children with a history of a previous accident were more likely to be removed from their home or sent home without services compared to their counterparts with no history of previous accident. In a similar vein, English, Brummel, & Marshall, (1997) found that CPS workers' decisions to place a child in foster care were positively influence by a parental history of abuse and neglect as a child.

Severity of injury. Injury to the child was consistently related to decisions to place the child in foster care. Runyan et al. (1982) found that the severity of the incident was a factor in placement decisions. The seriousness of the abuse or neglect incident, as measured by whether medical care (Groeneveld & Giovannoni, 1977) or hospitalization (Runyan et al., 1982) was required, increased the risk of placement. Lindsey (1991) also discovered that children who needed emergency room care were most likely to be placed in foster care, irrespective of the reasons for referral. In addition, Schwab, Baumann, and Gober (1994) found that for cases of confirmed sexual abuse, children were more likely to be removed from their homes if they needed medical care or had sustained a serious injury.

Yet, there was contradictory evidence that suggested that the severity of injury was unrelated to the decision to place children in care. Several authors found a lack of correlation between greater evidence of abuse and the degree of intervention (Katz et al.,

1986; Rosen, 1981). Further, Schwab et al. (1994) found that for cases of confirmed medical neglect, the presence of a facial or head injury was related to the child not being removed from the home. In a similar vein, Katz et al. (1986) reported that the presence of a physical injury decreased the likelihood of a child being removed from the home. Rosen (1981) speculated that the lack of correlation between the severity of abuse and the decision to place a child in care was related to workers' hesitation to remove a child from the home. Rosen argued that when faced with severe abuse, workers felt unable to deal with the situation effectively unless they removed the child from the home. However, workers often considered this option unacceptable. Rosen also suggested workers took strong action to forestall future problems when the level of child abuse was mild.

Risk to the child. As anticipated, the literature indicated that a child's risk of further abuse was an important element in the decision to remove a child from his or her home. Interview data gathered from CPS workers in Washington state revealed that the protection of children and the occurrence of dangerous acts were factors in the decision to place children in foster care (English et al., 1997). Schwab et al. (1994) found that for abuse cases, children were more likely to be removed from their homes if they were currently experiencing maltreatment and the caretaker had shown aggression and anger toward the child. For cases of neglectful supervision, the presence of the perpetrator was more prevalent in cases where children were not removed from their homes. Surprisingly, for cases of confirmed medical neglect, the perpetrator having no access to the child was related to a higher incidence of removal from the home.

Placement history. Phillips et al. (1971) reported that regardless of household composition, significantly more of the children who were placed in foster care had been receiving the major part of their care from persons other than parents or other relatives. A significantly higher proportion of children who required placement were already out of the home at the time the placement decision was made. Only 8% of the children whose "ideal" case plans included the receipt of services in their own home were out of the home at the time the placement decision was made. In contrast, 31% of the children in placement were

residing outside of the home at the time the placement decision was made. For this same sample, placement children were more likely to be 'temporarily away' from their homes and their families were more likely to have other children already in placement. This data appeared to suggest that workers face reduced internal and external resistance when placing a child that was already out of the home or that had a history of placement.

Segal and Schwartz (1984) reported a similar finding. For children in a short-term treatment facility, the most important variable in predicting a child's discharge status was the setting from which the child was admitted. Children discharged to a substitute care setting tended to be most closely associated with admission from a non-family setting. Segal and Schwartz interpreted this finding as evidence that children were likely to be returned to the same environment from which they were admitted, with apparently little regard for addressing the problem that initially prompted their placement. For this sample, the amount of time spent in treatment was also a significant predictor of discharge setting. Children discharged to a substitute care setting tended to have spent more time in treatment.

Problem intensification. Phillips et al. (1971) found that families often received services for problems that had been occurring for some time. Many families had previously come to the agency's attention for similar problems that had previously not been deemed severe enough to warrant services. Phillips and his colleagues discovered that children in placement were more likely to have problems that were classified as an intensification of an old problem than children receiving services in their own homes were. In contrast, children receiving services in their homes were significantly more likely to be seen as having a chronic problem with little recent change.

Child Characteristics

Race. The majority of studies that examined race and ethnicity found that race and ethnicity exerted a significant effect on the decision to place children in foster care. For example, DHHS (1997) reported that nationally, the majority of Caucasian (72%) and

Hispanic (60%) children received in-home services, but the majority of African American children (56%) were placed in foster care. Similarly, Groeneveld and Giovannoni (1977) found that neglected non-Caucasian children were more likely to be removed from their homes than neglected Caucasian were. Phillips et al. (1971) reported that although the race of the mother did not impact the placement decision, the race of the father did. Children from homes with an African American father present were far more likely to be placed in care. However, children from households with a Caucasian father present were significantly more likely to receive services in their homes.

The results of other studies further indicated that race impacted the placement decision, albeit in a more complex way. Although Benedict et al. (1987) found that similar proportions of African American and Caucasian children were placed in care for abuse, neglect, or abandonment, the reason for placement varied by race. Non-maltreated African American children were more likely to be placed in foster care primarily because of parental illness or death. In contrast, non-maltreated Caucasian children were more likely to be placed in foster care because of housing, financial, or family problems. Furthermore, the type of placement varied by race. A larger proportion of Caucasian children were placed in agency foster homes. In contrast, African American children were placed more often with relatives, with friends, or in group care.

Lindsey (1994) also found that the reason for placement varied by race. He found that for dependency cases, African American and Hispanic children were twice as likely to be placed in foster care than Caucasian children were. Further, African American children were at a higher risk of placement than Caucasian or Hispanic children, when placement was due to environmental factors. However, when parental condition was a major reason for placement, African American (0.89) and Hispanic (0.72) children had lower odds of being placed than Caucasian (1.00) children did. In cases of neglect, African American children were placed as often as Caucasian children were. In comparison, Hispanic children were placed less often (0.60) than Caucasian children were. Finally, Lindsey found that placement rates did not vary by race in cases that involved abuse, alcohol, and drugs.

Echoing the findings of Benedict et al. (1987), Lindsey (1994) discovered that although children of color were disproportionately represented in foster care, when children who received services were used as the base population there was only a minimal association between race and placement. Caucasian and African American children were placed equally often. Hispanic children had a slightly lower chance of being placed than Caucasian children did.

Conversely, other studies indicated that African American status was negatively associated with the decision to place children in care. Segal and Schwartz (1985) found that although Caucasian children in a short-term emergency treatment facility tended to be discharged to a substitute care setting, African American children were returned to their biological family more often. These authors speculated that this finding could reflect the shortage of substitute care alternatives available for African American children. Finally, Katz, Hampton, Newberger, Bowles, and Snyder (1986) and Runyan, Gould, Trost, and Loda (1982) concluded that race was not a significant factor in the placement decision.

Age. Several studies showed that age was a pivotal factor in the decision to place a child in care (Lindsey, 1991; Phillips et al., 1971; Segal & Schwartz, 1985). Several researchers found that younger children were more likely to be removed from their homes. Phillips et al. (1971) found that caseworkers considered placement to be an ideal plan for children under five years of age more often than for older children. DHHS (1997) found that children placed in foster care entered the child welfare system at the median age of five, but children who received in-home services entered the child welfare system at the median age of six. This age differential was accounted for primarily by the fact that more children who entered the child welfare system at less than one year of age (23%) were placed in foster care. In contrast, only 12% of the children who received in-home services entered the child welfare system at this early age. Similarly, Goerge et al. (1996) reported that children under five years old were twice as likely to enter foster care than older children were. The researchers noted that the disproportionate increase in the admission of very young children contributed heavily to rising entry rates in California, Illinois, Michigan, New York, and

Texas. Further, by 1989 children under one year of age were three times more likely to enter foster care than children who were from one to two years of age.

In contrast, other studies indicated that older children were more likely to be placed in care. Katz et al. (1986) found that children under six were more likely to be sent home than placed in care. For children discharged from a short-term emergency facility, Segal and Schwartz (1985) noted that children under 12 were returned to their biological family more often, but older children were discharged to a substitute care facility more often. Lindsey (1991) also discovered that the role of placement increased with age, with older children being placed more often. Lindsey reported a higher rate of placement for elementary school children than for preschool children, with the majority of the older children being placed. However, age interacted with the referral reason. For example, young children referred for abuse were placed in foster care more often than older children referred for the same reason. In contrast, older adolescents referred for abuse and neglect received services in their homes more frequently than other children did. Lindsey considered this finding to be disturbing because it suggested that abused adolescents might not be protected.

Gender. Only one of the studies examined the effect of gender on separation outcomes. Lindsey (1994) concluded that gender exerted only a limited influence on separation outcomes.

Emotional or behavior problems. Children with emotional and behavioral problems were frequently cited as reasons for placement in foster care (Mech, 1985). Unusual behavior or unusual characteristics of a child (Jenkins & Norman, 1975; Rosen, 1981) were related to judgments regarding either the choice of interventions or the decision to place children in care. DHHS (1997) found that 52% of children with a mental health problem were placed in foster care, compared to only 32% of children with no mental health problems. Similarly, Jenkins and Norman (1975) and Phillips et al. (1971) found that children in placement often exhibited overt indications of an emotional disturbance or a severe emotional disturbance. These children were often diagnosed as emotionally disturbed

by a mental health professional or they had induced their parents to seek help through foster care placement.

Phillips et al. (1971) found that children who were placed in care did not differ from those who received services in their homes in regard to: physical disabilities, learning difficulties, probation status, stealing, destroying property, and vandalism. Children in placement were more likely to exhibit behaviors that could be difficult for parents, teachers, and other associates. These behaviors included truancy, running away, and resisting parental control (stealing from parents, chronic lying, temper tantrums, and resistance of parental control). A comparison of items that were significant versus non-significant in determining placement, revealed that the items that reflected a child's overt conflict with parents or the outside community were most likely to be associated with placement. Likewise, Walker et al. (1991) cited running away and truancy as grounds for placing children in out-of-home care. Walker and her colleagues found that items such as learning difficulties or enuresis (chronic bed wetting) were not as likely to predict placement compared to items that described acting-out behavior such as behavioral problems in school or running away from home.

Physical Health Problems. A disability or a handicap was associated with placement in foster care (Barth et al., 1994; DHHS, 1997). DHHS found that children with a disability (46%) had a higher rate of placement in foster care than children with no disability (29%). Correspondingly, Barth et al. (1994) found that 1.6% of the children placed in foster care in California were placed there due to a disability or handicap. In fact in California, 63% of children with a physical health problem were placed in foster care, compared to only 35% of children without a physical health problem.

Family Characteristics

Socioeconomic status. Although Runyan et al. (1982) found that income, education, and occupation (except the military) were not significant factors in the decision to remove children from their homes, most studies indicated that income was associated with

placement in foster care. Several studies showed that a disproportionate number of children in foster care came from low-income families, particularly families that received public assistance (Barth et al., 1994; Phillips et al., 1971; Walker et al., 1991). Barth et al. (1994) observed that close to two out of three children in foster care in California came from AFDC eligible families. Similarly, Katz et al. (1986) reported that in cases of physical injury, Medicaid-eligible families were more likely to have their children removed than families that were more affluent. However, in cases of non-physical injury Medicaid-eligible families were less likely to have their children removed than wealthier families. Katz et al. (1986) maintained that this finding indicated that physical injuries tended to be characterized as abuse in poor families and as accidents in more affluent families. Further, the fact that affluent families were more likely to lose their children in cases of non-physical injury suggested that families who appeared to neglect their children despite adequate resources were judged more harshly. Barth et al. (1994) stressed that changes in the proportion of families that received welfare could affect the number of abuse and neglect reports, which in turn impacted the number of children placed in foster care.

In fact, Lindsey's (1994; 1991) research led him to conclude that income adequacy was the most critical factor in the decision to remove children of all ages from their homes. Lindsey (1994) found that in his sample, an unstable income was the highest predictor of removal. Parents who were either self-supporting or received public assistance were more likely to retain their children than parents with incomes from other sources. Notably, parents who received government support were even less likely to have their children removed than parents who earned enough money to support their families were. Children from families that were neither self-supporting nor recipients of government assistance were 120 times more likely to be placed in foster care than children from self-supporting families. Lindsey speculated that the income derived from sources such as family, friends, and alimony was less stable and predictable than the income derived from the government or self-support. Lindsey further noted that this finding supported the notion that programs that provided direct income to families would effectively reduce the need for placement.

In addition, Lindsey (1994) found that part-time employment increased the odds of removal from the home compared to unemployment or not being in the labor force, regardless of family composition. He conjectured that the income derived from part-time employment was either insufficient to reduce the likelihood of a referral or was inadequate to enable the family to provide the sort of care that reduced the odds of removal.

When income was controlled for, the source of the referral, the reason for referral, and emergency cases were more likely to result in foster care placement. Lindsey (1994) maintained that although income security appeared to be a major determinant for removing a child, it was usually not a determinant in returning the child. Jenkins and Norman (1975) also observed that children had been returned to homes although the chronic conditions that precipitated their placement had not been remedied, and in some instances had deteriorated.

Phillips et al. (1971) discovered that the fathers of children in placement were more likely to be unemployed and that the fathers of children who received services in their homes were more likely to be employed regularly on a full-time basis. The authors concluded that these differences could not be attributed to differences in fathers' physical health because the groups were alike in that respect.

Several researchers discovered that the children of employed parents were less likely to be admitted into care. DHHS (1997) found that children who lived with an unemployed caretaker or partner were more likely to be placed in foster care (40%) than children who lived with an employed caretaker or partner (25%) were. Catalano, Lind, and Rosenblatt (1999) also found that there was an increased incidence of foster home placements among families that lose jobs or income. In addition, children who lived in households that received government support were more likely to be placed in foster care (36%) than children who lived in households that earned wages (23%).

The living conditions of the biological family also affected placement decisions. Phillips et al. (1971) discovered that caseworkers judged living conditions to be adequate for 54% of the non-placement children compared to only 38% of the placement children. The authors noted that the gross weekly incomes of the families of placement children were

lower than the gross weekly incomes of families whose children received services in their homes.

Inadequate housing and homelessness were also significant factors in placement decisions (Walker et al., 1991; Zlotnick et al., 1998). The DHHS (1997) found that children from homes with housing problems were more likely to be placed in foster care than children from homes without housing problems (46%, vs. 27%, respectively).

DHHS (1997) discovered that children who were eligible for Title IV-E were more likely to be placed in foster care than children who were ineligible (52% vs. 25%). However, Title IV-E eligibility status was not viewed as a cause of their placement. Children eligible for Title IV-E eligibility were as likely to be placed in foster care as they were to receive in-home services (52% vs. 48%, respectively).

Family structure. Barth et al. (1994) discovered that the absence of the primary caretaker or caretaker incapacity were criteria for making placement decisions. The authors noted that close to four out of five children placed in foster care in California in 1990 came from single-parent families. These authors concluded that changes in the proportion of female-headed families could affect the number of abuse or neglect reports, and subsequently the number of children who entered care.

In a similar vein, Schwab et al. (1994) found that in cases of confirmed neglect, the decision to remove a child from the home was related to the absence of a caretaker due to arrest or the absence of another caretaker. In addition, for cases of physical neglect, children left with another caretaker who was unable to care for them were less likely to be removed from the family.

Phillips et al. (1971) found that more children who received services in their own home had mothers who were married and living with their husbands. Thus, a higher proportion of the parents of children in placement were identified as separated. Likewise, Needell and Barth (1998) found that infants in care were more than twice as likely to have single parents than infants not in care. In contrast, DHHS (1997) found that children who lived in single-headed households were less likely to be placed in foster care (33%) than were

children residing in two parent households (41%). Furthermore, Groeneveld and Giovannoni (1977) discovered that neither the presence of both parents in the family or other adults in the house were related to case outcomes. Similarly, Lindsey (1994) found that a child from a single-parent family was generally no more likely to be placed in care than a child from a two-parent family. However, when dependency and substance abuse were reasons for referral, single-parent families were most subject to having their children removed. Single-parent families faced odds of 5.69 (dependency) and 3.19 (substance abuse) compared to 2.21 and 0.90 for all families. Thus, dependency and substance abuse placed single-parent families at a greater risk of having their children removed. The other reasons for referral showed only a slightly greater chance of placement when single-parent families were involved. Lindsey also found that placement was 99.3% certain when no parent was present. Finally, Lindsey discovered that when the family consisted solely of the biological or adoptive father, the child was placed 1.80 times more often than when the family consisted solely of the mother. Lindsey speculated that this finding either reflected a bias against fathers or fathers' unwillingness to take responsibility for the child as often as the mother did.

Family size. Groeneveld and Giovannoni (1977) discovered that as the number of children increased, the probability of removal for abuse and neglect decreased. The authors speculated that this was due to the difficulty of finding foster homes for larger sibling groups and the reluctance to split such families. Similarly, Phillips et al. (1971) found that children who were allowed to receive services in their homes were more likely to have larger families. They were also more likely to be part of families that needed services for a larger number of children in the family. Finally, the number of victims of abuse played no significant role in experts' placement decisions.

Family dysfunction. Some studies concluded that marital conflict (Walker et al., 1991) and family violence (Jenkins & Norman, 1975) contributed to separation outcomes. However, Schwab et al. (1994) noted that in cases of confirmed emotional abuse,

the presence of spousal or partner abuse was inversely related to removal from the home. This finding may indicate that the child was not seen as being the main target of the abuse.

Parent-child conflict was also related to the decision to separate children from their families (Mech, 1985). Similarly, Schwab et al. (1994) noted that in cases of confirmed sexual abuse, the existence of negative social relationships within the family was related to the decision to remove children from the home. Further, Jenkins and Norman (1975) reported that the serious incapacity of the caregiver due to criminal activity and mental retardation were grounds for placement.

Family stress also significantly affected case outcomes (Groeneveld & Giovannoni, 1977). Similarly, environmental stress was related to the choice of interventions (Rosen, 1981). Katz et al. (1986) found that a high level of stress increased the likelihood that a child would be sent home with services in cases of physical injury. However, a high level of stress increased the likelihood of removal in cases of non-physical injury. The DHHS (1997) found that children from families with three or more total problems entered foster care at a higher rate than children from families with fewer problems (45%, 30%) did.

Availability of social support. Phillips et al. (1971) reported that caseworkers viewed significantly fewer placement cases as having anyone other than the social service agency, including friends and neighbors, to whom they could turn for help. In addition, more placement cases (24%) than own home service cases (10%) were judged to have fewer friends and neighbors whom they could contact.

Parental Characteristics

Workers judged the mothers and fathers of the children in placement to have a significantly higher number of negative traits (Phillips et al., 1971). Phillips et al. (1971) uncovered no difference in the age, race, religion, physical health, or employment status of the mothers of the children who received services in their own home and the mothers of children who were placed in foster care. However, the authors found that caseworkers judged the mothers of children in placement more harshly than they judged the mothers of

children who received in-home services. More of the mothers of children who were placed in care were judged to have 'little or no concern' about their children and 'difficulty in holding a job' than the mothers of children who remained at home. Similarly, caseworkers judged more mothers of the children who received placement to be 'suspicious or distrustful of others' and withdrawn or depressed. However, the mothers of children in placement were considered more likely to desire change, to recognize their part in the problem, and to be more cooperative and active in pursuing worker suggestions. These mothers were also judged to have a lower ability to verbalize their feelings.

Compared to the fathers of children not in placement, the fathers of children in care were thought to set limits less often and to 'lack concern' for their children more often. The fathers of children in placement were rated significantly higher on a myriad of negative traits compared to the fathers of children who received in-home services. These variables included: (a) lack of warmth and affection, (b) difficulty holding a job, (c) extreme laxness in discipline, (d) grossly deviant social attitudes; (e) poor money management skills, (f) feelings of being picked on by the community, (g) suspiciousness or mistrustfulness, (h) withdrawal or depression, and (i) the appearance of being emotionally disturbed.

Schwab et al. (1994) found that in cases of physical abuse, the removal of children was related to a poor prognosis for change. The authors speculated that factors such as parents' lack of motivation and aggressiveness could signal that intervention in family functioning would be unsuccessful. Katz et al. (1986) discovered that removal from the home was more likely when mothers were suspected of being involved in the maltreatment. A similar trend (that did not reach statistical significance) was also noted for fathers. The authors conceded that the small sample size could have contributed to the lack of statistical significance.

Substance abuse. Many authors reported the parental substance abuse problems put children at increased risk of placement (English et al. 1997; Jenkins & Norman, 1975; Nair et al., 1997; Runyan et al., 1982; Walker et al., 1991). Barth et al. (1994) maintained that drug abuse by a parent or guardian was a major reason for out-of-home

placement because of its association with child abuse and neglect and drug-related arrests. DHHS (1997) noted that children whose caretakers had a substance abuse problem were twice as likely to be in foster care than children whose caretakers did not have a substance abuse problem (54% vs. 23%, respectively).

Walker et al. (1991) discovered that in parental drug abuse cases, neglect was the primary reason for placement for a group of African American children who resided in New York City, Miami, Detroit, Houston, and Seattle. In contrast, for cases that did not involve parental drug abuse, physical abuse was the primary reason for placement. In addition, children whose parents did not abuse drugs were more likely to have emotional, behavioral, and other problems that contributed to their placement than did children whose parents abused drugs. Further, malnourishment, poor hygiene, unmet physical and medical needs, lack of child supervision, and uncertain return of the parent were significantly more common among parents in New York who abused drugs than parents who did not.

Caretaker mental illness. Jenkins and Norman (1975), Rosen (1981), and Mech (1985) found that an emotional disturbance in the parent was significantly rated to the choice of interventions. More specifically, the emotional problems of the caretaking parent (Fanshel & Shinn, 1978; Walker et al., 1991) increased the chances of placement in foster care. DHHS (1997) found that 55% of the children whose caretakers had a mental health problem were in foster care, compared to only 28% of children whose caretakers did not have a mental health problem. Phillips et al. (1971) found that the mothers and fathers of the children in placement were more likely to be diagnosed with a mental illness than the parents of children who received services in their homes were. In addition, the mental illness was more likely to be chronic. Phillips and his colleagues reported that 31% of the mothers of children in placement (for whom data were available) had a diagnosed mental illness that seriously interfered with parental functioning. In contrast, only 11% of the mothers of children who received services in their own home had been diagnosed with a serious mental illness. Furthermore, the mothers of children in placement were judged to be

chronically and seriously mentally ill more often than the mothers of children who received services in their own homes.

Fanshel and Shinn (1978) observed that 60% of foster care cases of children involved actual hospitalization and the remainder involved severe emotional disturbance without consequent institutionalization. Jenkins and Norman (1975) reported that the majority of placement cases resulting from parental mental illness involved the hospitalization of the mother in a psychiatric facility. Hospitalization often followed an incident that indicated that the mother was a danger to herself or her children. In cases where the mother was not hospitalized, there was frequently a clear, recorded indication record of emotional disturbances and bizarre behavior.

Caretaker physical illness. The physical illness of the care-taking parent (Fanshel & Shinn, 1978; Jenkins & Norman, 1975) was cited as a reason for placement in foster care. The death of the caretaking parent was also related to placement (Fanshel & Shinn, 1978).

Parenting ability. The DHHS (1997), Runyan et al. (19982), and Phillips et al. (1971) found that workers' negative perceptions of caretakers' parenting skills were factors in the decision to place children outside of the home. DHHS (1997) found that children whose caretakers were judged to have problems with their parenting skills were more likely to be placed in foster care (43%) than children of parents deemed to have adequate parenting skills (22%). Runyan et al. (1982) noted that parental perceptions of the appropriateness of physical punishment put a child at risk for placement.

Phillips et al. (1971) discovered that seven factors related to parenting ability differentiated placement cases from those in which services were provided in the home. These items included: (a) use of overly severe punishment, (b) failure to set limits for children, (c) erratic handling of children, (d) lack of warmth and affection with children, (e) extreme laxness in discipline, (f) impulsiveness, and (g) poor money management skills.

Unwillingness to care for a child. Abandonment or desertion by a parent (Fanshel & Shinn, 1978; Mech, 1985; Runyan et al., 1982) was cited as major reasons for the

placement of children in foster care. Jenkins and Norman (1975) reported that in their sample maternal abandonment of children without alternate childcare was the major reason for placement for 2% of the children. In addition, parental unwillingness or inability to care for a child was cited as a reason for placement by several researchers (Fanshel & Shinn, 1978; Mech, 1985; Walker et al. 1991). Jenkins and Norman (1975) identified the inability or unwillingness of single mothers of newborns to assume care of their children at birth as a major reason for placement in long-term care for 6% of their sample. Further, in 8% of these cases, a former caretaker could not or would not continue to care for the child. Removal from the home was also related to the uncertain return of the parent (Walker et al., 1991).

Parental request for services. Children also entered foster care when their parents voluntarily requested that the children do so (Walker et al., 1991). Barth et al. (1994) reported that voluntary placement was a reason for placement for 3.1% of the foster care population in California. Phillips et al. (1971) found that in cases involving parental requests for placement services, children's problems and mothers' emotional problems were more likely to precipitate requests for placement services. In contrast, marital problems were more likely among cases that involved services in the home. Phillips and his colleagues also discovered that parental requests for placement services were more often precipitated by parents' inability to assume or continue the care of their children than requests for services in the home.

Child Welfare System Variables

Referral source. There was convincing evidence that children referred from different sources were at varying risks of placement (Runyan et al., 1982). Several authors uncovered evidence that indicated that legal authorities such as the police and the courts had a startlingly powerful influence over the placement decision. Groeneveld and Giovannoni (1977) noted that children were removed from the home at the time of the complaint more

often when law enforcement officials had investigated a substantiated case (28.8% of cases) than when other agencies had investigated a substantiated case (7.3%). Lindsey (1991) also reported that for early adolescents, a legal referral increased the likelihood of being placed in Foster care. Lindsey noted that many status offenders were referred to the child welfare system by the juvenile justice system.

Likewise, Runyan et al. (1982) noted that cases referred by the courts or the police were at a two to four times higher for risk of removal, even after adjusting for the type of maltreatment. According to Runyan and his colleagues, this suggested that law enforcement's amplified influence was not based on the increased severity of cases they handled. Instead, the authors speculated that this finding was evidence of either the greater input that law enforcement had over the placement decision or a greater tendency for law enforcement to "rescue" children.

Groeneveld and Giovannoni (1977) observed that cases reported by private individuals were more likely to result in removal of the child from the home. They maintained that this finding indicated that the less severe cases reported by individuals were screened out earlier. This could indicate stricter screening of the cases in the substantiation pool that were referred by individuals.

Lindsey (1991) found that an emergency referral exerted an independent influence that increased the likelihood of placement in foster care. Lindsey observed that this was true for all age groups, except older adolescents. Lindsey expressed concern that older adolescents in emergency situations might not be protected by the child welfare system. Lindsey was also alarmed that so many children entered foster care by way of an emergency referral.

Time of removal. Groeneveld and Giovannoni (1977) observed that the removal of a child prior to the disposition of the case had the strongest effect on outcome for both abuse and neglect cases. The researchers considered this variable to reflect case processing.

Resource availability. Phillips et al. (1971) reported that the availability of resources to implement a decision limited caseworkers' ability to pursue their ideal intervention strategies. They noted that an ideal plan for placement, as judged by the caseworker, was impractical for 3% of the sample due to parental resistance to the available resources or the unavailability of the desired resources. Interestingly, the child's family received services in their home in every instance where implementation of an ideal case plan was impractical.

Caseworker/client contacts. Phillips et al. (1971) discovered that caseworkers had significantly more in-person contacts with parents in cases where children were placed in care. Caseworkers had fewer contacts with children who received services in their homes. In situations where children were placed, caseworkers evidenced more contacts with relatives and with other caretaking adults, and fewer contacts with other agencies, courts, neighbors, and the children of concern.

Community conditions. Barth et al. (1994) maintained that a state's economic conditions impacted the number of children that entered the child welfare system. Poor labor market conditions, as indicated by increased use of welfare, were likely to alter the number of children entering the child welfare system.

Geographic area. The geographic area in which a child resided (Runyan et al., 1982) and the county in which the case was handled (Groeneveld & Giovannoni, 1977) significantly impacted case outcomes. Runyan et al. (1982) attributed these differences to a variety of factors: (a) the influence of the judicial system, which varied by county, (b) the county differences in treatment preferences, (c) the financial resources available to provide services, and (d) the variance of social service and agency cultures within the state.

The DHHS (1997) found that children who resided in unsafe neighborhoods (47%) were more likely to be placed in foster care than children who lived in safe neighborhoods (27%) were. In addition, children from larger urban centers were more likely to be placed in foster care than children from rural areas were. McMurtry and Lie suggested that the racial composition of a community might affect placement outcomes. They also referred to the

study by Jenkins and Diamond (1985) that examined the visibility hypothesis. According to the visibility hypothesis, the increased visibility of African American children who resided in predominantly Caucasian areas propelled them into care at high rates than other children. In examining this hypothesis, Jenkins and Diamond found that African American children generally stayed in foster care longer than Caucasian children did. However, the differences in length of stay disappeared in communities where African American children comprised a higher proportion of the population. The authors speculated that a higher proportion of African Americans in the population corresponded to a higher percentage of African American caseworkers, which might have resulted in more effective foster care services.

Wolock (1982) found that caseworker judgments of abuse varied according to the average severity of the caseload handled in the district offices. Wolock observed an almost perfect inverse correlation between the mean severity of the abuse (as measured by actual and potential harm to the child) in districts and workers' judgments of the severity of the case vignettes. District offices with more severe maltreatment caseloads judged case vignettes as less severe, and offices with less severe maltreatment caseloads judged the same vignettes as more severe. Staff characteristics did not vary significantly by district, thus they were ruled out as a reason for the different judgments. The results of Wolock's study supported the notion that typical or average cases in a district office's caseload served as a standard or reference point for judging the severity of cases. However, this finding holds only to the extent that case vignettes adequately reflected the way decisions were made.

District offices with less severe caseloads seemed to adopt more stringent criteria for making judgments than offices with more severe caseloads. Therefore, similar situations might be treated differently depending on the region. Therefore, characteristics of the caseload as an aggregate (i.e. mean severity of maltreatment caseloads), in addition to individual case characteristics, appeared to be a crucial element in determining judgments regarding the severity of a case and the level of intervention required. Paradoxically, families that resided in more advantaged areas could be given greater attention. Such families would probably receive more help with housing, childcare, and financial, legal, medical, and other

problems than families in disadvantaged areas. However, if public child welfare is the only source of help for poor families and their needs were judged as less severe, poor families might be deprived of resources or services designed to alleviate their problems. The use of less stringent criteria in more advantaged areas might result in more attention being paid to problems before they reach the crisis stage. Early detection could provide greater protection to more advantaged children before they are injured.

Season. Barth et al. (1994) maintained that the number of births was a highly seasonal variable. Substantial fluctuations in the number of births could greatly affect the number of child abuse and neglect reports finalized during a month. Barth and his colleagues reported that in California, a monthly increase of 1,000 births resulted in an increase of about 864 emergency response dispositions (a petition for ongoing judicial supervision if child's safety is in jeopardy). Unemployment also increased emergency response dispositions. Barth and his colleagues considered this data to suggest that an 86% increase in the number of newborns in the population resulted in another child being reported for child welfare abuse and neglect. Stated another way, for each increase in 100 newborns in the population there was an increase of about 86 child abuse and neglect reports (p. 43). The authors acknowledged that there could be a substantial error in these birth coefficients. However, they also offered several possible explanations for this surprising result. Barth et al. (1994) suggested that the arrival of a newborn could trigger an event for other children in the family. If there were two children per family and both children were reported to the investigative agency, this data suggested that a 40% of any increase in the number of newborns would result in the receipt of some child welfare service. Alternatively, these authors noted that some other variables unaccounted for in their model might also fluctuate in a similar fashion to births. Thus, births could be a proxy for young families with a greater risk of child abuse. In addition, the rise in additional births in the population might lead to problems in other families whose children were referred to the system.

Child welfare policies. Barth et al. (1994) stressed that child welfare policies and practices were responsible for much of what transpired in the child welfare system. Policies that emphasized permanency planning, the priority of relative foster care placement, changes in reporting practices, and alterations in the level of resources allocated for services had monumental affects on the number of children served by the child welfare system.

Summary

Table 2 lists the factors identified in the literature as affecting the placement decision. According to the literature, the bulk of the factors fell into four main categories: (a) safety factors, (b) child-related factors such as age, race, emotional or behavior problems, (c) caretaker- and family-related factors such as mental illness, substance abuse, family conflict, and poverty, and (d) characteristics of the child welfare system such as referral source, area of jurisdiction, and policies. However, the evidence is correlational in nature. It suggests that a relationship between the variables exists. However, correlational evidence prohibits the determination of the causal nature of the relationship between the variables, as well as an explanation of how the relationship came about. An additional shortcoming of this body of literature relates to its overall failure to examine the nature of how these variables interact with one another. Thus, it is unclear whether these variables act independently of one another or combine to exert the observed effect. For example, does socioeconomic status act independent of single-parent status and race, or do these variables only produce the observed effects in conjunction with one another? Previous researchers observed that race, class, and family structure are so inter-related that untangling them poses a monumental challenge.

Only 7 of the 30 factors listed below measure community or organizational inputs. It is suggested here that these variables play a much greater part in decision-making that the literature indicated. The fact that the majority of studies failed to examine these variables, opens up the possibility that such effects would have been found had they been measured.

Their relatively modest influence on decision making as indicated by the literature probably reflects researchers' failure to study them.

This research was conducted over more than 20 years. It is certainly possible that decision-making in child welfare has changed over this time frame. Most notably, the passage of the Adoption Assistance and Child Welfare Act of 1980 may have marked a significant change in child welfare decision-making. The Act's emphasis on permanency planning resulted in a significant decline in the number of children in foster care. The number of children in foster care fell from 500,000 in 1977 to 251,000 by 1983. The swift removal of children from foster care, increased focus on reunification, and an emphasis on family preservation services which sought to maintain children in their homes (Karger & Stoesz, 1998) probably impacted the foster care decision making process. Although it is too soon to identify the effect, the Safe Families and Adoption Assistance Act of 1998 is also likely to have a significant impact on child welfare decision-making.

In addition to the issue of time, other factors may explain the contradictory results obtained for almost all of the variables discussed. The use of longitudinal versus cross-sectional designs would likely lead to different results. The methodologies employed included interviews, hypothetical case vignettes, surveys, computer tracking systems, etc. The variation in approaches could have affected the outcomes obtained due to the strengths and weaknesses inherent in each methodology. For example, although providing an excellent mechanism for the control of the variables examined, case vignettes might not reflect real world practice because caseworkers generally have more information to consider than the variables included in the vignettes. On the other hand, secondary data sources such as computer tracking systems and case records, have limited flexibility in terms of specification of predictor variables. Data gathered for other purposes may not precisely fit the purposes of the researcher. In addition, secondary data may not allow for the examination of certain important family, worker, and environmental variables.

The lack of the use of random sampling may also explain some of the discrepancies in the results. It would be expected that a proportion of the samples drawn would differ

Table 2 Frequency of Independent Variable Citation in the Literature

Variable	Results indicate an effect on the placement decision	Results indicate no effect on the placement decision
Socioeconomic Status	9	0
Abuse and Neglect	7	2
Substance Abuse	7	0
Caretaker Mental Illness	6	0
Family Dysfunction	6	0
Child's Age	6	0
Child's Emotional / Behavior Problems	6	0
Unwillingness to Care for Child	5	0
Race	5	2
Geographic Area	4	0
Severity of Injury	4	3
Parent Request for Services	3	0
Parenting Ability	3	0
Family Structure	4	1
Referral Source	3	0
Parental Characteristics	3	0
Prior A/N Complaint Record	2	0
Placement History	2	0
Family Size	2	0
Caretaker Physical Illness	2	0
Child's Physical Health Problems	2	0
Risk to the Child	2	1
Level of Social Support	1	0
Problem Intensification	1	0
Time of Removal	1	0
Caseworker-Client Contacts	1	0
Child Welfare Policies	1	0
Community Level Conditions	1	0
Season	1	0
Gender	0	1

significantly from the population they were purported to represent in important ways. The samples used probably differed in terms of the degree of bias that affected the conclusions. The statistical methods employed by the researchers varied greatly. Some statistics, especially those employed in later studies, may be more sensitive in detecting the differential effects of variables. Also, none of the models that were derived explained all of the dependent variable's variance. The percentage of the variance explained ranged from 20 to 80%, which means that even in the most accurate models, a substantial portion of the variance in placement decisions was left unexplained. The samples also differed in size. They were comprised of persons with different proportions of characteristics that could have affected the results. Varying compositions in terms of ethnicity, reason for referral, or socioeconomic status are likely yield different results. In addition, some researchers relied solely on subjects that were in the first substitute care placement, but others did not make this distinction.

The operationalization of the variables also varied between studies. Different definitions of poverty, family dysfunction, socioeconomic status, etc. would logically lead to variations in findings. Some studies did not examine certain influential variables at all. For example, studies that did not examine race or socioeconomic status provided no opportunity to find that these variables superseded others in importance in determining placement outcomes. Notably, many studies failed to examine organizational and community variables, providing no means to measure their effect.

Furthermore, these studies spanned the entire country. Some samples used national data, although others focused on diverse states such as New York, New Jersey, California, Illinois, and Texas, among others. Therefore, the results obtained for one study may pertain to specific regions of the country, but not to other parts of the country. Also, the use of urban versus rural locations most likely impacted the results obtained.

DCFS Child Endangerment Risk Assessment Protocol

Finally, it is important to note that the Child Endangerment Risk Assessment Protocol (CERAP), the risk assessment form used by DCFS is likely to exert substantial influence on decisions to remove children from their homes. The CERAP form is part of a safety assessment that child abuse investigators must conduct for child protection purposes. This assessment is minimally to be conducted within 24 hours after the investigator first sees the child and whenever circumstances suggest that the child's safety may be in jeopardy. In addition, child welfare service caseworkers must, at minimum, conduct the safety assessment at the following milestones: (a) within five working days after case assignment (the child must be seen to conduct the assessment); (b) whenever circumstances suggest that the child's safety may be in jeopardy, (c) every six months on intact family cases, (d) immediately before returning a child home, and (e) immediately before closure of a service case.

The safety assessment involves the identification of the following factors. Caretakers are assessed in terms of (a) violent or "out of control" nature of their behavior, (b) extremely unrealistic expectations or descriptions of children in predominantly negative terms, (c) ability to provide sufficient supervision to protect the child from moderate to severe harm, (d) inability to meet medical needs to the extent that it results in moderate to severe harm, (e) ability to meet needs for food, clothing and shelter, and ability to provide a physical living environment that is not hazardous, (f) previous abuse or neglect of the child, severity of maltreat, response to prior incident which suggest that safety is an immediate concern, (g) alleged or observed substance abuse which affects the ability to supervise, protect, or care for the child, (h) alleged or observed mental illness or developmental disability that seriously affects the ability to supervise, protect, or care for the child, (i) caused or threatened moderate or severe harm. Factors such as child sexual abuse that may reoccur, involvement in domestic violence which impairs the caretaker's ability to car and protect the child, family refusal to provide access to the child, or their potential to flee, and unknown whereabouts of the child are also considered in determining whether the child is in immediate danger of severe or moderate harm.

Methodology

This study built on a previous one by Harris and Poertner (1999) that employed a retrospective cross-sectional design using administrative data. That study was restricted in the variables that could be studied because of the administrative database. Only variables identified in the literature review that could be operationalized through the database could be studied. The present study sought to build on the findings of the first study by including variables that could be operationalized by the use of information in case records.

The data for this study were obtained from the Illinois Department of Children and Family Services (IDCFS) Integrated Database maintained by the Chapin Hall Center for Children at the University of Chicago and from case record data, specifically, the CFS 1440, Family Assessment Factor Worksheet (FAFW), and the CFS 1441, Child Endangerment Risk Assessment Protocol (CERAP). The major research question concerned the identification of factors that contributed to the decision to place children in foster care. The variables identified in the literature that were available in the database or from the FAFW and/or CERAP included:

- Child Characteristics (age, gender, race; mental/behavioral status),
- Caregiver Characteristics (age, race; parenting skills; substance abuse, mental illness),
- Family Structure (parent marital status, family size, family dysfunction, social support),
- Caregiver and Child Relationship,
- Previous Allegation History (number of previous total allegations, number of previous indicated allegations, number of previous indicated reports, abuse and neglect, risk to the child),
- The Severity of the Most Recent Allegation (number of allegations in the most recent report, type of allegation identified as most severe in the most recent report, severity and/or frequency of abuse and neglect)

?? Case Processing Variables (initial reporter, number of investigator home visits, number of other investigator contacts, caregiver's cooperation with agency staff), and

?? DCFS Region.

Study Sample

The study consisted of two groups of children. The first group was children with an indicated child abuse or neglect report who remained at home (intact family cases). The second group was children with a substantiated abuse and neglect report who were placed in foster care (child cases). This study population was identified from the Integrated Administrative Database. First, only those children less than 18 years of age at the time of the case opening were selected. Second, the sample was limited to those cases that represented the child's first case opening in CYCIS. All cases were from either Rockford or Peoria, with a goal of having approximately 50% from each of these locations. These two locations are the second and third most populous cities in Illinois after Chicago and thus afforded large numbers of child cases. The decision making model was developed using a population of new intact and placement cases during FY95 through FY98. The original number of cases selected from the administrative database was 570; however, data from case records was only obtained on 494 cases. Cases where there was a discrepancy between the administrative data and the case files were eliminated from the analysis. After then eliminating additional cases where there were apparent mismatches between the child selected and the data from the case records, the final population for this study totaled 393.

For children who were placed, only those cases that opened with a first placement in Foster Home Boarding care (FHB), Foster Home Private Agency care (FHP), Foster Home Specialized care (FHS), or Home of Relative care (HMR) were selected. The second type of case was an "intact family" case. Children in intact family cases were defined as those cases in which the family as a whole received services from IDCFS, and there were no children from that family in IDCFS custody at the time of the case opening.

The resulting data set consisted of 190 children who were placed in foster care and 203 children who received services in the home.

Findings

Child Characteristics

Demographic characteristics (age, gender, and race) of children for the placement cases were compared to those in intact family cases. Child mental / behavioral data was obtained from caseworker entries on the Family Assessment Factor Worksheet, indicating the risk level of a child's behavior and the child's interaction with siblings, peers, and others.

Child's age. The mean age for children with intact cases was 4.3, while the mean age for children with placement cases was 2.7. For purposes of further analysis, the children were divided into the following age categories: (a) infants (0-6 months), (b) toddler (6.1 months – 2.99 years), (c) three (3-5.99 years), (d) six (6-8.99 years), (e) nine (9-11.99 years), and (f) twelve (12-14.99 years) (Table 3). The major difference between the groups was that the very youngest children were much more likely to be placed in foster care. For those children six months of age or younger, 45.8% were placed in foster care compared to 17.2% who remained at home.

Child's gender. For all cases, 47.6% of the children were female and 52.4% were male. Half (95) of the children who were admitted to foster care were female and 50% (95) were male. Fewer females, or 45.3% (92), remained at home and 54.7% (111) males remained in intact families.

Child's race. In this study, a slightly lower percentage of the children who were placed in foster care (41.1%) were African American compared to the children who received services in their homes (32.5%). A slightly higher percentage (52.6%) of the children who

were placed in foster care were Caucasian compared to the children who received services in their homes (60.6%) (see Table 4).

Child's mental/behavioral status. All four items under the heading "Child Assessment Factors" on the FAFW were examined to construct this variable: (15) Child's Age/Physical/Mental Abilities, (16) Child's Behavior, (17) Child to Caretaker Interaction, and (18) Child Interaction with Siblings, Peers, and Others. For each of these items, the caseworker indicated the risk level as no, low, intermediate, or high. The FAFW was not completed for these items in 46 of these cases.

Caregiver Characteristics

Demographic characteristics (age, gender, and race) of caregivers for the placement cases were compared to those in intact family cases. Caregiver parenting skills, substance abuse, and mental illness were also examined.

Caregiver's age. The mean age of the caregivers in each of the groups of children was 29 years.

Caregiver's gender. For all cases, 75.6% of the caregivers were female. Nearly 78% of the children who were admitted to foster care had female caregivers, and over 73% of children who remained at home had female caregivers.

Caregiver's race. A larger percentage of the caregivers of the children in placement were African American (37.9%) compared to the percentage (30.5%) of caregivers of the children who remained in the home. Slightly over 60% of the caregivers of the children in placement were Caucasian compared to 66% of the caregivers of children who remained in their homes (see Table 5).

Parenting skills. This variable was measured by the caseworkers rating of the level of risk on Item 9, "Caretaker's Parenting Skills/Knowledge" on the Family Assessment Factor Worksheet. Since there was a potential of ratings for four caretakers, a score was

Table 3 Children in Placement and Intact Family Cases (by age)

Age	Placement		Intact		Total	
	n	*%*	*n*	*%*	*N*	*%*
0–6 months	87	45.8	35	17.2	122	31.0
6.1 months–2.99 years	34	17.9	48	23.6	82	20.9
3–5.99 years	33	17.4	57	28.1	90	22.9
6–8.99 years	25	13.2	39	19.2	64	16.3
9–11.99 years	11	5.8	22	10.8	33	8.4
12–14.99 years	0	0.0	2	1.0	2	.5
Total	190		203		393	

Table 4 Children in Placement and Intact Family Cases (by race)

Child's Race	Placement		Intact		Total	
	n	*%*	*n*	*%*	*N*	*%*
White	100	52.6	123	60.6	223	56.7
Black	78	41.1	66	32.5	144	36.6
Other	12	6.3	14	6.9	26	6.6
Total	190		203		393	

Table 5 Caregivers of Children in Placement and Intact (by race)

Race	Placement		Intact		Total	
	n	*%*	*n*	*%*	*N*	*%*
White	115	60.5	134	66	249	63.4
Black	72	37.9	62	30.5	134	34.1
Other	3	1.6	7	3.4	10	2.5
Total	190		203		393	

created adding up the risk levels given for each caretaker. Since 1 indicted no risk, the lowest score was 4 and the highest was 16.

Substance abuse. Substance abuse was measured by using two separate items to create a variable indicating whether or not there was an indication from the case record data (CERAP and FAFW) of risk of substance abuse by the caregiver. The combined variable was a better indicator of the presence of substance abuse by the caregiver since the CERAP was missing data pertaining to substance abuse (item 11) in 123 of 393 cases. First, the FAFW item 7, "Caretaker's Substance Misuse," was used to create a score adding together the risk levels of the caregivers listed. Again, since there was a potential for assessing a risk score for up to four caregivers and 1 indicated no risk, the lowest potential score was 4 and the highest score was 16. The totaled scores were then placed in a scale of 1 to 4, with 1 being no risk (a score of 4), 2 as low risk (a score of 5), 3 as intermediate risk (scores of 6 or 7), and 4 being high risk (scores of 8 or greater). This scale was then used with the CERAP item indicating risk for substance abuse. If the CERAP indicated "yes" for risk and/or the FAFW item indicated intermediate or high risk, the variable was indicated positively for risk. In 41.6% of placement cases, there was an indication of risk of caretaker substance abuse. For intact cases, 31% were indicated as a risk for this factor (see Table 6).

Mental illness. Caretaker mental illness was measured by using two separate items to create a variable indicating whether or not there was an indication from the case record data (CERAP and FAFW) of risk of mental illness of the caregiver. The combined variable was a better indicator of the existence of mental illness of the caregiver since the CERAP was missing data pertaining to mental illness (item 12) in 123 of 393 cases. First, the FAFW item 6, "Caretaker's Emotional Mental Health," was used to create a score adding together the risk levels of the caregivers listed. Again, since there was a potential for assessing a risk score for up to four caregivers and 1 indicated no risk, the lowest score was 4 and the highest score was 16. The totaled scores were then placed in a scale of 1 to 4, with 1 being no risk (a score of 4), 2 as low risk (a score of 5), 3 as intermediate risk (scores of 6 or

Table 6 Children in Placement and Intact Family Cases (by caregiver risk for substance abuse)

Caregiver Risk for Substance Abuse	Placement		Intact		Total	
	n	*%*	*n*	*%*	*N*	*%*
Yes (intermediate/high risk)	79	41.6	63	31	142	36.1
No (no / low risk)	111	58.4	140	69	251	63.9
Total	190		203		393	

7), and 4 being high risk (scores of 8 or greater). This scale was then used with the CERAP item indicating risk for substance abuse. If the CERAP indicated "yes" for risk and/or the FAFW item indicated intermediate or high risk, the variable was indicated positively for risk. In 31.1% of placement cases, there was an indication of risk of caretaker mental illness. For intact cases, 31% were also indicated as a risk for this factor (see Table 7).

Family Structure

To try to determine the family structure, four variables were used. These were parent marital status, family size, family dysfunction, and social support.

Parent marital status. A higher percentage of children placed in foster care came from families in which the parents were never married (40%), compared to 31.5% of the children who received services in their homes (see Table 8).

Family size. The size of the family was determined by using Chapin Hall database information of the number of persons in the household at the time of the investigation. The mean number of persons in the household was 4.6 for intact cases and 3.75 for placement cases.

Family dysfunction. One item in the CERAP and three items in the FAFW were used to determine family dysfunction. Item 13 in the CERAP safety assessment, "Caretaker may be a victim of domestic violence which affects caretaker's ability to care for and/or protect child from imminent, moderate to severe harm," was used in this category (see Table 9). However, it should be noted that there was missing data for this item in 123 of the 393 cases.

FAFW item 1 "Family Interaction," FAFW item 10 "Caretaker to Caretaker Interaction," and FAFW item 11, "Caretaker to Child Interaction" were looked at independent of one another as indicating potential family dysfunction. Since there was a potential of ratings for four caretakers, a score was created for each of these items adding up

Table 7 Children in Placement and Intact Family Cases (by risk from caregiver mental illness)

Caregiver Risk for Mental Illness	Placement		Intact		Total	
	N	*%*	*n*	*%*	*N*	*%*
Yes	59	31.1	63	31	122	31
No	131	68.9	140	69	271	69
Total	190		203		393	

Table 8 Children in Placement and Intact Family Cases (by marital status)

Family Type	Placement		Intact		Total	
	n	*%*	*n*	*%*	*N*	*%*
Never married	76	40	64	31.5	140	35.6
Divorced/Separated Widowed	15	7.9	16	7.9	31	7.9
Married	41	21.6	37	18.2	78	19.8
Missing	58	30.5	86	42.4	144	36.6
Total	190		203		393	

Table 9 Children in Placement and Intact Family Cases (by risk from family dysfunction)

Caretaker may be a victim of domestic violence which affects caretaker's ability to care for and/or protect child from imminent, moderate to severe harm	Placement		Intact		Total	
	n	*%*	*n*	*%*	*N*	*%*
Yes	11	9.1	16	10.7	27	10
No	110	90.9	133	89.3	243	90
Total	121		149		270	

the risk levels given for each caretaker. Since 1 indicted no risk, the lowest score was 4 and the highest score was 16.

Social support. Caseworkers assessment of the "Strength of the Family Support System" on item 2 of the FAFW was used in determining the family's social support. For this item, 40 cases were missing data. Over 68% of all cases were no or low risk for family social support, with over 71% of intact cases falling into these categories and over 64% of placement cases doing so. Over 28% of all cases were intermediate or high risk for family social support, with over 25% of intact cases falling into these categories and over 31% of placement cases doing so.

Caregiver and Child Relationship

Approximately 86.3% of the caregivers of the children who were placed in foster care were the children's biological parents. Similarly, 82.8% of the caregivers of the children who remained at home were the children's biological parents. Approximately 5% of the caregivers of the placement children were relatives, and 9.4% of the caregivers of the children who remained at home were relatives (see Table 10). Relatives were defined as aunts, uncles, grandparents, siblings, step-parents, and "relative home" caregivers.

Previous Allegation History

Five variables were created to measure a child's allegation history. These variables were the number of previous indicated allegations, the number of total allegations, the number of indicated reports associated with each child prior to the case opening, abuse and neglect history, and risk to the child.

Total number of previous allegations. The total number of previous allegations ranged from 0 to 12. Since this is a highly skewed distribution, this variable was categorized as 0 and 1 or more allegations. Nearly 62% of the children in the sample had

Table 10 Caregiver's of Children in Placement and Intact (by relationship to the child)

Relationship	Placement		Intact		Total	
	n	*%*	*n*	*%*	*N*	*%*
Biological parent	164	86.3	168	82.8	332	84.5
Relative	10	5.3	19	9.4	29	7.4
Other	16	8.4	16	7.9	32	8.1
Total	190		203			

no previous allegation. Almost 59% of the children who remained at home had no previous allegation, and over 65% of the children who were placed in foster care had no previous allegation. Further, 34.7% of the children who entered foster care had one or more previous allegations, and 41.4% of the children who remained at home had one or more previous allegations (see Table 11).

Number of previous indicated allegations. The number of previous indicated allegations ranged from 0 to 9. Since this is a highly skewed distribution, this was categorized as 0 and 1 or more allegations. Over 66% of the children who received services in their home had no previous substantiated allegation, and 71.1% of the children who were placed in foster care had no previous substantiated allegation (see Table 11).

Number of previous indicated reports. Nearly 62% of the children in the sample had no previous substantiated report. This variable was also categorized as 0 previous indicated reports and 1 or more indicated reports. Nearly 59% of the children who remained at home did not have a previous indicated report, compared to 65.3% of the children in placement (see Table 11).

Abuse and neglect. Using the CERAP safety assessment abuse and neglect was operationalized by through Item 3, "Caretaker caused moderate to severe harm or has made a plausible threat of moderate to severe harm to the child" (see Table 12). Again, it should be noted that data was missing for this item in 123 of 393 cases.

Abuse and neglect history was measured by using two separate items to create a variable indicating whether or not there this was indicated from the case record data (CERAP and FAFW). First, the FAFW item 22, "History of Pending/Confirmed CA/N Reports," was used to create a score adding together the risk levels of the caregivers listed. Again, since there was a potential for assessing a risk score for up to four caregivers and 1 indicted no risk, the lowest score was 4 and the highest was 16. The totaled scores were then placed in a scale of 1 to 4, with 1 being no risk (a score of 4), 2 as low risk (a score of 5), 3 as intermediate risk (scores of 6 or 7), and 4 being high risk (scores of 8 or greater). This new variable was then used with item 7 of the CERAP, indicating previous abuse or

Table 11 Previous Allegation History

	Placement (n=190)		Intact (n=203)		Total (N=393)	
	n	*%*	*n*	*%*	*N*	*%*
Number of previous total allegations						
0	124	65.3	119	58.6	243	61.8
1 or more	66	34.7	84	41.4	150	38.2
Number of previous indicated allegations						
0	135	71.1	135	66.5	270	68.7
1 or more	55	28.9	68	33.5	123	31.3
Number of previous indicated reports						
0	124	65.3	119	58.6	243	61.8
1 or more	66	34.7	84	41.4	150	38.2

neglect of a child, since there was missing data in 123 of the 393 cases in the CERAP and in 70 of the 393 cases for FAFW item 22. If the CERAP indicated "yes" for risk and/or the FAFW item indicted intermediate or high risk, the variable was indicated positively for risk. In combining CERAP item 3 and FAFW item 22, sixty-one cases were still missing data. In 49.7% of placement cases, there was an indication of previous abuse and neglect of a child by the caregiver. For intact cases, 35.2% were indicated as having this history (see Table 12).

Risk to the child. To measure the risk to the child, two parts of the case record were examined. First, a total score from the CERAP Safety Assessment was determined by adding up yes (score of 1) and no (score of 2) risk responses for items 1 through 13. However, many of these items were left blank, and many CERAP forms were missing altogether (124 missing out of 393). Therefore, whether or not a CERAP was present in the case file was used to determined possible risk to the child (see Table 13). The second area examined for risk to the child was the perpetrators access to the child as assessed on the FAFW item 12. Again, since there was a potential for assessing a risk score for up to four caregivers and 1 indicted no risk, the lowest score was 4 and the highest score was 16.

Severity of the Most Recent Allegation

Three variables were created to serve as indicators of the severity of the report most closely associated with the child's case opening. The first indicator was the number of allegations in the report. The second indicator of severity was the type of allegation identified as most severe in the most recent report. Finally, an indicator of severity and/or frequency of abuse and neglect was used.

Number of allegations. The first indicator of the severity of the report that was most closely associated with the child's case opening was the number of allegations in the most recent report. This variable was recoded into a dichotomous categories for data analysis purposes (one or two allegations, or three or more allegations). Approximately 78% of the most recent reports of the children placed in foster care contained one or two

Table 12 Children in Placement and Intact Family Cases (by risk of abuse and neglect)

Risk of Abuse and Neglect	Placement		Intact		Total	
	n	%	*n*	%	*N*	%
Caretaker caused or has made a plausible threat of moderate to severe harm to the child						
Yes	19	15.7	20	13.4	39	14.4
No	102	84.3	129	86.6	231	85.6
Total	121		149		270	
History of Abuse and Neglect						
Yes	84	49.7	68	35.2	152	42
No	85	50.3	125	64.8	210	58
Total	169		193		362	

Table 13 Children in Placement and Intact Family Cases (by risk to the child)

CERAP Exists	Placement		Intact		Total	
	n	*%*	*n*	*%*	*N*	*%*
Yes	134	70.5	135	66.5	269	68.4
No	56	29.5	68	33.5	124	31.6
Total	190		203		393	

allegations with 22% that contained three or more. In comparison, 29% of the most recent reports of the children who remained at home contained one or two allegations while 71% contained three or more (see Table 14).

Most severe allegation. The severity of the allegation was determined by using the Testa-Bilavar Severity Index. To construct this variable, the allegations in the database were grouped into eight categories. The categories, listed in the order of severity are:

- ?? sexual abuse,
- ?? physical abuse,
- ?? substance-exposed infants,
- ?? emotional abuse,
- ?? lack of supervision,
- ?? environmental neglect,
- ?? other neglect,
- ?? substantial risk of harm.

Sexual abuse was recorded as the most severe allegation for 32.8% of the children in the sample (Table 15). Physical abuse was the most severe allegation for 4.3% of the children, and substance-exposed infant was the most severe allegation for 8.4% of the children. Emotional abuse was the most severe allegation for 23.7% of the children, lack of supervision for .3% of the children, environmental neglect for 13% of the children, other neglect for 13.7% of the children, and substantial risk of harm for 3.8% of the children.

For children who remained at home, the most severe allegations were more likely to be sexual abuse, other neglect, and substance exposed infant. Over 21% of the case openings of the children who remained at home were associated with a sexual abuse

Table 14 Number of Allegations in the Most Recent Report

Number of allegations in most recent report	Placement (n=190)		Intact (n=142)		Total (N=332)	
	n	*%*	*n*	*%*	*N*	*%*
1–2	148	77.9	41	28.9	189	56.9
3 or more	42	22.1	101	71.1	143	43.1

Table 15 Type of Allegation Identified as Most Serious in the Most Recent Report

Allegation type	Placement		Intact		Total	
	n	*%*	*n*	*%*	*N*	*%*
Sexual abuse	86	45.3	43	21.2	129	32.8
Physical abuse	6	3.2	11	5.4	17	4.3
Substance exposed infant	11	5.8	22	10.8	33	8.4
Emotional abuse	39	20.5	54	26.6	93	23.7
Lack of supervision	1	.3	0	–	1	.3
Environmental neglect	34	17.9	17	8.4	51	13
Other neglect	12	6.3	42	20.7	54	13.7
Substantial risk of harm	1	.5	14	6.9	15	3.8
Total	190		203		393	

allegation, compared to over 45% of the case openings of children who were placed in foster care. Nearly 21% of the case openings of children who remained in their home were associated with other neglect, although only 6.3% of the case openings of the children who were placed in foster care were. Substance exposed infant was the most severe allegation for 10.8% of case openings of children who remained at home, while 5.8% of cases associated with this allegation were placed into care.

Children who were placed in foster care were more likely to be associated with the most severe allegations of sexual abuse and environmental neglect. Over 45% of the case openings of the children who were placed in foster care were associated with the allegation of sexual abuse, compared to only 21% of the cases of children who remained at home. In addition, the case openings of children placed in foster care were more likely to be associated with an allegation of environmental neglect (17.9% vs. 8.4%).

Severity and/or frequency of abuse and neglect. Three items, all under the Final Finding Factors of the FAFW, were used to look at severity and/or frequency of abuse and neglect. These were item 19, "Severity and/or Frequency of Abuse," item 20, "Location of Injury," and item 21, "Severity and/or Frequency of Neglect." These items were missing data for 71 to 74 cases. Item 19 was indicated as no or low risk for 60% of intact cases and over 39% for placement cases, and as intermediate or high risk for nearly 24% of intact cases and almost 41% for placement cases. Item 20 was indicated as no or low risk for 64% of intact cases and nearly 55% of placement cases, and as intermediate or high risk for over 16% of intact cases and over 18% for placement cases. Item 21 was indicated as no or low risk for over 45% of intact cases and over 33% of placement cases, and as intermediate or high for nearly 43% of intact cases and for 51% of placement cases.

Case Processing Variables

Four case processing variables were constructed: the person making the initial report, the number of home visits made by the investigator, the number of other contacts made

during the process of the investigation, and the caregiver's cooperation with agency staff and/or the service plan.

The initial reporter. Mandatory reporters are professionals who potentially work with children in the course of their professional duties. In Illinois, professionals in the categories of medical, school, state agency, mental health, law enforcement, child care, coroners, and medical examiners are legally required to report cases of suspected abuse and neglect. The overwhelming majority of the children (78.9%) were initially reported by mandatory reporters. More specifically, 41.7% of the mandatory reporters were medical personnel, 24.2% were law enforcement personnel, 11.1% were state agency or mental health personnel, 11.5% were school personnel, 10.2% were DCFS personnel, and 1.3% were child care personnel. Family and friends made up the second largest category of reporters. Family and friends reported over 13% of the cases.

Mandatory reporters (87.9%) identified a larger percentage of the children who entered foster care compared to the children who remained at home (70.4%) (see Table 16). Medical personnel (43.7%) compared to the children who received services in the home (23.6%) initially reported the largest proportion of the children who were placed in foster care. Of the children for which the initial reporter was family and friends, more of the children remained in their homes (18.2%) compared to the children who were placed in foster care (8.4%).

Investigator home visits. The database also contained information on the total number of home visits made during the abuse or neglect investigation. This variable was categorized as 0 home visits and 1 or more. Investigators did not visit the homes of almost 46.8% of the children who entered foster care, compared to only 17.2% the homes of children who were not placed (see Table 17).

Other investigator contacts. The administrative database also contained information on the total number of other caseworker contacts made during the investigation. This variable was categorized as 0 to 3 contacts and 4 or more contacts.

Table 16 Comparison of Initial Reporters

Reporter type	Placement		Intact		Total	
	n	*%*	*n*	*%*	*N*	*%*
Mandated Reporter	167	87.9	143	70.4	310	78.9
Medical	83	43.7	48	23.6	131	33.3
Law enforcement	38	20	38	18.7	76	19.3
School personnel	10	5.3	26	12.8	36	9.2
Family and friends	16	8.4	37	18.2	53	13.5
State agency and mental health	16	8.4	19	9.4	35	8.9
Anonymous	4	2.1	19	9.4	23	5.9
DCFS	20	10.5	12	5.9	32	8.1
Child care	1	.5	3	1.5	4	1
Other	2	1.1	1	.5	3	.8
Total	190		203		393	

Examples of other contacts include communication with, neighbors, relatives, or other professionals working with the family. Investigators made 0-3 contacts in 77.3% of the cases that resulted in the receipt of services in the homes compared to 50.5% of cases where the child was placed. Investigators made four or more contacts in 49.5% of the placement cases, compared to only 22.7% of the cases that resulted in the receipt of services in the home (see Table 17).

Caregiver's cooperation with agency staff. Item 14 of the Family Assessment Worksheets "Caretaker's Cooperation with Agency Staff &/or Service Plan," was used to measure this variable. However, the low number of completed items (200 of 393) precluded this variable from being used in this study.

DCFS Region

Overall, more children in Peoria (54.2%) were placed in foster care than were in Rockford (45.8%) (see Table 18).

Model Development

The model building process focused on seeking the most parsimonious collection of variables that differentiated children who were placed in foster care from those who remained at home. The initial stage of model building followed the strategy suggested by Dattalo (1994). Dattalo recommended that the relationship between prospective independent variables and the dependent variable be examined prior to the logistic regression analysis. He recommended the use of an alpha level of .15 as a screening criterion to ensure that important variables were identified. Each independent variable was entered into the logistic regression analysis singly to determine if it was related to the dependent variable. The independent variables that were not related to the dependent variable at the

Table 17 Comparison Investigator Home Visits and Other Contacts

	Placement (n=190)		Intact (n=203)		Total (N=393)	
	n	*%*	*n*	*%*	*N*	*%*
Investigator home visits						
0	89	46.8	35	17.2	124	31.6
1 or more	101	53.2	168	82.8	269	68.4
Other investigator contracts						
0–3	96	50.5	157	77.3	253	64.4
4 or more	94	49.5	46	22.7	140	35.6

Table 18 Children in Placement and Intact Family Cases (by location)

Location	Placement		Intact		Total	
	n	*%*	*n*	*%*	*N*	*%*
Rockford	87	45.8	110	54.2	197	50.1
Peoria	103	54.2	93	45.8	196	49.9
Total	190		203		393	

variable. The independent variables that were not related to the dependent variable at the .15 significance level were excluded from further analysis. Table 19 presents the significance level for the variables that were included in the logistic regression equation.

Following Datallo's (1994) model building process, forward stepwise logistic regression was employed using all of the independent variables from Table 19. Forward conditional logistic regression analysis yielded a model that contained nine predictor variables (see Table 20). As a group, the variables classify 83.5% of the cases correctly. Almost 79% of the intact family cases were correctly classified compared to nearly 87% of the placement cases.

One of the strongest predicators for a child being placed in foster care was the child's age. If the child was an infant (0–6 months old) he/she was 5.5 times more likely to be placed into care than to remain in their home following an indicated report of abuse and/or neglect.

Family structure was also predictive of the placement decision. The child's family size was indicative of placement. Children in homes with more than four persons in the family were 25% less likely to be placed in care. Family dysfunction also was predictive. Children who were at risk based on caretaker to child interaction were one-third more likely to be placed into care.

Surprisingly, a history of abuse and neglect decreased the odds of a child entering foster are. Children in families with a history of abuse and neglect were 65% less likely to come into care. Another negative predictor for entering care was the number of allegations in the most recent report. If there are 3 or more allegations in the most recent report, the child were less likely to be placed in foster care. In fact, these children were at a 91% decreased probability of being placed in foster care compared to children with reports that contained 1 or 2 allegations. An allegation of risk of harm also decreased the probability of child placement. Children with this allegation were 92% less likely to be placed in foster care.

Table 19 Relationship between independent variables and the decision to place.

Variable		Significance level
Child's age	—	.00
	Infant	.00
	Three	.01
	Six	.10
	Nine	.07
Child's race	White	.11
	Black	.08
Child's mental / behavioral status	Child's behavior	.09
	Child interaction with siblings, peer, and others	.01
Caregiver's race	Black	.12
Parenting skills		.06
Caregiver risk for substance abuse		.03
Parent marital status		.10
Family size		.00
Family dysfunction	Caretaker to caretaker interaction	.03
	Caretaker to child interaction	.01
Caregiver and child relationship	Relative caregiver	.12
Previous allegation history	Abuse and neglect history	.00
	Perpetrator's access to the child	.10
Severity of the most recent allegation	Number of allegations in most recent report	.00
	Sexual abuse	.00
	Substance exposed infant	.07
	Environmental neglect	.00
	Other neglect	.00
	Substantial risk of harm	.00
	Severity and/or frequency of abuse	.02

Table 19 Relationship between independent variables and the decision to place. ***(continued)***

Variable		Significance level
Initial reporter	Mandated reporter	.00
	Medical personnel	.00
	School personnel	.01
	Family / friends	.00
	Anonymous	.00
	DCFS	.09
Number of home visits		.00
Number of other contacts		.00
DCFS Region		.10

Table 20 Logistic Model

Variable	B	S. E.	Sig	Wald	Exp (B)
Infant	1.701	.467	.00	13.290	5.481
Family size	–.285	.116	.01	5.994	.752
Caretaker to child interaction	.286	.112	.01	6.477	1.331
Abuse and neglect history	–1.012	.384	.01	6.944	.364
Number of allegations in most recent report	–2.432	.399	.00	37.215	.088
Risk of harm	–2.485	1.128	.03	4.859	.083
Reporter – Anonymous	–4.153	1.352	.00	9.431	.016
Reporter – DCFS	1.517	.627	.02	5.852	4.557
Number of other contacts	1.803	.402	.00	20.158	6.071

Several case processing variables have predictive value for child placement. In cases where the initial reporter of the suspected child abuse and neglect was anonymous, the child was 98% less likely to enter foster care. In contrast, if the report was made by the Department of Children and Family Services, the child was 4.6 times more likely to enter care. The number of other caseworker contacts made during the investigation was also a strong predictor of child placement. If 4 or more other contacts are made, the child was 6 times more likely to be placed into care.

Interaction effects. It appeared that were likely interactions between some of these variables that would more fully explain the findings. For example, the finding that abuse history lowered the probability of placement may be related to the type of abuse or neglect. Therefore, model was examined for interaction effects. This model has 36 possible interaction terms. Rather than consider all of these, only ones that seemed plausibly interrelated were examined. The model indicated children with an abuse and neglect history were 65% less likely to come into care, which was an unexpected result. Therefore, abuse and neglect history was multiplied with other possibly interrelated variables (risk of harm, the number of allegations in the most recent report, and an anonymous reporter) to create interaction variables.

Another unexpected result was that in cases where there were 3 or more allegations in the most recent report the child was less likely to enter care. To examine this for interaction effects, the number of allegations in the most recent report was multiplied with the variables of risk of harm, an anonymous reporter, and family size, respectively. Finally, the interaction between an anonymous reporter with risk of harm was examined.

Each of these interaction terms was entered into the logistic regression analysis to determine if it was related to the dependent variable. Of the new interaction terms determined, four were found to be meet the criteria of .15 significance: abuse and neglect history and risk of harm, the number of allegations in the most recent report, and an anonymous reporter, respectively; and number of allegations in the most recent report and

family size. The two interaction variables that were not related to the dependent variable at the .15 significance level were excluded from further analysis.

Each of the four remaining variables was entered in the model singly with the nine variables from the previous model. Of these regression models, the model with the interaction term combining abuse and neglect history and risk of harm proved to be the best (see Table 21). This model accurately predicted nearly 78% of the intact family cases and almost 86% of the placement cases, or 83.3% of all cases.

With this model, one of the strongest predicators for a child being placed in foster care was the child's age. If the child is an infant (0–6 months old) he/she was 5.5 times more likely to be placed into care than to remain in their home following an indicated report of abuse and/or neglect. Family structure was also predictive of the placement decision. The child's family size was indicative of placement. Children in homes with more than four persons in the family were 23% less likely to be placed in care. Children who were at risk based on caretaker to child interaction are 45% more likely to be placed into care.

A child's allegation history is predictive of placement outcomes. A history of abuse and neglect decreased the odds of a child entering foster care. Children in families with a history of abuse and neglect were 50% less likely to come into care. Another negative predictor for entering care was the number of allegations in the most recent report. If there were 3 or more allegations in the most recent report, the child were less likely to be placed in foster care. In fact, these children were at an 89% decreased probability of being placed in foster care compared to children with reports that contained 1 or 2 allegations.

Several case processing variables had predictive value for child placement. In cases where the initial reporter of the suspected child abuse and neglect was anonymous, the child was 98% less likely to enter foster care. In contrast, if the Department of Children and Family Services made the initial report, the child was 4.5 times more likely to enter care. The number of other caseworker contacts made during the investigation was also a strong predictor of child placement. If 4 or more other contacts were made, the child was 5.6 times

Table 21 Logistic Model with Interaction Term

Variable	B	S. E.	Sig	Wald	Exp (B)
Infant	1.704	.418	.00	16.590	5.498
Family size	–.275	.108	.02	5.675	.773
Caretaker to child interaction	.372	.104	.00	12.678	1.450
Abuse and neglect history	–.684	.338	.04	4.088	.504
Number of allegations in most recent report	–2.232	.361	.00	38.156	.107
Reporter – Anonymous	–3.728	1.291	.00	8.336	.024
Reporter – DCFS	1.498	.581	.01	6.661	4.475
Number of other contacts	1.714	.364	.00	22.130	5.551
Abuse and neglect history and risk of harm	–1.990	.973	.04	4.180	.137

more likely to be placed into care. If abuse and neglect history and risk of harm are accounted for together, a child with an abuse and neglect history with the most severe allegation being risk of harm was 86% less likely to come into care.

DISCUSSION

This study built upon a previous one that employed a retrospective cross-sectional design using administrative data that was analyzed using logistic regression. The present study used a smaller sample but includes data from case records. This allowed for inclusion of variables that were identified in the literature but unavailable in the administrative database. The variables included from the case files included the presence of a substance abuse problem, mental illness and caretaker and child interactions. Including a greater number of variables attempts to gain greater insight into placement decision-making. The smaller sample size is the result of data collection costs and somewhat reduces the power of the findings.

Limitations of the study include the design. A cross-sectional retrospective study can only demonstrate how some independent variables might predict the dependent variable. This design does not allow causal judgments. A richer and more costly study using a longitudinal design is needed to attempt to determine which case characteristics or worker behaviors more fully explain the placement decision.

There are many measurement problems with this study. Variables were operationalized based upon what was available in the administrative database or the case files. Therefore, the adequacy of the measures and their reliability are open to question. Critical variables such as the presence of mental illness or substance abuse were determined based solely upon worker judgment. It is likely that workers vary greatly in their ability to access these conditions. As is the case in most social research, there are additional limitations related to the logistic regression. These include some variables being badly

skewed and therefore needing to re-categorize them and problems of mulitcollinearity between the independent variables.

In spite of the normal limitations of studies such as this, the results do provide some insights into the decision to place a child into substitute care. In comparing this and the previous placement decision making study, similarities and differences are noted. The nine variables in the model resulting from the study reported here classified 86% of the placement cases correctly and 78% of the intact family cases. Overall, this model correctly classified 83% of the cases. The 13 variables in the model resulting from examination of the administrative data classified 82% of the intact family cases and only 68% of the placement cases. The overall classification rate for this model was 75%. Since the model resulting from the study reported here includes fewer variables and correctly classifies more cases, this can be thought of as a better model.

Several variables found to be predictive of the placement decision in the study using administrative data only were not predictive in this study. These variables were home visits, number of previous indicated allegations, number of previous indicated reports, lack of supervision, birth mother never married, toddlers, children 9-12 years of age, and the initial reporter being a family member or friend. However, several variables found to be predictive of child placement in the previous study were also predictive in this study. These variables are the child being an infant, the number of allegations in the most recent report, risk of harm, and the number of other contacts. In adding case record data, new variables were entered in the model that proved predictive of child placement. These variables are caretaker to child interaction and abuse and neglect history. The inclusion of an interaction term also helps clarify that history of abuse and neglect when accompanied by a most severe allegation of risk of harm reduces the probability of placement.

From a child welfare policy and practice point of view, the results of this study are positive. The variables included in the placement model are characteristics of the child, family, or child welfare system that one would expect. The child being an infant makes them more vulnerable to harm and is related to placement. Larger family size was not related to

placement and may indicate the presence of more support for the caretaker. The more problematic the interaction between the caretaker and the child the more likely the child was placed. A larger number of contacts made by the worker in the process of investigating the report was related to a higher probability of placement. This may indicate the workers uncertainty about the child's safety and the need to collect as much information as possible to clarify the situation.

Likewise, it is cause for hope that variables, such as the office that investigated the report and the race of the child or caretaker, did not enter the model. Some investigators find that these variables influence child welfare decision making when they should not (DHHS, 1997; Groeneveld & Giovanni, 1977). Neither of the two placement studies found variables of these types to be predictive of the placement decision.

CONCLUSION

The final model developed through logistic regression identified 9 variables that predicted the decision to place a child into substitute care. This model accurately predicted almost 79% of the intact family cases and nearly 87% of the placement cases. When the model was changed slightly by adding an interaction term, it accurately predicted nearly 78% of the intact family cases and almost 86% of the placement cases, or 83.3% of all cases.

This study, which included case record data, showed some difference from the earlier study, which used exclusively administrative data. It includes four of the same variables and adds two additional variables derived from case records. The case record data allows for expanding the areas examined to gain a better understanding of the decision to place children into substitute care.

While this study allows for increased understanding of the decision to place children into care, there are several limitations to this study. The sample only includes those cases where there was corresponding administrative and case record information. Cases where these did not match up were excluded. There were also limitations due to poor record

keeping. Although it is required, in many (124 of 393 cases) of the cases there was not a Child Endangerment Risk Assessment Protocol (CERAP). This led to excluding information from this form altogether or combining existing CERAP data with other similar information found in the Family Assessment Factor Worksheet, which also had missing data in several cases. Finally, as this study involved a limited number of cases and used secondary data, it is not generalizable but can only indicate variables that have predictive value.

Continued research should be done to deepen our understanding of placement decision-making. Further research adding variables related to the cognitive processes of the decision-maker will shed additional light on the decision of whether or not a child is placed into substitute care.

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