Researchers have identified three variables to explain the diversity among children born to cocaine/polydrug using women: (1) the dysfunctional family histories of the maternal user; (2) the purity, dosage, and regularity of illicit drugs used during pregnancy; and (3) subsequent mother-child interaction following birth and during formative developmental milestones. This investigation examines the authenticity and relatedness of drug-exposed children in both foster and biological homes and compares and contrasts the findings to another vulnerable population, pre-term infants. The researcher studied the intervention needs of four young children who experienced cocaine/polydrug exposure in-utero, along with the needs of their maternal caregivers. These four children were then compared to a control group of two like-aged, pre-term infants. Evidence indicated that the mothers perpetuated dysfunctional/generational family life-styles in the biological homes of drug-exposed children. All of the children appeared to be physically normal at the time of research and social service records indicated adequate supervision of the children. The socially constructed identity, "crack baby," did not emerge for the in-utero-exposed children. Variables associated with fetal drug-exposure may become more evident when the exposed children enter school. (Contains 63 references.) (RJM)
Rural Cocaine/Polydrug Abusing Families and Young Children: An Ethnographic Study of Intervention Needs

This research study was partially provided for by funds from the Clemson University Provost Award for Research, 1990-1991 and The Clemson University Provost Teaching Award, 1991-1992.

This paper was presented at The Eastern Educational Research Association Annual Conference, Clearwater, Florida, February 19, 1993

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Acknowledgements

The author wishes to thank the research contributions of Nancy C. Hamby, M.S.W., Program Coordinator of Child Protective Services, The South Carolina Department of Social Services, Greenville, South Carolina.

Rural Cocaine/Intervention Needs

Abstract

Researchers (Chasnoff, 1987; Chasnoff, Chisum & Kaplan, 1988; Howard, Rodning, & Kropenske, 1989; Zuckerman, 1991a; Zuckerman, 1991b; Zuckerman & Frank, 1991) have identified three variables that attribute to the diversity among children born to cocaine/polydrug using women: 1) dysfunctional family histories of the maternal user; 2) the purity, dosage and regularity of illicit drug used during pregnancy; and 3) subsequent mother-child interaction following birth and during formative developmental milestones.

Children born to cocaine/polydrug women compose a diverse group. The purity, dosage, and regularity of illicit drug use during pregnancy combined with a history of family dysfunction have been identified as correlates to fetal development and subsequent mother-child interaction. Cocaine/polydrug children may experience limited physiological damage or have acute, chronic medical needs that jeopardize their lives. Using Tjossen's (1976) criteria established for developmental delay, three multidisciplinary professionals combined the in-depth methodologies associated with qualitative-ethnographic research to profile four cocaine/polydrug toddlers and their maternal caregivers (biological and foster-care). A comparison-control group of two at-risk toddlers and their biological families (attending were a NICU follow-up program) also investigated.
The purpose of this collaborative pilot investigation was to determine the immediate intervention needs for service delivery as perceived by the maternal caregivers for the two vulnerable child populations—young children exposed in-utero to illicit drugs and pre-term infants who had experienced the trauma associated with premature birth, and to determine future research needs.

Review of Literature

Infants born with serious impairments provoke deep sorrow, especially when it is believed that the newborn's impairments are attributable to conduct by others; the problem of drug-exposed infants has created anger and a strong sense of anxiety about the long term societal problem, substance abuse (Behrman, 1991). Many multidisciplinary professionals are "writing off" cocaine/polydrug children. This is a reaction to the multifaceted and complex problems including the intergenerational legacy of chemical dependence, physical, sexual, and emotional abuse a family pattern being propigated to the young children, poverty, community violence, inadequate parental education, diminishing employment opportunities, and social problems (Howard, Rodning, & Kropenske, 1989; Sameroff & Chandler, 1975, as cited by Kronstadt, 1991).

Substance abuse undermines normal patterns of interaction and alters commitment priorities. Drugs give temporary meaning and
significance to the lives of addicts by deadening painful feelings such as low self-esteem and depression; drugs create the ability to deal with emotional burdens and to relieve concerns about lack of assertiveness (Friedman, 1974; Hirsch & Imhof, Kaufman & Kaufman, 1979; Kirschenbaum, Leonoff, & Maliano, 1974 as cited in Textor, 1987). With a primary commitment to their drugs and not their children, chronic polydrug abusers may neglect their children, live a disruptive and chaotic lifestyle, and exhibit impairment in memory, attention, and perception (Howard et al., 1989).

It is estimated that there are three to four million cocaine users in the world (Rawson, 1990). Cocaine induces subjective well-being and alertness. "Human cocaine addicts report that almost all thoughts are focused on cocaine during binges: nourishment, sleep, loved ones, responsibility and survival lose all significance" (Gawin & Elwood, 1986, p. 318 as cited in Gawin, 1991). Cocaine is usually taken in combination with other drugs including alcohol, heroin, marijuana, tobacco, barbituates, and/or amphetamines according to Gawin (1991, p. 1581):

"The fundamental effect of cocaine is the magnification of the intensity of almost all normal pleasure. The environment takes on intensified but non-distorted qualities. Emotional and sexual feelings are enhanced. Self-confidence and self-perception of
mastery increase, so anxiety is initially decreased. Social inhibitions are reduced, and interpersonal communication is facilitated. Satiation of appetite occurs, so pleasures associated with eating are not enhanced."

Similarities present in substance abusing families may include the following: poor parenting skills, unreasonably high expectations for their children, lack of supervision, lax/coercive disciplinary techniques, social isolation, lack of cohesion, family psychological problems, antisocial behaviors, stress, and conflict (Kandell, 1990). "Heavy drug use and especially addiction interferes with a mother's ability to provide consistent nurturing and caretaking needed to promote children's development, self-esteem, and ability to regulate their affect or impulses" (Zuckerman, 1991, p. 3). The origin of addiction has many theories; however a growing body of evidence indicates many addicted women have been sexually and/or physically abused as children. Research indicates a high incidence of incest, and estimates run from 50-90 percent of maternal addicts were sexually abused as children (Textor, 1987; Zuckerman, 1991).

An individual raised in a dysfunctional (alcoholic, substance abusing, abusive) family develops characteristics of rigidity, silence, denial, and isolation, characteristics which describe a closed system (Kritsberg, 1985). Dysfunctional families operate by inhibiting any
Children raised in a dysfunctional or substance abusing family need to control other people when they reach adulthood. The methods they select to control their own children are generational - the perpetuation of their own internalized childhood abuse which they transfer to their children. Denial is another manifestation of generation dysfunction and occurs when family members deny what they are feeling. With silence imposed, family members remain mute, and do not discuss what is happening in the family either to one another or with people outside the family unit. This imposed quietness produces deep feelings of loneliness. The dysfunctional and/or addictive family is a closed system. Bonding and interaction did not develop in their family of origin, a direct correlation with the inflexibility and denial of lifestyles (See Table 1).

Recovery and rehabilitation from cocaine and/or other licit and illicit substance abuse may include programs incorporating all or some of the following rehabilitation methods: detoxification from the substance(s), individual and group psychotherapy, family support and intervention, vocational and/or educational preparation, parent
### Table 1

Emotional, Mental, Physical, and Behavioral Characteristics of Individuals Reared in Dysfunctional Families\(^a\)

<table>
<thead>
<tr>
<th>Emotional</th>
<th>Mental</th>
<th>Physical</th>
<th>Behavioral</th>
</tr>
</thead>
<tbody>
<tr>
<td>fear</td>
<td>thinking in</td>
<td>tense shoulders</td>
<td>crisis oriented</td>
</tr>
<tr>
<td>anger</td>
<td>absolutes</td>
<td>living</td>
<td></td>
</tr>
<tr>
<td>hurt</td>
<td>lack of information</td>
<td>lower back pain</td>
<td>manipulative behavior</td>
</tr>
<tr>
<td>resentment</td>
<td>compulsive thinking</td>
<td>sexual dysfunction</td>
<td>intimacy problems</td>
</tr>
<tr>
<td>loneliness</td>
<td>indecision</td>
<td>gastrointestinal</td>
<td>tries to fit in</td>
</tr>
<tr>
<td>sadness</td>
<td>learning disabilities</td>
<td>disorders</td>
<td>compulsive-addictive</td>
</tr>
<tr>
<td>shame</td>
<td>confusion</td>
<td>stress related</td>
<td>dysfunction</td>
</tr>
<tr>
<td>guilt</td>
<td>hypervigilence</td>
<td>behaviors</td>
<td></td>
</tr>
<tr>
<td>numbness</td>
<td></td>
<td>allergies</td>
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</table>

-skill training, early intervention programs for drug-exposed young children, and Twelve Step Support Groups (Alcoholics Anonymous, Narcotics Anonymous, Al-Anon, Co-Dependents Anonymous, Adult Children of Alcoholics, etc.).

Rehabilitation may occur with several programs or using one method. The purpose and tradition of Twelve Step Programs is to develop a bond of support with other participants, reduce the incidence of relapse, and develop an understanding of past, present, and future self-relationships with the accompanying knowledge of addictive-dysfunctional behavior.

Although the Twelve Step ideology is neither spiritually oriented nor based upon specific religious disciplines, it does embrace the philosophies of the East in addition to religious, ethical, and moral thought. Suggested in the Twelve Step programs are the presence of a power greater than the addict (Higher Power, God, . . .), living one day at a time, new opportunities for self-realization and self-growth which develop as life becomes more manageable, serenity, and knowledge of a sense of achievement as control is released to the Higher Power (Al-Anon Family Group, 1981). The unified support experienced by participants creates a cohesiveness that encourages self and other healing.

Although some maternal addicts seek voluntary rehabilitation for
their illness, others are involuntarily retained by the judicial system. This occurs when medical or social service professionals, following procedural safeguards, detect child abuse and/or neglect, a result of the continual use of cocaine/polydrugs during pregnancy and/or thereafter. Positive identification of fetal drug-exposure can be detected by medical and social service professionals through the use of maternal case histories which signal substance abuse. Fetal withdrawal, urine toxicology testing of the mother and newborn, and meconium testing of the newborn's first bowel movement are other conclusive methods for detecting substance use (See Table 2).

The use and abuse of alcohol and other drugs crosses all societal barriers and affects families at all socioeconomic levels. It impacts the disadvantaged and minority populations which are best equipped to negotiate complex law enforcement, public health, medical, educational mental health, drug treatment, social service, and judicial systems.

Drug-exposed infants are having a profound impact on the child welfare system by creating new problems and exacerbating others. Social service professionals have an increased case load size. New
Table 2

Guidelines for Obtaining Urine Drug Tests<sup>a</sup>

The following are guidelines to assist health-care providers in determining the need to test an infant's urine for substances abused by mother during the antepartum period.

1. Mother with no prenatal care, or infrequent (< 5 visits) or late prenatal care (after 28 weeks).
2. Undocumented prenatal care or care in clinics in areas with a high incidence of drug use.  
3. Drug use by history anytime in the antepartum period. 
4. Previous drug-affected infant.
5. Previous abuse of marijuana, cocaine, heroin, amphetamines, or alcohol.
6. Participation in a substance abuse program.
7. Physical evidence of drug use in the mother, eg. track marks or hepatitis.
8. Drug use in the home by family members or support persons. 
9. Abnormal neuobehavioral activity seen in the mother, infant, or support person, eg. signs of intoxication or withdrawal. 
10. Involvement with the juvenile or criminal justice system. 
11. Prostitution 
12. Mutually sexually transmitted diseases, including human immunodeficiency virus.  
13. Multiple episodes of fetal wastage (abortions and stillbirths), abruptio, prematurity, placenta previa, precipitous delivery, or premature rupture of membranes.  
14. Poor maternal weight gain. 
15. Prematurity, intrauterine growth retardation, small for gestational age, or microcephaly.

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roles have been established for creating appropriate responsibilities in various child service agencies. These include the coordination of and timely response to meet the infant's or child's needs for adequate parenting within a stable environment. Parent needs include long term treatment for drug abuse and addiction (McCollough, 1992). Problematic issues are often encountered by the welfare system as it attempts to work with substance abusing parents. These may include parents who manifest signs of mental instability, have no telephones, and fail to keep appointments. Also relevant to the welfare system is the chaotic lifestyle of maternal addicts which may prohibit adequate care of the children. This is further heightened by self and other drug related encouragement which enables the continued provision for and acquisition of using the drug(s) of choice (Howard et al., 1989).

Substance abusing women and families have many complex problems and require a variety of carefully integrated services; the most effective service delivery programs identify and provide for the substance abusing women and their families according to the National Council of Juvenile and Family Court Judges Permanency Planning for Children Project (1992) perinatal, public health, and medical resources include the following:

"Infants, children, and families who are exposed to licit and illicit
drugs need to have a comprehensive continuous source of care. This source of care should be able to provide preventative healthcare services, monitor child development and health, and make suggestions regarding perinatal support. Increasingly, traditional programs are being modified and new services are being developed to meet their needs. Clinical methods, duration of treatment, caseload size, the nature of concrete services provided, and other program components vary widely. The most valuable programs are tailored to meet the needs of the individual families and individual family members. They offer a holistic approach in involving the client’s home, neighborhood and community as well as skills training and drug treatment (pp. 27-28).

The perpetuation of child abuse is previously noted and evolves from generational dysfunction which is demonstrated in social service and medical records. The cocaine/polydrug exposed child and family illustrate a legacy of many dysfunctional families. Dysfunction may be due to the non-normative stressors encountered in the lives of substance abusing families, and illustrated as coping mechanism developed in response to invasive internal and external stimuli (See Table 3).
Young children are especially vulnerable to substance abusing parents. They are the most defenseless, least able to communicate their reactions and fears, and are thought by parents and others that they will "forget" the experience of repeated exposure to violence (Zuckerman, 1991). These problematic conditions place cocaine/polydrug exposed young children at high risk for organismic (related to birth) and environmental stressors (caregiving), and synergistically magnify vulnerability to perpetuated, generational dysfunction (O'Grady & Metz, 1987).

Child abuse, with a pathological locus of control in the family of origin, results from the perpetuation of unclear messages, vague information giving, lack of direct talk, avoidance of eye contact, frequent interruptions, illicit and/or licit substance abuse, and family members speaking for other family members (Textor, 1987). Cocaine/polydrug addicted parents, similar to other child abusers, typically received little love or tenderness and were frequently abused as children; as substance abusing parents, they combine a high level of demand with a great desire for immediate response (Adams, 1986).

Another problem posed to the social service system is the difficulty in finding and retaining capable foster parents when the drug-
Table 3

Specialized Programs Designed by the Child Welfare System that Recommend Service Delivery for Strengthening Families

- Specialized medical care and health services for both the mother and children.
- Periodic home visits by a public health nurse.
- Early childhood and parent education.
- Peer group support and education.
- Temporary and therapeutic foster care and specialized respite care.
- Child care.
- Employment and training services.
- Transportation.
- Income assistance.
- Extended family support and counseling.
exposed child demonstrates significant medical and caregiving needs, deficits, and behavioral problems; these symptoms are associated with many children at-risk for developmental delay or establish delay (Siegel & Roberts, 1989). Even under the most liberal adoption laws, it is conceivable that many children born to addicts will continue to live in foster care for long time periods; therefore, the purpose of foster care needs to be the establishment as normal a life as possible with the social service agencies restructuring the child welfare system to reward the most nurturing, secure foster care environments (Besharov, 1990).

Foster parents do not control the length of time the child will remain in their care nor do they have the legal rights for their foster child. As a result, role ambiguity develops which may alter the quality and quantity of early family-child experiences (Lubeck & Chandler, 1990). Moving a foster child from one home to another disrupts the stable ties that may have developed (Hampton & Travormina, 1980) and increases regressive behavior in the child.

Although official statistics are not kept, most officials estimate 50–75 percent of identified crack babies go to their birth homes. About 30–50 percent go into foster care where parents are predominately of the black roll. It is reported there is low reimbursement, a lack of support services, and few agency
restrictions. The significant medical and caregiving needs of cocaine/polydrug infants and young children make it difficult to find capable foster parents for them (Siegel & Roberts, 1989).

It has been established by psychologists and the health care profession that infants do poorly with stress when mothers are emotionally non-responsive or express a repertoire of negative emotions. The psycho-social profile of cocaine/polydrug infants and their addicted mothers indicates a degree of aggressiveness, emotional degeneration, more immature play, and less interaction than those children whose mothers show more positive and frequent emotions (Denham, 1989). Since caregivers are known to function as managers of their children's relationships, it is important to enhance and develop modification, mediation, and solution behaviors which form the maternal caregivers agenda of social skill/caregiving behavior's (Russon, Waite, & Rochester, 1990). The maternal caregiver's emotions are potentially important as interpersonal regulators of social-emotional development; these behaviors illustrate the emotional-specific valence and intensity of certain experiences, and model emotions appropriate to the occasion to the child (Denham, 1989).

Biologic variables inherent to the mother, cocaine/polydrugs (alcohol, opiates, marijuana, heroin, cigarettes, prescription and
nonprescription medicines), the amount of licit and illicit drugs taken in combination, the stage of development, and specific pharmacologic contradictions and interactions will have an effect on the developing fetus. During embryonic development, spontaneous abortion may be caused by "using" drugs.

Congenital malformations occur throughout the first trimester, the period of development during which all major organs are forming. The organ with the greatest vulnerability to fetal damage is the brain and its connecting central nervous system (Zuckerman, 1991).

A relatively recent problem, prenatal cocaine exposure and its effects has not been systematically identified. Good scientific evidence supports an association between prenatal cocaine exposure and smaller head size at birth; microcephalacy of the newborn is common (Zuckerman, 1991). "Infrequently occurring birth defects of the bowel, kidney, heart, and skeletal systems have been diagnosed in infants exposed prenatally to cocaine (Zuckerman, 1991, p. 30). Cocaine exposed infants are normative for their gestation period, have a lower-than-expected birthweight, usually a result of intrauterine growth retardation. "Infants with impaired fetal growth have more likelihood to experience developmental and learning problems as they get older, compared to infants with
normal head size" (Frank, Bauchner, Parker, et. al., 1990 as cited in Zuckerman, 1991).

According to Hunt (1989), researchers and practitioners in the field have reported the following observable effects of intrauterine cocaine/polydrug exposure in infants and young children:

"Poor organizational responses, increased tremulousness, irritability, state lability, poor consolability, poor visual attention, transient EEG abnormalities, abnormal flash-evoked potentials, abnormal brain stem auditory evoked responses, and late developmental delay are reported in infants of cocaine users; the increased availability of neurotransmitters is frequently sited as causitive. New studies, however, suggest more permanent disabilities such as attention deficits, difficulties in concentrating, abnormal play patterns, and flat apathetic moods" (p. 4)

To legitimize the deviant social status of young, drug-exposed children, the label "sick" is applied, a method to exempt the young child from normative behavior, thinking behavior, and physiological appearance and reduce societal stigma. To maintain the label, "sick", a socially appropriate label, the maternal or foster caregiver is obliged to procure medical, rehabilitation, psychological, and other prescriptive care that will render the young child "well". If there is compliance to "wellness," is accomplish, the deviant status is
removed by society.

As illustrated in Parson's "sick role" theory, the construction of reality is a social process. The social meaning attributed to young polydrug exposed children is a cultural product involving externalization or "out there" thinking (Berger & Luckman, 1966). The degree to which society embraces the maternal addict and her drug-exposed young child is proportionate to the amount of internalizing the phenomenon cocaine/polydrug exposed young children. A reality construction cannot be developed in an external, mode which exits outside in societal constructs and events.

"The sick role," Talcott Parson's (1951) sociological theory of deviance, may assist cocaine/polydrug young children in the removal of a stigmatized identity in the school and community, a label which denotes a "less than" status. Constructs of the "sick role" theory include the following: 1) being born exposed to cocaine/polydrugs renders an infant sick, a deviant status which is not attributable to willful acts of the infant; 2) the "sickness," cocaine/polydrug exposure, may have caused etiological anomalies such as physiological, mental, emotional, or combinations of each to the infant; 3) the "sickness," cocaine/polydrug exposure, violates social norms for the typical infant-mother dyad; and 4) unwillful deviance, "sickness" due to maternal polydrug exposure, may be manifested in
central nervous system damage and observable in aberrant behavior, physiological abnormalities, cognitive deficiencies and/or combinations of each.

Recognizing that families with children who are disabled, including young children exposed in-utero to cocaine/polydrugs, is included in Public Law 99-457, a legal mechanism for designing a comprehensive support system based on formal and informal assessment (Bailey, Winton & Rouse, 1990). Family members may, if they wish, become full team members of the multidisciplinary collaborative that implements the Individual Family Service Plan (IFSP), a mechanism for holistic teaching and other support services the at-risk child and family through early intervention (Bailey, et al., 1990; Hash, 1990). Part H, a provision of PL 99-457, establishes family intervention to assist with the needs demonstrated by parenting and financial concerns, and the social, psychological, educational, and physical needs of the young "at-risk" child (Mahoney & O'Sullivan, 1990).

Methodology for Research

A qualitative-ethnographic methodology was used to investigate the intervention needs of young children exposed to cocaine/polydrug in-utero (N=4) and their maternal caregivers (biological for two subjects and foster for two subjects) and a control group (N=2)
consisting of like-aged pre-term infants who had been patients in the neonatal intensive care unit (NICU) of a large southeastern United States hospital system. Criteria for admission into the NICU Follow-up Clinic included one of the following: mechanical ventilation for more than 72 hours, birth weight less than 1500 grams, hospital stay more than 29 days and/or hemorological complications.

The lives of young children exposed in-utero to cocaine-polydrugs and their families cannot be adequately understood through narrow and restrictive hard data produced by the manipulation of the environment (Edgerton, 1984). "Conferring meaning is not an autonomous act; human beings are social and meaning develops through socialization with others" (Bogdan, 1986, p. 345). Symbolic meaning is associated with drug addiction, generational dysfunction, and aberrant physiological and behavioral observed in young children labeled "crack-cocaine kids." Identity does not lie in the object but the definition the viewer imputes to it (Bogdan, 1974).

Traditionally associated with the field of anthropology, ethnography is a social investigation which occurs in the "field," or the society in which the subjects live (Burgess, 1982). Malinowski (as cited in Spradley, 1979, p. 3) describes ethnography's meaning as "to grasp the native's point of view, his relation to life, and realize his vision of the world."
The Verstehen theme, "the human capacity to know and understand others through sympathetic introspection and reflection from detailed description and observation" (Patton, 1980, p. 45) is rooted in phenomenology and seeks to understand human behavior from the actor's own point of view (Bogdan & Taylor cited in Guba, 1978). The holistic view represents a research strategy that is inductive, the examination of a phenomenon that culminates in successive examinations of similar and dissimilar phenomenon in the development of a theory of explanation for what is being studied (Goetz & Le Compte, 1984).

Qualitative-ethnographic studies are naturalistic and discovery oriented. Data is amassed by a variety of research techniques. A multi-model or eclectic approach produces an in-depth inquiry which focuses on respective tools that attempt to understand the setting through direct personal contact and experience with the people and the program (Goetz & Le Compte, 1984; Patton, 1980).

Procedures in This Study

The research methods employed in the present study were informed by perspectives obtained from the field of ethnography as well as strategies associated with qualitative research. To investigate the intervention needs of young children exposed in-utero to cocaine/polydrugs, six diverse data collection strategies were used. Research
Rural Cocaine/Intervention Needs

findings were incorporated into a triangulation mode involving the use of multiple indicators to measure a single concept. Numerous sources of information were combined to verify a single phenomenon, thus strengthening its credibility (Stainback & Stainback, 1984). It was proposed that multiple data collection methodologies would reveal a broader spectrum to assess and understand the self-esteem of school children with handicaps. (See Appendix A).

A holistic picture was obtained with five data collection instruments which included the following: 1) A Structured Open-Ended Caregiver Interview which revealed caregivers' perceptions associated with their own family of origin and formative development; 2) A Structured Multiple Choice Intervention Need Questionnaire for Caregivers to determine perceptions of intervention needs; as determined by both groups of caregivers; 3) A Document Review of the Department of Social Service's Records for the Young Child Exposed to Cocaine/Polydrugs and His/Her Biological Mother and/or Foster Care Family) a method to determine the maternal drug addiction patterns, family of origin information concerning the maternal addict, and stability patterns existing in the home situation for all drug-exposed young children; 4) A Medical Document Review of Pre-Term and Drug-Exposed Children; to note pediatric and obstetric similarities and differences existing between
the delivery and developmental etiologies evidenced by the two sample groups; 5) **An Open-Ended Caregiver Survey Denoting Family Needs for School, Role Identity for their Child and a Twelve-Step Moral Inventory** a method to determine parents' perceptions of their child's "sick role," caregiver's perception of school (early intervention needs), and a moral inventory, an instrument familiar to the caregivers who had received drug rehabilitation; and 6) **Non-Participant Observation of Child-Caregiver Interaction**, a method to discover the interactive complexities of demonstrated behavior in the caregiver-young child dyad. Non-participant observation requires a researcher make a series of reflective decisions concerning the units of specific behaviors and their analysis. Qualitative description adds richness and depth to the naturally occurring phenomenon (Goetz & Le Compte, 1984).

The rationale for the instruments used is the following: Surveys assess the extent to which subjects hold similar beliefs, share similar constructs, or execute comparable behaviors (Siebert as cited in Burgess, 1982). **The Open-Ended Caregiver Survey Denoting Family Needs for School and Role Identity for their Child, The Twelve Step Moral Inventory** is an example of participant construct device, an instrument used to measure the strength of feelings people have about phenomenon (Goetz & Le Compte, 1984).
Conversation is a crucial form of data collection to the ethnographer. Predetermined questions were presented to the caregivers, and each respondent progressed through the same questions in an identical sequence with other respondents (Patton, 1980). The Structured Open-Ended Caregiver Survey Denoting Family Needs for School and Role Identity for the Child Interview was used to learn what respondents were thinking and what couldn't be directly observed (Patton, 1980).

Document Review provides a behind the scenes look at a program (sic social history and medical record) that may not be directly observable and about which the researcher might not ask appropriate questions without the leads provided through the documents (Patton, 1980).
Data Collection Procedures

For a period of 13 months, a Southeastern University College of Education faculty member with expertise in typical and atypical children and the Coordinator of Protective Services for a large County Department of Social Services conducted interviews and observed parent-child interactions in the homes of the four cocaine/polydrug exposed and two pre-term infants and their families under investigation. Throughout the same time period, the following data collection procedures occurred: 1) a Developmental Pediatrician, the Director of Center for Developmental Pediatrics (a Children's Hospital affiliate), examined the obstetrical records of the biological mothers (both exposed and pre-term samples) and developmental pediatric records of the two groups of children being investigated; and 2) the social service records of the cocaine-exposed young children and families were reviewed by the university faculty member and social service administrator. The purpose was to identify similarities and differences that were present in the longitudinal/historical patterns of maternal addiction.

The Sample and Setting

The primary sample in this research investigation was the young child exposed in-utero to cocaine/polydrugs; the child’s maternal caregiver was the secondary subject. There were 4 sample member
Rural Cocaine/Intervention Needs

children; two resided with their biological mothers, and two were in the protective custody of the Department of Social Services and resided in foster homes. The chronological age range of the young children was 2 years 8 months to 2 years 10 months; the mean age was 2 years 9 months. A comparison control group of at-risk young children was also investigated to determine the similarities and/or differences existing between two vulnerable populations of young children and their families. Both sample members in the comparison - control group were 2 years 9 months of age; the mean for the comparison - control group was 2 year 9 months the identical chronological age of the drug-exposed sample. The racial distribution was 100% minority (black) for the drug-exposed group and 100% caucasian for the comparison - control group. Three males and one female composed in the drug-exposed sample, and one male and one female comprised the comparison-control group (See Table 4).
Table 4

Summary of Demographic Characteristics of Cocaine/Polydrug-Exposed and Biologically At-Risk Young Children (N=6)

<table>
<thead>
<tr>
<th>Characteristics</th>
<th>Cocaine/PolydrugExposed (N=4)</th>
<th>Biologically At-Risk</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sex</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Males</td>
<td>3</td>
<td>1</td>
</tr>
<tr>
<td>Females</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>Race</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Caucasian</td>
<td>0</td>
<td>2</td>
</tr>
<tr>
<td>Minoritya</td>
<td>4</td>
<td>0</td>
</tr>
<tr>
<td>CA Rangeb</td>
<td>2y 8m - 2y 10m</td>
<td>2y am</td>
</tr>
<tr>
<td>Mean CA</td>
<td>2y 9m</td>
<td>2y 9m</td>
</tr>
</tbody>
</table>

aMinority: Black
bRange in Years and months
Biological and foster parents for both sample groups represented a cross-section of socioeconomic levels extending from upper lower to middle levels. One sample member from the comparison control group represented an intact family unit. The remaining five families were simple parent mothers who were the head of household.

Data Analysis Procedures

Data analysis is an ongoing activity that occurs throughout the investigative process. Analysis is recursive - the findings are generated and systematically build as successive pieces of gathered information. In both the analytic inductive method (nonparticipant observation) and the constant comparative method (structured interview instruments, the particular ongoing analysis process dictated as a function of the investigative purpose and specific research strategy employed.

Limitations

To establish groups that were as uniform as possible, a urine toxicology test was needed for all biological mothers. Urine testing would have determined whether the two comparison - control group mothers were positively drug free, a speculation made by researchers. Unless a newborn can be identified as experiencing drug withdrawal, the infant’s urine or meconium is tested, the mother indicates she is currently "using" or has used drugs during
her pregnancy, or the mother's history indicates drug usage, the large tertiary care hospital serving all biological mothers in both samples, does not routinely conduct urine toxicologies birth for the purpose of determining prenatal drug use.

**Research Results**

**Document Review (Medical)**

A Developmental Pediatrician reviewed the obstetrical records of all biological mothers (N=6) and their newborns and the developmental records of the two groups of sample children (N=6). The physician's objective was to note similarities and differences between the two groups of mothers (cocaine/polydrug exposed as drug free) and their infants. Specifically, the numbers wanted to determine was there a difference between the two sample groups.

It has been established that the young sample member children were born within a two-month period of time during 1989 in a large tertiary care hospital serving the upstate area of South Carolina. Homogeneity of the young childrens' chronological age was a research designated variable. The intention was to observe developmental behaviors similar to those appropriate to chronological age. The cocaine/polydrug exposed infants' gestation period ranged from 28 to 40 weeks. The gestation periods for the at-risk infants were 29 and 32 weeks. At the time of birth, all maternal
addicts were single parent, head of households; the comparison-control groups (N=2) were intact family units were intact at the time of birth. After delivery, one comparison-control group mother become a single parent.

Prenatal care was of poor quality for the sample of maternal addicts (N =4). The comparison-control group was composed of one mother who received one prenatal visit. Her limited care was due to the incorrect diagnosis by her physician who thought she had abdominal tumor. The other comparison-control mother received good prenatal care.

All but one drug-exposed infant was born in the hospital. Two drug-exposed babies were delivered by C-section, one was a vaginal delivery, and one was delivered in the mother's home comode.

At-risk comparison control newborns registered APGAR scores of 8, 8 and 2, 6, 8. One infant male was born by C-section one hour after his mother began to experience labor. He was in shock at the time of birth, and was diagnosed to have hyalaine membrane disease. The newborn female had multiple physical anomalies which included necrotizing entercolitis, an inflammation of the
intestinal wall tissue which necessitated that she have four surgeries (the first at one month) as the tissue died. Developmental information indicates the male to be appropriate for this chronological age. The girl has tested to be low average in ability, however, her parents perceive her to be exceptional.

Both sample groups of young children experienced a traumatic birth. Three of the four cocaine/polydrug sample experienced drug withdrawal which included symptoms of rapid heart beat, jitteriness, and poor feeding. As cited, alcohol and cocaine was found in one newborn, cocaine in two of the newborns, and alcohol, cocaine, and barbituiates in one infant. The comparison-control mothers were not tested for drugs.

Within the substance exposed population, three babies experienced the effects of withdrawal from cocaine/polydrugs. Their symptomatic behaviors included jitteriness and fussiness at feedings. Other medical problems detected for one newborn were supraventricular tachycardia, an increase in heart rate (300 BPM); hypertonic extremities, exaggerated muscle responses; and necrotizing enterocolitis, the inflammation of intestinal wall, a life-threatening complication. The only newborn not to experience withdrawal from cocaine - exposure was also reported to experience the least medical trauma at birth. Supernumerary digits (more than
five fingers or toes on hands or feet) were present at birth, but were surgically removed. Abruptio placentae, the separation of the placenta from the uterus is recorded in the literature as a direct correlate to maternal cocaine use, was believed to be the cause of one premature birth. The infant was placed on a ventilator; one maternal addict had a premature delivery (28 weeks gestation period) as a result of abruptio placentae. One male infant, whose mother was "high" on cocaine/polydrugs, did not realize she had delivered her baby until a friend found him in a comode.

The medical and pediatric records for this population of southeastern rural infants exposed in-utero to cocaine/polydrugs examined (N=4), there appears to be less physiological insult typical child behavior than has been indicated in large urban centers. Maternal obstetric complications, likewise, appear to be within the norm for all live births. This may be the result of potential prosecution facing substance using mothers who, if non-compliant to with stringent legal mandates, face incarceration for "dirty" urine.

**Document Review (Department of Social Service)**

Department of Social Service Records were reviewed for cocaine/polydrug exposed young children and their biological mothers. It was the researchers' purpose to determine the historical or generational background of one mothers and note, by comparison,
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problematic situations encountered by their young exposed children. A consistency of mother and child themes was generated, a device to assist Social Service workers to implement intervention appropriate to the maternal addict and her family.

The information contained within the social service records indicated two types of data: 1) data common to the population, cocaine/polydrug exposed young children (N=4) and their biological mothers and 2) data specific to individual family units. Presentation of findings focused, first, on the population, and second, case study specifics.

Collectively, the analysis of data for the population, cocaine/polydrug young children and their families was divided into five major domains according to the document and artifacts found within social service records; 1) social service worker observations that were unique to sample member children and typical children; 2) difficulties encountered working with cocaine/polydrug exposed young children and their families which were unusual or dissimilar to other typical children and families; 3) unusual difficulties experienced when foster care was initiated for cocaine/polydrug infants or young children; 4) resistance demonstrated by cocaine/polydrug using mothers to social service drug and alcohol commission treatment plans; and 5) difficulties experienced in
maintaining drug-exposed babies in foster homes. The data was documented in running record style, and researchers determined entries from at least ten case workers for some cases (although it is possible there were more).

Social workers identified the following differences had been observed in drug-exposed babies that they had not observed in the pre-term infant (e.g. "This particular infant cried very little in comparison to other infants that age.") 1) weight variations; 2) hyperactivity; 3) difficulty consoling; 4) seizures; 5) different cry; 6) need for extra care; 7) stiff limbs; 8) sleeping all the time; 9) irritable; 10) cry more often; 11) medical conditions warranting extended care; 12) child has no desire to be rocked, held, or cuddled; 13) ability to have sound sleep increases with darkness of the room; 14) startle reflex; 15) little crying; limited smiling; and 16) exaggerated reflexes. The data indicates that although this is a homogeneous sample, variations demonstrate heterogeneity. Current researchers (Bays, 1992; Chasnoff, 1987; Zuckerman 1991; 17) have identified similar comparison between drug-exposed children.

Social workers expressed concerns working with the drug-exposed infants and families (biological or foster) which included the difficulty keeping some babies and young children in placement situations. The reason sited most often for placement difficulty was
the infant's continual crying. Feeding problems were noted, including a longer period of time "to get off the nighttime bottle."

Families presented the problem of understanding drug treatment needs. A drug-exposed child, with adequate care, may progress in a typical pattern -- a source of confusion to the biological family who identified the drug-exposed child's "wellness" to the cessation of the biological mother to be in drug treatment. Finally, foster parents must be willing to keep regular appointments with medical experts as many drug-exposed children experience physical, psychological, or developmental anomalies that require remediation.

Drug treatment is legally required of women who give birth to a drug-exposed child or are found to be actively "using" drugs while rearing children. Non-compliance places the mother at-risk to the drug treatment program, for child remove and the charge with abuse/neglect. One maternal addict includes in the sample resisted two drug treatment programs and was sentenced to prison for 10 years. Workers stated that maternal users were usually cooperative and remorseful, the result of potential loss not of their child to the welfare and legal systems.

Unusual difficulties encountered as a result of foster care placement included the problems associated with medical care (long waiting period at ambulatory pediatric care clinic of hospital), the
foster family emotionally bonding to a child only to have the child's placement disrupted by the "drug free mother" who regained custody, and the frequent foster care placements, if the drug-exposed child was difficult to console or had extensive medical problems.

Department of Social Service

The document review from specific drug-exposed children and their families created a phenomenological picture. Phenomenology answers questions about how human experience disclose reality by correlating conscious perceptions and their existents (what is perceived or felt to be).

Child PT, DOB 10-16-89

Social History

PT is a black male, is the third child born to his mother, R_____. R____ was expelled from the 11th grade for strong-armed robbery of another girl's money. R_____'s behavior is described as destructive and manipulative. She is described as smart and especially street wise, especially street.

R____ has been described by her social worker as a drug dealer who made up to $1,500 - $2,000 per night selling crack cocaine. Even though she had 3 children (the two older siblings, aged 9 and 16, were in the custody of potential relatives), R____ was known to be bisexual. She often had a "girlfriend" staying with her. R____ was
described as self-employed. Sometimes she prostituted her body (criminal record) to get an "egg" or "rock" which was worth $15 on the streets. As a dealer, she was financially secure and was able to purchase elaborate furniture and extravagant clothing for her children.

PT's birth father, age 49, was married to another woman at the time of PT's birth. R protected the father's identity by refusing to name him. The father had attended college for three years, and was employed as a supervisor. He was described as 6 feet tall, and soft spoken.

After R failed to complete two drug treatment programs, she was tried by the County Solicitor. Her record included prostitution, petty larceny, armed robbery, assault, and contributing to the abuse and neglect of PT, born exposed to cocaine, alcohol, and barbituates. R was sentenced to 10 years in prison, a long incarceration period which according to the record, was provoked by her belligerent outbursts and behavior.

R experienced a sense of loss for PT, her son. Letters were sent from prison to her caseworker, on a regular basis;

"I am sending you this card, so please give it to PT. Please bring him this month is you can. I look at picture of him every night."

"I regret that I didn't follow through with my treatment. E
(caseworker), I was angry with you, but you was only trying to help me more than anything. Please forgive my negative attitude. You were the best social worker I ever had. God bless you and your family. I don't want to loose PT. Give him a hug and a big kiss. I'm having a very hard time with these ladies picking at me and saying I had a crack baby, and that DSS took him. That hurts. I got to see him. I'm depressed. I hope they haven't taken my rights as P's mother. I will go crazy. I go to church every Sunday and at night when they call it. I'm a good inmate."
"Tell PT's foster family I'm very grateful of their love for my son and I sent $15 a month to show that I want to do something for him. I get a state check every two weeks, not much, but I'll save that just to send PT. Can he talk how? I LOVE HIM NO MATTER WHAT. I was used as an example so other women would know don't use drugs, pregnant or not."

Caseworker interjections into the document indicate that R—is smart and just using PT as a means of being released from prison. PT has difficulty recognizing his mother when the caseworker takes him to the prison. The problem is his young age and inability to bond with his mother whom he rarely sees.

**BB (DOB 8-13-89)**

BB was placed into protective custody of the Department of
Social Services because of her mother's physical neglect of the infant girl. BB was described by her caseworker to be "a very bright, attractive child," (2-28-90). "Mother can't get clean urine" is also noted by the worker.

"Mother was very shak y and her eyes were glazed over."
The worker suggested a Dort program (7-13-91). An older female sibling has been placed for adopted. BB and sibling, a male, were both born cocaine-exposed. Both are in protective custody having been removed by the local police department with the charge of felonious criminal neglect due to endangering a child's life.

**DB (DOB 9-29-89)**

The local hospital system declared DB to be "at-risk" when cocaine/polydrugs were found in his urine. This was in violation of South Carolina Code 26-7-650.

DB was described as extremely jittery and shakey and as experiencing severe drug withdrawal. Child had scratches and marks on his nose and face from his fierce movements and restlessness. (Hospital visit 10-13-89).

A cat scan found a little fluid on the brain (12-1-89).

DB is a perfect example of a drug addicted baby. He is
unconsolable and consequently fed bottles and food to quite him. He also has deformed ears (Drug Rehabilitation Worker on 7-10-90).

Mother has dirty urine serum from smoking marijuana (2 6-91).

Two dirty urines in drug program Monday and Thursday (3-5-91).

Mother not honest which is typical of drug using mothers. She cares for DB, but she also neglects him. Custody removed from mother and given to maternal grandmother. Mother feels custody needs to be returned; however, a stroke following a cocaine binge has left her right side paralyzed. Mother's father died from drug abuse problems after using Coke for 4 years (5-17-91).

MD (9-11-89) Subject 03

DSS received report of physical and medical neglect on 11-3-89. Baby girl was born prematurely weighing 2 pounds. Cause of the premature birth was abruptio placentae which is often associated with maternal cocaine use. Parents called NICU about once a week. Baby girl is brought young home on APNEA monitor, and mother needs training for its use (11-6-89).
Maternal grandmother has visited baby at hospital. She is concerned about the children. Says the house is infested with roaches and rats. She was she has been told her daughter is on drugs. (11-14-89).

A_____ had been good mother until her involvement with M, the baby's father. She was he deals in drugs, and A_____ is using with him (11-16-89).

Mother admitted to using cocaine while pregnant. She said she didn't use it real often since she was pregnant, only when M sold it and had leftovers. Many girlfriends lived with A_____ and M_____ because M_____ had available drugs (11-20-93).

Drug rehabilitation worker reported mother had flat affect and was fairly resistant to counseling. She appeared resentful of someone telling her to go off the cocaine. Also had no conception of time thinking that baby was in hospital 4 weeks rather than actual 2 1/2 months. Worker indicated mother did not seem to care about anything (1-17-90).

The baby, M_______, is very tiny to be almost a year. Mother plans to take her to clinic for appointment.

Court Hearing: the court adopted the guardian AD-Litem Treatment Plan. A is not going to drug treatment. NA would be better for mother. As she would have a new group and go
three times per week (8-20-93).

Caseworker visited with client and children. Apartment was spotless. Children are well behaved and happy. Health Department determined child has lead poisoning (11-9-90).

M____ has appointment with Center for Developmental Pediatrics. She is very tiny and weighs 16 pounds (1-30-90).

Mother pregnant but has missed OB appointments. She started back using "crack" cocaine in June. She said she has been using the oven to heat the house. Mother due to deliver last of December. Father, WJ, in jail for assault and battery (10-7-91).

Mother scheduled to enter N.G. Drug Treatment Hospital on 10-25-91. Loss of money to pay utilities was a result of mother using "crack" cocaine, and smoking it in a pipe. She considered releasing urban baby for adoption but decided against it (12-9-91).

Home Visits and Structured Interviews

Polydrug - Exposed Young Child and Family

Interviews were conducted within the homes of the four maternal caregivers, two foster mothers and two biological mothers. Free flowing conversation established the rapport necessary to conduct the interview. Previously described
instruments. (See methodology section and Appendix A) were presented in an alternative format pre-arranged by the researchers. One researcher would interact with the respondent for specific instrument information for their respective instrument. The researcher instrument selection was based upon the discipline and expertise with the topic. Rapport which would permit optional forth verbal exchange with mothers, was initiated by the social service professional.

**Family Assessment for Early Intervention**

The Family Needs Survey was developed in 1989 by Bailey & Simeonsson. The instrument (See Appendix A) consists of 35 items which are organized into six categories. The major need categories are the following:

1. parents' need for information related to their child's disability or behavior;
2. how to play with their child;
3. how to explain about their child's disability;
4. parents' needs to obtain community service;
5. needs concerning basic living expenses; and
6. needs regarding intrafamily functioning.

Ascertaining the needs of very young children exposed intrauterine to cocaine/polydrugs is a demanding and comprehensive
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activity. Bailey & Simeonsson (1989) list five reasons for determining parental needs: 1) to meet legal mandates; 2) to understand the child as part of the legal system; 3) to identify family needs for service; and 4) to identify families' strengths that promote family adaptation; and 5) to expand the base for evaluating services.

Results of the Family Assessment in Intervention indicated that very few of the maternal caregivers of the drug-exposed sample group expressed needs listed on the Bailey & Simeonsson (1989) questionnaire. If biological mothers were not drug free at the time of the interview the reliability of responses was questionable. Both biological and foster care givers perceived their children to be normal or "advanced." Sample number children had not been formerly assessed to determine cognitive and/or developmental functioning; thus, the parents' determination of ability was reflective of their perceptions.

Parents (both foster and maternal) indicated a need to know the long term consequences of in-utero drug exposure. They experienced comments that ranged from "He'll outgrow it" to "What might happen as she gets older?"

As-risk for developmental delay children were described as normal or advanced. Center of Developmental Pediatrics records
show one child to be functioning in the normal range, an accurate statement by his mother. The other child manifests developmental delay, also determined by a developmental pediatrican, the developmental staff, and is not functioning as the "advanced" child his parents indicated. It was determined that the sample number child's first months were constantly life-death threatening, and that the parents view her stability and present growth by a constant comparison to a traumatic period in which they observed no development.

There is no difference between responses for either sample group. Researchers determined the financial position and educational level of the at-risk parents might contribute to their ability to such out and purchase the services they deemed appropriate for their young children.

Talcott Parson's (1951) theory on deviance prompted the researchers to ask parents whether they perceived their children to be sick. Cocaine/polydrug exposure has a negative social valence, and a drug-exposed child is more likely to incur social deviance imposed by external individuals. If a parent believes the drug-exposed child to be sick, Parson's Theory (1951) suggests ideations responsiblity (mother's usage) and some exemption of role obligation (too sick). The child is not socially stigmatized if the parent is
cooperating with the health care sector to establish the child's wellness. Parent responses to the researchers' question, "Is your child sick?" were the following: "He's just a baby like other babies," "... is healthy, talks and learns": "D is too active and strong to be considered sick," and "Seems healthy and O.K." Each child's progress since withdrawal from cocaine/polydrugs had alleviated the parent's memories of "sick." Further, the exposed sample member group did not include children with physiological problems (visible handicaps); therefore, the ideation of sick was limited as there was a lack of "sick" visibility.

Comparison-control children were ill as small infants. Parents discussed the trials that their children experienced as medical professionals worked to save their children's lives. At the time of the interview, neither parent regarded their child as "sick" other than having the typical viruses and colds, etc. that are contagious to young children.
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Conclusion

A holistic view of two young children exposed in-utero to cocaine/polydrugs and living with their biological mothers, two young children exposed to cocaine/polydrugs living with their foster caregivers, and a comparision control group of two "at-risk" for developmental delay (premature and health related problems) was captured using six research methodologies informed from qualitative - ethnographic research. Multiple indicators were drawn from the triangulation of data. The twofold purpose of the research was to discover the authenticity and relatedness of the drug-exposed children in both foster and biological homes and compare and contrast the findings to another vulnerable population, preterm infants. Intervention needs as perceived by families was investigated. A multidisciplinary service program was to be initiated for the regional area.

A universal theme emerged as the data were evaluated. Inductive reasoning associated with the constant comparative method was the method of analysis. The deeply rich and very vivid descriptions of young drug-exposed infants differed slightly from typical young children or the comparison - control group of preterm children. There was evidence that dysfunctional/generational family life-styles were being perpetuated in the biological homes of drug exposed
children; both maternal addicts had returned to "using," even after
treatment. Although, South Carolina law adjudicates maternal
addicts who place minor children into abusive or neglectful care, the
biological mothers were had continued their substance abuse.

All young children, according to health records, appeared to be
physically normal at the time of research. Social service records
indicated adequate supervision of the children (both in foster and
biological care).

The socially constructed identity, "crack baby," did not emerge for
the in-utero exposed sample children. Parents, siblings, and the
child's subculture reflected a positive identity for the young
children. The "at-risk," pre-term infants experienced greater
identity deviance, a relationship to their real condition, long-term
sick.

Variables associated with fetal drug-exposure may be more
evident when the sample member children enter public school.
Researchers see value in a longitudinal exploration of these mother-
child dyads as family dynamics continue to emerge and the long
term effects, as documented in urban areas, may begin to be visible.
Bibliography


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