The Development of an Instrument to Measure Stress In Nonclinical Populations of Preschoolers

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THE DEVELOPMENT OF AN INSTRUMENT TO MEASURE STRESS IN NONCLINICAL POPULATIONS OF PRESCHOOLERS

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ABSTRACT

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This study evolved from interest in programs designed to enhance personality development and to bolster resiliency to stress in three to five year old children. This newly emerging multifaceted area of research and practice is variously described as "mental health promotion," "interpersonal problem solving," "primary prevention," and other mental health skill training models. The usual setting for these programs, the preschool, is a "key integrative social system" in which staff and parents are often guided and supported in addressing stress in young children by a mental health professional in the role of consultant.

Primary prevention programs for preschoolers are based on the assumptions of adults regarding children's experience of stress and life events and the interrelationship of these experiences with later development. While there is research available on stress as self-reported by nonclinical populations of older children,

there is a dearth of literature on the experience of stress by nonclinical populations of preschoolers. Since language development is not considered reliable enough for self-reporting in the preschool age group, the purpose of this study was to explore and describe the design of a method by which preschool personnel could ascertain and record the current experience of stress in three to five year olds.

A qualitative research approach was chosen for this study because of the exploratory nature of the question. The research design featured the formative (pre-use) evaluation of a social/emotional development checklist by a small purposive sample of its potential users. The researcher/investigator based the sample checklist on data from existing literature and ten years' participant observer experience in preschools as a consultant. Primary prevention theory provided the conceptual framework which influenced every phase of this research.

The data, produced by means of open structured interviews with the respondent/critics, was qualitatively analyzed and applied to the revision of the instrument and implications for its utilization. Based on the findings of this study, the current experience of stress can be observed and recorded in preschoolers by their caregivers. The data conclusively supported the content of the developed instrument as valid and its implementation as practical for the setting for which it was designed.

Staff training for utilization of the instrument and its importance to promoting a common language by its users was also conclusively supported.

A major finding of this study was that an observation instrument was generated from the naturalistic setting for which it was intended rather than from models adapted either from clinical settings or from older age groups. Further implications were that: 1) the instrument utilization can be a prevention program in itself, 2) it can serve as an adjunct to the consulting process, 3) it can help identify issues for new and continuing staff training, 4) it can become a tool for program planning or evaluation.

THE CALIFORNIA INSTITUTE FOR CLINICAL SOCIAL WORK

We hereby approve the dissertation

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TO MEASURE STRESS IN
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Doctor of Philosophy in Clinical Social Work

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DEDICATION

To the memory of my mother,

Lugene Ellen Johnson,

who taught me about caring and letting go.

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CHAPTER I

INTRODUCTION

Nature of the Problem

Recent attention to the safety and protection of children has led to the development of approaches designed to bolster children's resiliency to stress (Garmezy, 1983). Some programs specifically address accidental stressors such as fire and traffic safety; some programs seek to prevent susceptibility to drug abuse or child abuse; still others focus on reducing the negative effects of divorce, adoption and other phenomena related to separation and loss (Bernstein, 1977).

There are many factors which have contributed to the development of prevention programs aimed at progressively younger populations. Partly due to awareness of continuing changes in family patterning which results in "literally fewer caring adults living with children" (Brenner, 1984), some approaches involve only adults (teachers and/or parents) while others are combinations of adult-child dyads or groups. This study evolved from interest in the type of program designed to enhance the personality development of children between the ages of three and five years, in anticipation of stresses to come.

This approach is variously described as mental health promotion (Bower, 1972), interpersonal problem-solving (Winer, Hilpart, Gesten, Dowen, & Schubin, 1982), affective education (Cooper, Munger, & Ravlin, 1980), primary mental health prevention (Caplan, 1964), and other mental health skill training models (Guerney, 1979).

The importance of the preschool period of children between three and five years of age is recognized by child development specialists. The significance of this period is perhaps best summarized by Berrueta-Clement, Schweinhart, Barnett, Epstein and Weikart (1984) in Changed lives: The effects of the Perry Preschool Program on youths through age 19:

> Several stages of development converge to make the preschool age an opportune time for intervention. Physically, the young child has matured to the point that he or she has achieved both fine- and gross-motor coordination and is able to move about easily and freely. Mentally, the child has developed basic language capabilities and can use objects for self-chosen purposes. In terms of Jean Piaget, the child has shifted from sensory-motor functioning to preoperational capacity. As Donaldson (1978, p. 59) states, "from age four . . . the supposed gap between children and adults is less than many people have claimed." Socially, the child is able to move away from familiar adults and social contexts, into new settings. The fear of strangers, so common earlier, is gone, and the youngster welcomes relations with new peers and adults. (p. 107)

The preschool environment provides a context in which children and their parents can be given support for the management of accidental and growth-related stress (Bronfenbrenner, 1979). While prevention programs in pre-

schools may emphasize relieving emotional tension in order to help children learn or helping children learn in order to provide emotional relief (Shure & Spivack, 1979a), there is agreement regarding the relationship of the school environment to personality development--as a "key integrative social system" (Bower, 1972).

The theoretical principle which unifies the apparently disparate ideas associated with prevention in preschools is "primary prevention" as developed by Gerald Caplan (1959, 1961, 1964). Caplan recognized (along with many others) that development proceeds along three tracks simultaneously and sequentially: the physical and physiological; the environmental; and the rate of structuralization (the individual's sense of self and the world). From this recognition he developed the notion that changes could be effected in the environment which would bolster the individual's inner strength and thereby mitigate against social and/or emotional breakdown. The prevention is "primary" because intervention precedes the problem. Integral to the practice of primary prevention in preschools is the working alliance between the mental health professional and preschool personnel who actually carry out the interventions.

Stress theory as developed by Hans Selye (1974, 1980), is highly complementary to Caplan's primary prevention theory. Selye's theory emphasizes that stress begins with the individual's sense of a threat to equilibrium.

One of many areas of congruence between Caplan and Selye is that stress is a part of living and includes the developmental and accidental, the planned and unplanned, life events which become incorporated into the way the individual sees himself and the world. This will be discussed in more detail in the next chapter.

Prevention programs for preschoolers are based on the assumptions of adults regarding children's experience of stress and stressful life events and the interrelationship of these experiences with later (personality) development. These programs are generally validated by longitudinal assessments of the involved preschoolers by adult observation of behavior at school and at home (Shure & Spivack, 1979b; Berrueta-Clement, et al., 1984). There is a dearth of literature on the experience of stress by nonclinical populations of preschoolers.

Two groups of researchers have studied stress as experienced by nonclinical populations of older children in their current lives (Lewis, Siegal, & Lewis, 1984; Metcalfe, Dobson, Cook, & Michaud, 1982). The present study seeks to explore whether the current experience of stress and self-image can also be ascertained in a nonclinical population of preschoolers. Language development in this age group is not considered reliable enough by experts for the direct verbal self-reporting procedures utilized with older groups of children. In addition, the younger the child, the more dependent he or she is upon

caretakers who guide and protect development. Therefore, an exploratory study of how preschoolers experience stress would need to include the observations by significant caretakers, e.g., their teachers; and those of mental health professionals who serve the caretakers as consultants.

Statement of the Problem

In recent years, prevention programs for preschoolers have been designed to enhance child safety and bolster children's resiliency to life stress. The experience of stress in life events by children is likened to personality development, i.e., the child's sense of self and the world. Primary prevention theory explains the aims of such programs and longitudinal studies have assessed their effectiveness. The current study seeks to explore and describe whether the current experiences of stress in a nonclinical population of preschoolers can be ascertained and recorded by the children's related caretakers in the preschool setting.

Research Question

The task of the present study is to explore the following inquiry:

Can the current experience of stress be ascertained and recorded from a nonclinical population of preschoolers? The major assumption of this study is that young children do experience stress and convey it in their behavior in the classroom.

This inquiry will explore two subquestions. One is whether an instrument can be designed which will help organize the behavioral observations of stress in young children by their caretakers. The second is whether such an instrument would be deemed useful by professionals from the fields of early childhood development.

Anticipated Contribution of the Study

By way of preface, after ten years of mental health consultation practice, I have been impressed and sometimes surprised by the recent proliferation of prevention programs which target the preschool age population. This is especially evident in the current nationwide attention to training of young children to protect themselves from child abuse.

These programs are usually based upon the reconstruction of adult victims' and offenders' lives and often ignore young children's sense of themselves and the world around them at their current level of development. It is hoped that the present study will contribute to a generative base for further studies of preventive psychosocial interventions with children of preschool age. Although this area of applied child development has been increasingly studied and written about since the 1970s with regard to school-aged children, there is significantly less information of this sort about the younger child.

It is also anticipated that the instrument developed by means of this study will provide an organized, meaning-

ful method for preschool teachers and aides to capture the signs of stress in young children on paper. Such personnel, many of whom are "untrained" in the formal sense, intuitively sense stress indicators in children without having the advantages of a conceptual framework for appreciating the significance of their own observations.

Further, primary prevention theory, although partly attributed to social work practice in origin, is not given much emphasis in current practice literature of the profession. In addition, I have rarely met other clinical social workers with an interest in the use of the developmental knowledge base with nonclinical populations, an area of increasing social need. Perhaps this study can demonstrate one way in which clinical social work can make a contribution to the preschool environment.

Major Concepts

Certain terms appearing throughout this study will be defined in the following manner:

Stress refers to planned, accidental or developmental, positive or negative events which are also known as "crises" or "problems." As will be elucidated in the next chapter, stress is also synonymous with biopsychosocial stressor.

Prevention is "primary prevention" or "primary mental health prevention," i.e., intervention, which recognizes and precedes evident emotional, social or physical breakdown or disturbance.

Child is interchangeable with young child or preschooler denoting the age between three and five years unless otherwise specified.

Caretaker is an adult, preschool teacher or aide, with a sustained and current relationship to the child.

Nonclinical refers to a situation, setting or population which is "normal" or naturalistic, not identified as therapeutic or rehabilitative.

Preschool is the overall term for Pasadena Unified School District's State Preschools, for children between three and five years of age from low-income families.

Evaluand is literally the thing to be evaluated; in this study, the evaluand is the Social/Emotional Development Checklist.

Evaluator refers to those interviewed for this study and is interchangeable with the terms "informant," "expert" and "respondent."

CHAPTER II

REVIEW OF THE LITERATURE

This chapter reviews the literature which is pertinent to the topic of stress in early childhood, the background of interest in it, existing interventions and approaches to it, and approaches to measurement. As a new area of interest, stress in early childhood is dependent upon many interrelated fields which have been arbitrarily separated for the purpose of this discussion. The unifying theoretical framework most appropriate to the topic is primary prevention. Other areas reviewed were stress, social work practice, child development, primary prevention programs for preschoolers and qualitative research methodology. In order to present background material, the literature on stress in adulthood and childhood will first be summarized.

Stress

Since the early 1970s widespread usage of the term "stress" by professionals and the public alike has not precluded ambiguity regarding its meaning. Perhaps, as Dobson (1983) states, the fact that "we speak of stress in general terms because it incorporates so many areas of our lives," would promote universal agreement on what stress

is. However, the same author searched the literature and found "over 300 definitions of stress and words which are semantically akin to it" (p. 2). Fortunately, behavioral scientists began to reach consensus due to the man who is acknowledged to be the father of stress research.

Hans Selye (1974) first defined stress as "the non-specific response of the body to any demand made upon it." These demands include the planned and/or pleasant events, called eustress; as well as the unplanned and/or unpleasant events, called distress. (Most authors mean distress when they refer to stress.) The overall mechanism of stress is the physiological response of the individual which activates bodily readiness for "freezing, flight or fight" and begins with the subjective perception of threat by the individual (Dobson, p. 120). When the response is restricted from completion, especially on a chronic basis, physical or mental illness results.

There is agreement in the literature that subjective experience is integral to the individual physiological or psychological response to stress. The complex notion of stress as evolved by behavioral scientists underscores self concept or self image which provides the framework for the individual's experience. This will be discussed in more detail later in this section.

Some research on stress in adults emphasizes the impact of major life events on overall functioning such as is outlined in the Social Readjustment Rating Scale

developed by Holmes and Rahe (1967). Other researchers have pointed to the potential of stress in the cumulative effect of the minor "hassles" of day-to-day life as just as impactful to functioning as major life events. The most often quoted representative of this perspective is Richard Lazarus' (1966) "snapped shoelace" phenomenon.

In the health fields researchers have emphasized certain character styles as more or less stress-vulnerable. For example, psychological factors which increased individual susceptibility to heart disease were summarized as the "Type A Personality" by two cardiologists (Time, 1983). Social scientists add the perspective that stress is related to the availability of social supports (Killilea, 1982). Social supports can be either significant others or peers in the community who help the individual to feel understood and accepted. An apparent point of interdisciplinary convergence is that, as most authors cite, isolation is a condition which intensifies the negative experience of stress.

A newer companion concept to stress is "coping" which some authors use in referring to response when stress refers to stimulus. However, coping behavior (which is also a complex concept) is an area worthy of study in its own right (Garmezy, 1983). Of interest to this study is that the apparent individuality of responses to stress in adulthood has contributed to increased research interest in childhood stress.

In Stress, coping and development in children, Norman Garmezy points out that children have always been victims of severe stressors but civilization needed to advance enough to develop the awareness of "a relationship between stress, disease and adaptation" before childhood stress could be approached as a topic of study (p. 51). He further states:

> Today, . . . we witness a striking growth of interest in the study of stress, its antecedents and consequents. Thousands of articles are now published annually attesting to that expanding interest. The preponderance of such investigations, observations and case accounts have been focused on the physiology of stress, far fewer on its psychological correlates. But in this output of scientific and clinical studies, the effort to observe, record, and study the reactions of children to stressful events has remained an area of neglect in comparison to the many studies of adult responsivity. (p. 51)

As Eleanor Maccoby (1983) indicates, the concept of childhood stress evolved from the centuries-old notion of the "problem child." By the mid 20th century, practitioners had turned their attention instead to the investigation of the etiology of "mental disorders in children" (p. 50). Literature representative of this transition in focus would include Psychological emergencies of childhood (Kliman, 1968), Prevention of mental disorders in children (Caplan, 1961), and Stress and psychiatric disorder (Tanner, 1960).

Today there is general agreement that not only is stress in life unavoidable, but that for children growth itself is stressful (Brenner, 1984). Elkind (1981) goes a

step further and suggests that a new constellation of stressors for children has been created out of parental stress manifested by pressure on children to grow up faster. Brenner provides a good summary of childhood stressors highlighted in the literature of the past 12 years (p. 25 ff):

-separation (death, adoption, divorce)

-other changes in family composition (e.g., multi-parent)

-abuse, neglect or substance abuse by parents

-child illness or handicaps

-parental illness

-changes in family residence

-changes in child's development

Following in the footsteps of Holmes and Rahe, life events have sometimes been listed and ranked in stress inventories for children which are based on events judged by adults to be stressful (Lewis, et al., 1982). On the other hand, some researchers have scrupulously attended to the self reported perceptions of stress by children in nonclinical populations.

Metcalfe, et al. (1982), surveyed 13 year olds from five schools and developed a 40-item inventory on stresses the young people associated with school attendance. With the assurance that all comments would be treated confidentially, the subjects were asked what was nice about school and what was unpleasant, worrying or difficult. The re-

sulting scale also measured the intensity of perceived stress on a four-point continuum. The researchers found that the internal reliability and validity of the scale was high for both boys and girls which suggested "the existence of a pervasive general 'stress' factor" (p. 68) in child development. It was also determined that stress was multidimensional in nature "arising from a number of more or less independent sources" (p. 69).

Lewis, et al. (1982), studied the subjective experiences of stress in children after noting tendencies among certain children without organic indicators to refer themselves frequently to school nurses with complaints of "feeling bad" (p. 117). A group of 50 to 60 fifth and sixth graders were asked by the researchers what would make them feel bad, nervous or worried. The resultant 20-item "Feel Bad Scale" (named for terms used with the children) was administered to 2,400 fifth graders in various U.S. communities (p. 118). In addition to the designation of items and their perceived intensity, the Feel Bad Scale also measured frequency of occurrence of the bad feelings during the year prior to the administration of the survey; and a measurement of how the subjects liked themselves (p. 28).

The Lewis study further pointed out that changes in physical or mental health status could not be attributed solely to life events; and that other variables "might moderate, or attenuate," the impact of life events on

health. These variables include "dispositional characteristics such as locus of control, interpersonal characteristics such as social support, and situational characteristics such as persistent role problems" (p. 120). The authors advise the importance of efforts which combine stress inventories with measurements of depression, anxiety and self image in children toward "an operational definition of children's emotional and social health which incorporates the child's perspective" (p. 122).

R. Dean Coddington and his associates produced a "Life Event Scale" based on a survey of over 3,500 healthy children in 1971. The study was not school based and included children from preschool to senior high school age. The resultant 30 items were weighted from a survey of 243 professional workers. (The preschool questionnaire was administered to parents [1972b, p. 205].) Like the Lewis study, Coddington was interested in the amount of life events occurring in a year's time for the children; but, unlike Lewis, frequency of events per individual was not ascertained. However, the frequency of events per age group was measured and a corresponding growth curve of life event occurrence was constructed (p. 212).

Another branch of literature on childhood stress deals with the development of resiliency in children as an aspect of personality development and focuses on younger ages down to infancy and beyond to perinatal issues

(Eisen, Donald, Ware, & Brook, 1980). A summary of this trend can be found in an article by Julius Segal (1983) who states,

> Recent years have brought a crescendo of activity in the field of behavior medicine, and an increasingly widespread acceptance of the notion that major alterations in behavior and lifestyle provide one of the strongest weapons in the armamentarium of prevention. (p. 319)

One group of researchers did an exhaustive study of measures of the physical, mental and social health of children from infancy to age 13. Eisen, et al. (1980), found that the small number of studies on mental health measures for young children had been focused primarily on early detection of emotional disorders, reactions in children to catastrophe or problem behaviors. Recognizing the need for the measurement of mental health in healthy children involving positive and negative states on a continuum, the Eisen group conceptualized a mental health index as a component of a comprehensive health insurance survey for the Rand Corporation (p. 9).

The measures represented three dimensions of mental health: anxiety, depression and positive well-being for children ages five to 13, determined by parents (p. 80). Other researchers have adapted and expanded this index to a 16-point questionnaire which can be administered directly to children in the ten to twelve-year-old age group (Stiff, 1983), and accompanies the administration of stress inventories.

Kagan (1983) and Maccoby (1983) have contributed to

the understanding of the role the developing self concept plays in the young child's experience of stress as well as the role stress plays in the child's personality development. This type of literature seems to represent a school of conceptualization which bridges child development and stress theory. This area will be discussed in more detail in a later section.

Primary Prevention

Gerald Caplan is cited consistently throughout the literature on stress. As a practice model, community mental health consultation was derived from an amalgamation of several approaches to human service by Caplan (1959, 1961, 1964, 1970). While a psychoanalyst in training, Caplan was simultaneously involved in the school of public health at Harvard (Caplan-Moscovich, 1982), where he began to integrate epidemiology, psychoanalytic developmental, crisis and social work practice theories into his theories on prevention (1964).

In brief, prevention is threefold: primary, secondary and tertiary. Taking the third approach first, tertiary prevention addresses rehabilitation or treatment of disorder or illness. Secondary prevention deals with the reduction of incidence or lessening the effect of a condition of diminished functioning or difficulty. Primary prevention applies what we have learned from treatment to nonclinical populations before physical, social or emotional breakdown occurs (Kornberg & Caplan, 1980).

By identifying populations "at risk," the primary prevention specialist facilitates the utilization of cognitive and social resources to bolster the individual's resistance to breakdown. Longstanding examples of primary prevention have included infant care classes for expectant parents, workshops for the newly widowed, social group work with immigrants, recreation clubs for workers and other examples of community education (1959, p. 106).

Much of Caplan's theory is tied to crisis theory, the experience of disequilibrium-producing life events. Modern terminology refers to crisis (and/or potential for disequilibrium) as stress or stressors. As the first psychiatric consultant to the Peace Corps, Caplan developed "anticipatory guidance," which is a primary prevention approach that focuses on "competence building" or mental health promotion. In a manner of speaking, all children are "at risk" for disequilibrium at each developmental stage (as are adults). In addition, accidental stressors from war to parental separation also impact the individual's experience of reality. Kornberg and Caplan (1980) published a review of 650 papers on bio-psycho-social risk factors and divided competence promotion in children into two areas: anticipatory guidance (what could happen) and preventive intervention (before a situation worsens) (p. 99).

A key feature of primary prevention theory is that people who are not trained in mental health, such as

teachers, can be helped by the mental health consultant to increase their potential to affect the emotional health or development of others. There are authors who have expanded upon Caplan's primary prevention theory in school settings. Helen Reinherz (1982) notes the importance of the school environment and describes teachers as secondary only to parents in helping children develop a positive self concept.

Eli Bower (1972) labeled schools as one of the "key integrative social systems" for the enhancement of child development. He further defined the school as a setting where there is a tying together of primary emotional processes with secondary reality processes. Speaking specifically of a category of primary prevention, Cooper, et al. (1980) surveyed 17 types of affective education approaches in schools, preschool through grade 12. As diverse as the field may seem, the following principles were described by the authors as unifying the approaches:

> 1. Human experience is an inseparable interplay of cognitive, affective, and motor processes.
>
> 2. Inadequate consideration of any of these domains, and/or neglect of the developing human being's needs for self-understanding and empathy results in subversion of both the intellectual aims of education and those related to positive mental health.
>
> 3. Numerous findings of the behavioral sciences are relevant to students and teachers, would be helpful to them and can be made available to them in schools.
>
> 4. Schools should be settings that encourage the expression of affect for the purpose of

enriching the curriculum and enhancing its relevance.

5. Education must be comprised of instructional methods that integrate the affective, cognitive, and behavioral processes. (p. 25)

The authors also emphasized young people's self-expressed concern with behavior science related issues. (Projects aimed at the preschool population will be addressed later in this chapter.)

Social Work

Social work historically valued work with nonclinical populations via the settlement house movement. During the early 1900s the methodology became known as "social group work" with the ultimate aim of strengthening family life (Axinn & Levin, 1975). Florence Hollis (1964) referred to "environmental work" as the indirect (nontreatment) type of casework which "also takes place with people through psychological means." Acknowledging that the person and situation was a fundamental concern of social work, Hollis also noted that "intervention in the environment is also sometimes necessary to remove or lessen situational pressures that are causing strain for the client" (p. 113).

Martin Bloom (1980) in describing "preventive social work" articulates six dimensions of primary prevention related to social concerns gleaned from literature going back 20 years. Among models of causation, he identified the social systems model as most compatible with social work education because of the emphasis on biological-psychosocial-physical systems (p. 22). He also summarizes

five other dimensions of primary prevention as related to social work values, which include timing, populations chosen, health promotion, strategies and evaluation.

Child Development

Interest in stress as it relates to young children is evident in literature on child development. However use of the word "stress," with regard to life stages as well as life events, is newer than the concept. Peter Neubauer (1965) states that what was known in traditional psychoanalytic child development as "trauma" is now known as "stress." He adds that in recent literature "stress" also supplants "conflict" (p. 10). Describing stress as synonymous with stimulation, Neubauer further suggested three categories of the relationship between stimulation and development. Understimulation results in underachievement; overstimulation also results in underachievement; and the interaction of over- and under-stimulation can result in normal or uneven development (depending on other factors) observed either as accelerated or lagging growth (p. 11).

Like Caplan, child development specialists view development as proceeding along three tracks simultaneously (Fraiberg, 1959; Erikson, 1959; Elkind, 1978). In her studies on vulnerability in young children, Grace Heider (1966) described the three tracks as bodily equipment, environment and management processes. Lois Murphy followed Heider's work with interest

> both in understanding the beginnings of personality and in learning ways of helping children at the point where troubles begin, and before their consequences have begun to distort the child's personality. (1976, p. ix)

The methods of these researchers included rating scales by trained observers and nonverbal projective measures. Murphy further indicates the importance of observing stress reactions in children under age five because (although there are individual differences) there is less repression operating than in children over the age of five (p. 5).

Another important aspect of the study of stress in early childhood development is expressed by Selma Fraiberg (1959) who saw the principle task of three to six year olds as the development of self control. She states, "education requires that the child control his drives, which in a certain sense means opposing himself" (p. 139). As the young child first experiences being part of a group outside of the family, learning becomes "an enticement to the conquest of the pleasure principle and to its replacement by the reality principle" (Freud, 1911). The foregoing does not exclude environmental impact for, as Elkind states, "perceptual reality, no less than conceptual reality, is always an irreducible product of subject-object interaction" (1978, p. 47).

No discussion of young children's subjective experience would be complete without an overview of the influence of Jean Piaget's theories upon child development

specialists. Sula Wolff (1969) describes the child between the ages of two and six or seven in terms of four principle characteristics: egocentrism, animism, pre-causality and authoritarian morality. As Elkind states, this is the period of the "symbolic self" wherein the child begins to construct a system of representations of the object world, can use them and compare these representations to those of others (p. 88). Piaget labeled the resulting thought patterns as egocentrism to convey the highly personal, or self-centered, or subjective, and highly creative or magical quality (Pulaski, 1971) of the "child's active structuring of his own experience" (Maccoby, 1966).

In a manner of speaking, the Piagetian term "preoperational" denotes the dawning of consensus on what things are called; and things include people, roles, feelings, processes, etc., as well as objects in the physical world. For example, egocentric play falls between purely individualistic and cooperative play (Duska, 1975) as one may observe when preschoolers play house.

The internal synthesis of what the child brings by way of genetic endowment and experiences in the environment of his early relationships evolve into his sense of value or goodness during the preoperational period (Thomas, 1979). The child holds the highest regard for the adult's rules (and opinions), even if he fails to live up to them. And if he fails to live up to them, anything

subsequently unpleasant or dissatisfying is perceived as caused by his own naughtiness (Wolff, 1969, p. 7). It is interesting in the foregoing Piagetian context to note Erikson's formulation that, in the child under four, shame and doubt accompany autonomy; and that in the four- or five-year-old, guilt accompanies initiative (1959, pp. 68-74).

There is risk of confusion regarding how, if children in this period are "egocentric," there can be communication skills at a reliable (i.e., consensual) level. Zaporozhets and Elkonin and their associates (1971) demonstrate through their research that the social basis of egocentric speech is left out of Piaget's formulation; that the social basis needs to be recognized as integral to the ongoing interplay between the development of thought and the development of language. However, most child development specialists agree that while consensual language use begins to evolve during early childhood, behavior is realiable and observable communication in three to five year olds. Although Zaporozhets and Elkonin emphasize cognitive development, their thesis also supports the importance of interaction between the developing person and his environment. This is illustrative of the ecological developmental viewpoint (p. 3).

Often cited by other authors writing about stress in childhood, Bronfenbrenner (1979) focuses upon the environmental impact on development in his human ecology theory.

Reading his theory requires assimilation of another system of terminology. However, the ecological perspective closely resembles psychosocial theory because of the emphasis on the person-situation interrelationship. To summarize briefly, Bronfenbrenner defines the ecological perspective as akin to viewing the interplay of systems as they pertain to the developing person like a set of Russian dolls--"nested structures, each inside the next" (p. 3). These structures are defined as follows:

> A microsystem is a pattern of activities, roles and interpersonal relations experienced by the developing person in a given setting with particular physical and material characteristics.
>
> A mesosystem comprises the interrelations among two or more settings in which the developing person actively participates (such as, for a child, the relations among home, school, and neighborhood peer group; for an adult, among family, work, and social life).
>
> An exosystem refers to one or more settings that do not involve the developing person as an active participant, but in which events occur that affect, or are affected by, what happens in the setting containing the developing person.
>
> A macrosystem refers to consistencies, in the form and content of lower-order systems (micro-, meso-, and exo-) that exist, or could exist, at the level of the subculture or the culture as a whole, along with any belief systems or ideology underlying such consistencies. (pp. 22-26)

Bronfenbrenner goes on to underscore the power of the preschool environment to promote immediate and longer term effects on children's psychological growth primarily from that setting's distinctive ecological characteristics (1979, p. 202). The underlying concept is "molar activity" which is "an ongoing behavior possessing a

momentum of its own and perceived as having meaning or intent by the participants in the setting" (p. 45). He further asserts that the caretaker or teacher stimulates and sustains emotional growth in the child, along with intellectual competence, by the promotion of molar activities (partly by example) such as "persisting in tasks, thinking, contributing ideas, giving opinions and working together" (p. 202). Molar activity additionally generates the related phenomenon of "interpersonal structures" (p. 205), which is akin to the clinical concept of "object relations."

In the preschool environment, which also usually promotes a high degree of parent participation, there is potential for the reinforcement of the enhancement of molar activities and interpersonal structures in two interlocking microsystems--or on the mesosystemic level. Finally, the molar activities and interpersonal structures generated in the mesosystem become incorporated into the developing child's personality structure (p. 205). Clearly, these ecological concepts are rather directly addressed by programs which seek to promote competence and resiliency to stress in young children.

Primary Prevention for Preschoolers

The dearth of literature in this area attests to its newness. There are no scholarly studies on the development or outcomes of child protection or abuse prevention programs. The small amount of reading dealing with

prevention or mental health promotion approaches for a nonclinical population of young children is primarily to be found in dissertations and articles. Of these sources, most are replications of other studies. The rest involve approaches which border on treatment, or secondary or tertiary prevention. One explanation for this phenomenon is offered by Bernard Guerney (1979) who suggests that the medical model of health versus illness (in which mental health professionals are rigorously trained) interferes with the operational definition of "prevention," unlike "education" which is essentially always defined the same way (p. 85). He also states that the dawn of true primary prevention may be the training/education of preschoolers in mental health skills (p. 86).

The ecological viewpoint is unavoidable in any discussion of young children who are, naturally, dependent on adults. Reinherz (1980) describes a primary prevention approach that addresses the parent-child microsystem without including children directly. She found that the children of parents who participated in mental health/child development discussion groups presented fewer behavior problems in school than children whose parents did not (pp. 6-7). The interviewer/child microsystem is another intervention avenue such as employed by Lindemann and Ross (1955). These researchers set out to study children's peer and adult problem solving capacities by use of a four-point protocol on doll play. By interaction with the

researchers, the children were able to enhance their interpersonal skills (p. 84).

The approach illustrated in the Early Intervention Program (EIP) seems two-fold (Frangia & Reisinger, 1979). On the one hand, the authors describe a mesosystem intervention featuring parents involved with professional consultants and with their own children (as well as with volunteers who have previously worked with their own children in the same program). On the other hand, the program has features of casefinding and treatment-by-parent with professional consultation which would seem at first to be more closely aligned with secondary or tertiary prevention (p. 64). However, it is explained that the terminology has more to do with EIP's funding strategy than operational perspective (p. 68).

The program is composed of five service modules: Intake, Individual Tutoring, Toddler Management, and a three-step preschool module (p. 65). The cognitively and behaviorally focused techniques in fact shape the parents' behaviors as much as the children's. When a child has progressed enough, either through Individual Tutoring or Toddler Management, he or she enters the Preschool module: first step--intake, second--deficit/remediation (when needed), third--community classroom (which most resembles the usual preschool program) (p. 66). There are also five support modules which include nursery (for siblings of EIP children), Liaison, Public Relations, Parent Theory Class

and Visitation (p. 67). The success of four- and five-year-old "graduates" of EIP who enter regular preschools and kindergartens provides good advertising for the program as well (p. 68).

The program most often referred to in the literature on primary prevention for preschoolers is Preschool Interpersonal Problem Solving (PIPS) developed by Shure and Spivack (1979a, 1979b). Like EIP, PIPS is also a mesosystemic, cognitive and behavioral program composed of related segments. Unlike EIP, which began as a program for middle-class families and later became accessible to low-income families, PIPS was created and first tested for low-income Project Headstart families (Winer, et al., 1982). Another difference between the two programs is that while EIP obtains participants by referral and moves young children by gradual steps toward the regular classroom, PIPS is conducted in the regular preschool classroom (there is also a variation for kindergarten) as part of the curriculum (1979a, p. 93).

Parent involvement in PIPS evolved from what was first created for the teacher in the classroom. In their generative research, Shure and Spivack (1979b) found that

> People over a broad age range, from diverse socioeconomic groups, of both sexes, and across a broad span of adjustment levels, who exhibit healthy, adaptive behaviors have consistently demonstrated markedly superior (interpersonal cognitive problem solving) ICPS ability compared to those who manifest some degree of behavioral maladjustment. (p. 202)

Within groups of normal children, the same

researchers identified the levels of ICPS ability in children as young as four years. By analysis of the areas of deficiency in the less skilled preschoolers, the authors concluded that the differential in skills had to do with two major categories: (1) alternative solution thinking and (2) consequential thinking (p. 202). Teachers were trained initially in the 20 minutes a day scripts which were called games with the children. After about eight weeks of basic language concepts (to insure, for example, that the children know the concept of "not" as in "what not to do"), "children are presented with pictures and puppets depicting interpersonal problem situations and asked for all the ways they can think of for the portrayed child" to respond (1979a, p. 90). The second ICPS skill area is demonstrated in the What Happens Next Game (WHNG), which is along similar lines.

When Shure and Spivack determined to adapt PIPS to the mother-child dyad or microsystem, their modification included adult problem solving games around responses to child behavior (1979b, p. 206). With both the teacher trained and the parent trained preschoolers, pre- and post-training behaviors were rated and compared. In all cases, the participating preschoolers indicated better behaviors or competencies than the control groups (p. 215). Further, findings suggested that the impact on the children's development in the long run was greater when "mothers as well as children are taught how to think" (p.

217). In recent years, PIPS has been adapted and replicated with children of various ages and communities of various socioeconomic statuses, especially in dissertations.

Research

From the perspective of testing hypotheses which may support behavioral scientists' practice interventions on behalf of child growth, research on stress and development in early childhood is in its own infancy (Segal, 1983).

Referring to the three tracks of development etiologically as "genogenic, psychogenic and sociogenic," Garmezy (1971) highlighted the need for empirical data upon which prevention programs should be based (p. 101). He further suggested that investigations of stress and other parameters of primary prevention programs for young children would contribute ultimately to a knowledge base in adaptation (social, economic and emotional competence) and maladaption (mental illness, criminality and social isolation/deprivation) in later life (pp. 104, 112). The literature summarized previously in this chapter represents the theoretical frameworks which are usually cited by primary prevention specialists. As stated before, the interdependence of these areas was first recognized by Gerald Caplan.

Caplan's definition of "host factors"--qualities of individual populations which contribute to vulnerability or resilience to stress--has greatly influenced research

and program development in childhood stress (1964). There is no literature in this area which fails to credit Caplan with having first identified host factors which are "fixed," such as age, sex, socioeconomic group and ethnic group; and host factors which are "modifiable" such as "ego strength, problem solving skills and capacity to tolerate anxiety and frustration" (p. 27).

To follow through with Caplan's guidelines, primary prevention specialists who have targeted the preschool population focus on the factors of age/development and socioeconomic status (usually) in that choice of population. In research literature these specialists seem to fall naturally into two categories--the theorists and the investigators (who are sometimes the same individuals).

One representative of the first group is Eli Bower (1972) who emphasizes the developmental need of young children to have guidance and support in their social and emotional growth. As part of the "strong ecological chain," which includes health services, families and peer play arrangements (p. 557), the school provides the young child with a setting in which a "tying together of primary emotional processes with the secondary reality processes can occur" (1979, p. 144). Bower's thoughts on the power of environmental influences upon the young child's development are echoed by Bronfenbrenner (1979) who advocates an eco-systems perspective to research in this area. He proposes 50 hypotheses for the study of development, many

of which are in fact descriptive of research reviewed for this study.

Bronfenbrenner's view which most influenced the present study is that the child's evolving sense of himself and the rest of the world is "not observed directly but inferred from patterns of activities, roles and interpersonal relations enacted by the child in a given setting" (p. 22). The desire to study the modifiable factors described in the previous paragraphs predominates in child development research, although there is diversity in settings and specific variables chosen. It is the second group of primary prevention specialists, the "investigators," who frequently study modifiable factors from the standpoint of the impact of interventions (Robins, 1983).

Some studies of preschool aged children involve the mental health professional as participant-observer (Bruyn, 1966). The setting may be a laboratory (Lindemann, 1955; Brody, 1961) or the familiar environment of the preschool. For the most part, methodology in this type of study enlists use of structured and projective clinical assessment techniques with the child directly. This approach takes child development into account by design and is not solely based on the preschooler's verbal or manual abilities due to the unreliability of language and fine motor development in children under five years of age (Lindemann, 1955, p. 24). On the other hand, the child

under five is given to an openness and spontaneity of involvement which begins to fade after age five due to the evolution of repression (Murphy, 1960, p. 5). Validity and reliability for this type of study are derived from short-term and long-term follow-up with the children and/or their parents and/or their teachers by the professional(s).

Another category of research deals almost exclusively with evaluation of the impact of intervention programs for preschoolers. This group includes EIP (Frangia & Reisinger, 1979), PIPS (Shure & Spivack, 1979a&b), and the Perry Preschool Program (Berrueta-Clement, et al., 1984); and also features longitudinal and retrospective approaches to establishing validity and reliability (Garmezy, 1971, p. 108). The interventions themselves feature cognitive and social approaches within the contexts of micro or mesosystems involving teacher/child or parent/child dyadic or group activities.

These programs are primarily designed for the naturalistic environment of the preschool and/or home (Bronfenbrenner, 1979, p. 25), with the exception of EIP which includes a therapeutic (remedial) component. While this group of studies also may involve the mental health professional as observer-participant, the majority of the activities occur between the natural caregivers and the preschoolers with professional guidance.

The third category of research is naturalistic

studies of preschoolers involving the use of scales, inventories and checklists developed by researchers for use by natural caregivers (parents or teachers) (Coddington, 1972a & b; Johnson, 1976; Eisen, et al., 1980). The items from the Coddington scale for preschoolers are stressor specific like the Life Readjustment Scale developed by Holmes and Rahe for adults (1967); and life event scales for children aged six through thirteen (Coddington, 1972b; Metcalfe, et al., 1982; Stiff, 1983; Lewis, et al., 1984).

Coddington's team gleaned 30 items from the literature and their experience with normal and clinical populations of children. Then a group of 243 teachers, pediatricians and mental health workers were asked to rank the items (representing such life events as "death of a parent, change of nursery school, change in parents' financial status, decrease of arguments between parents," etc.); and to assign values also known as "life change units" (1972a, p. 10). At this level of development of the scale the professionals' responses were geometrically correlated revealing some difference between the teachers and the other professionals regarding values, the amount of upheaval due to a stressor, but no significant difference among all the professional respondents in the rank ordering of stressors (p. 18).

The scale was next administered to parents of 806 preschoolers who were selected randomly from around the

Columbus, Ohio area in the summer of 1971 (1972b). The scale was then used to compare life change units between children who were and were not hospitalized during the previous year in order to predict the etiology of physical illness (p. 210). The author, noting the rapidity of change in our society, recommends updating the items on the scale every few years in order to adequately reflect contemporary stressors in the lives of children (p. 212).

The impact of various health care arrangements upon the maintenance or improvement of child health was the object of study by Eisen, et al., published in 1980. These researchers sought to develop valid and reliable scales applicable to general populations of children under thirteen for which the respondents were parents (p. 2). The scales, known as the Health Insurance Survey (HIS), include several components following the World Health Organization's definition of health as "a state of complete physical, mental and social well-being and not merely the absence of disease or infirmity" (p. 4).

The sample of 2,750 families from six areas of the United States included 679 children under the age of four. In addition to the Baseline Interview of a head of household by a professional and the self-administered medical history questionnaires, respondents also completed bi-weekly health reports and an annual health questionnaire (pp. 3-4). After an exhaustive review of the literature, the researchers adapted mental and social health items

from eight psychiatric screening indices (used in general populations) and two social relations inventories for the HIS.

The resultant scales address "current health, prior health, resistance/susceptibility, anxiety, depression, positive well-being and social relations" in children under thirteen (pp. 172 ff). Mental health was not measured for children under four for whom parents were asked to respond in the first three categories only (current health, prior health, resistance/susceptibility) (p. 136). In addition,

> One Satisfaction with Development Scale based on summated ratings was constructed for children 0-4 years old. The four items, representing aspects of development, such as the child's growth, eating, sleeping, and bowel habits, for which parents might express satisfaction or concern, were scaled and met multitrait scaling criteria. (p. 137)

The results of this highly statistical study were measures which continue to be in use in follow-up research around the country. The authors summarize:

> Although additional research must be completed to address several important validity and measurement issues, findings thus far indicate that self-administered scales to measure child health in the HIS 1) are applicable to general populations, 2) possess sufficient variability to allow detection of potential differences in health status, 3) are generally reliable and . . . 4) have validity, i.e., contain useful information about the health status constructs they were developed to measure. (p. 147)

While the HIS is in the process of development for predictive use in supporting total child health and resiliency, there are other approaches in use with preschool

populations which are specifically designed to monitor child personality development.

There are many social/emotional development checklists in use in preschool programs for which no data is available regarding authorship, construction, reliability or validity. It is common for such instruments to be disseminated by the U.S. Department of Health and Human Services and other federal and state agencies. Since items are extremely similar between checklists, one can assume that the information attempts to synthesize early childhood education with applied child development knowledge bases for early identification of special needs or individualized educational plans (Brody, 1961, p. 169). All of the checklists describe problem behaviors in language of varying levels of sophistication, are usually recommended for use more than once a year and tend to exclude positive signs of growth. There are seven such instruments for nonclinical populations of preschoolers reviewed in Orval Johnson's Tests and measurements in child development: Handbook II, Vol. I (1976). Figure 1 summarizes these instruments (pp. 408-439).

Most of these instruments are intended for predictive purposes, possess greatly varying reliability and are validated longitudinally from one to ten years. All of the instruments seek to measure personality development of young children by adult observation except "Gumpgookies" which features interviews with children; and the CDCQ

Name	Age	Variable	Type of Measure	Informants	Sample Items
Child Behavior Checklist	Preschool Children	Eight Temperment Variables	5 point rating scale of 68	Parents and preschool teachers	1. Good appetite. 5. Worries. 10. Energetic. 15. Sympathetic. 20. Fearful
Child Development Center Q Sort (CDCQ)	Toddler to Maturity	Personality Development in 8 Variables	Developmental sort covering 5 age levels: from 41 items at toddler level to 113 at maturity	Mental health workers, specially trained teachers	2. Seeks out physical contact--Avoids physical contact. 7. Takes active steps in fulfilling own desire--Fails to take steps that are necessary for own benefit.
Child's Behavior Traits (CBT)	2 to 12 yrs.	Socio-emotional Development	Likert-type. Scale of 20 items in 5 subscales	"Home interveners" and teachers	1. Responsible Independence: Seems self-confident, not timid. 3. Cognitively Related Skills: Is well organized in work or play. 5. Task Orientation: Is affective and concentrates on tasks.
Gumpgookies	3½ to 8 yrs.	Motivation to achieve in school in young children	Simulations of 2 amorphous, dichotomous characters used to cover 75 items in 5 hypothetical components of motivation in interviews with children	Teachers	This gumpgookie does what it wants to. This gumpgookie does things well. Which is your gumpgookie? Learning to count makes this one feel good Learning to count makes this one feel bad. Which is yours?
Nursery School Behavior	2 to 5 yrs.	Informant judgments of 9 temperment variables	Rating scale of 66 behavior traits	Teachers	1. Outstandingly vigorous; has great stores of energy to burn. 7. Little motor energy; Never does things energetically or vigorously. 1. Free, flexible, fluid, expressive patterns of voice, face, body. 7. Tight, constrained, rigid, unexpressive response; Can't let himself go.
Preschool Mental Health Assessment	3 to 4 yrs.	Behavior response patterns	Checklist or structured interview. Two assessment forms: home = 139 behaviors; preschool = 143 behaviors	Parents or teachers	3.x. Can maintain own rights with other children. 3.y. Usually gives in to other children in play, routine, conversation. 18.x. Can amuse self happily for reasonable length of time with play things. 24.y. Refuses to play alone--shows emotion-protesting, crying, temper tantrums, sulking.
Psychiatric Behavior Scale (PBS)	2½ to 6½ yrs.	Emotional development	5 bipolar items with 6-8 choices each; 1 unipolar item; 8 yes-no questions	Day care workers	1.1. of 6. The child demands his own way in virtually all situations. He often takes toys from other children while refusing to share his own. The child often persists despite the teacher's intervention.

FIGURE 1. Developmental Checklists for Nonclinical Populations of Preschoolers

Note. Summarized from Tests and Measurements in Child Development: Handbook II, Vol. I (pp. 408-439) by O. G. Johnson, 1976, San Francisco: Jossey-Bass Pub.

which incorporates family and developmental histories, psychological tests and child interviews--when available. One instrument includes "emotional distress" as a concept related to a set of items, another lists "response to stress" as a scale. Only the PBS includes staff development as an additional goal of the instrument, which also requires extensive written observations.

While there were no instruments to be found in the literature which addressed signs of stress in preschool children in nonclinical settings per se, there was research literature which suggested how such instruments might be designed. This question is central to the present study.

The answer appears to lie with qualitative or ethnographic research methodology. Within this framework the participant observer investigates cultural phenomena unobtrusively and creates a taxonomy, or descriptions of human situations, events, interactions and activities (Patton, 1980, p. 36). The preschool setting fits the definition of a culture because of "the acquired knowledge participants use to interpret experience" (Spradley, 1979, p. 6).

In a given preschool the participants include staff and parents engaged, ideally, in promoting the cognitive, social and emotional growth of children between the ages of three and five years. As has been shown, this rich setting functions within a context of observable effects

for which the inherent wisdom of the adult participant develops from experience with the young child (Lincoln & Guba, 1985, p. 123). While research in early childhood development clearly adapts instruments from clinical populations or older populations, the dearth has been in the organization of data intuitively known to informants for analysis of developmental contexts and processes at the level of the preschool stage (Bronfenbrenner, 1979, p. 42).

In addition, the majority of studies of this population features inquiries of natural caregivers because, as Patton states, "participant observation is a highly labor-intensive and therefore relatively expensive research strategy" (1980, p. 30). What is not clear, however, is how investigators know whether adult caregivers share the same contexts of meaning when filling out the requisite surveys and checklists. The exception is the PIPS program wherein, before young children are taught language to insure a shared context of meaning for cognitive problem solving training by their teachers, the teachers are themselves trained in PIPS. This results in assurance of the adults' shared meanings (Shure & Spivack, 1979b, p. 203). Part of the task of developing an instrument to measure stress in preschoolers therefore is to generate a shared context of meanings for the informants. The most effective way to promote this shared meaning is in presenting and training on an instrument which utilizes language

familiar to the respondents.

The models for creating such a checklist include the problem solving approach to program development as described by Spradley (1980, p. 108) and the decision making model by Patton (1980, p. 57 ff) who also emphasizes the importance of unobtrusive measures in qualitative research (p. 76).

In Naturalistic inquiry Lincoln and Guba state that determining the focus of inquiry is crucial to the design of a naturalistic exploratory study (1985, p. 226). The checklist instrument this study seeks to develop is the focus of inquiry and, as such, can also be referred to as the evaluand. An evaluand can be a program, material or facility, etc., "the value of which is to be determined" (p. 227). An evaluation can be either summative (done after operation) or formative (for the improvement of the evaluand under development). The methodology of this study is based on the formative evaluation model of program development as discussed by Patton and Lincoln and Guba.

Formative evaluation can make use of quantitative or qualitative research methodology (Patton, 1980, p. 71). However, for this study formative evaluation is a qualitative approach which comes more easily to the human-as-instrument paradigm of the naturalistic investigator. In the words of Lincoln and Guba:

> The human-as-instrument is inclined toward methods that are extensions of normal human

> activities: looking, listening, speaking, reading, and the like. We believe that the human will tend, therefore, toward interviewing, observing, mining available documents and records, taking account of nonverbal cues, and interpreting inadvertent unobtrusive measures. . . . We organized qualitative methods into two broad categories differentiated by whether another human is typically present--or needed--as a source. Thus other humans are usually required for interviewing, observation, and nonverbal language situations, but they need not be present when using documents and records or assessing unobtrusive measures. (1985, p. 199)

Professional review is often a key element of qualitative formative evaluation. Sometimes professionals are designated as auditors, critics or experts. Whatever the designation the use of professional expertise in formative evaluation is also known as "connoisseurship" which is analogous to the tradition of literary and artistic criticism (Patton, 1980, p. 52) at the conclusion of a project (summative evaluation). The professionals invited to participate in this study included experienced consultants and natural caregivers in order to provide the most relevant reviewers for the evaluand (p. 73). The next steps in the development of the evaluand involved analyzing the respondences of the critic/evaluators "repeatedly until trustworthiness is achieved" (Lincoln & Guba, 1985, p. 189).

> Trustworthiness is tested by four naturalistic analogues to the conventional criteria of internal and external validity, reliability, and objectivity, which are termed "credibility," "transferability," "dependability," and "confirmability," respectively.

The flow of naturalistic inquiry is illustrated in Figure 2.

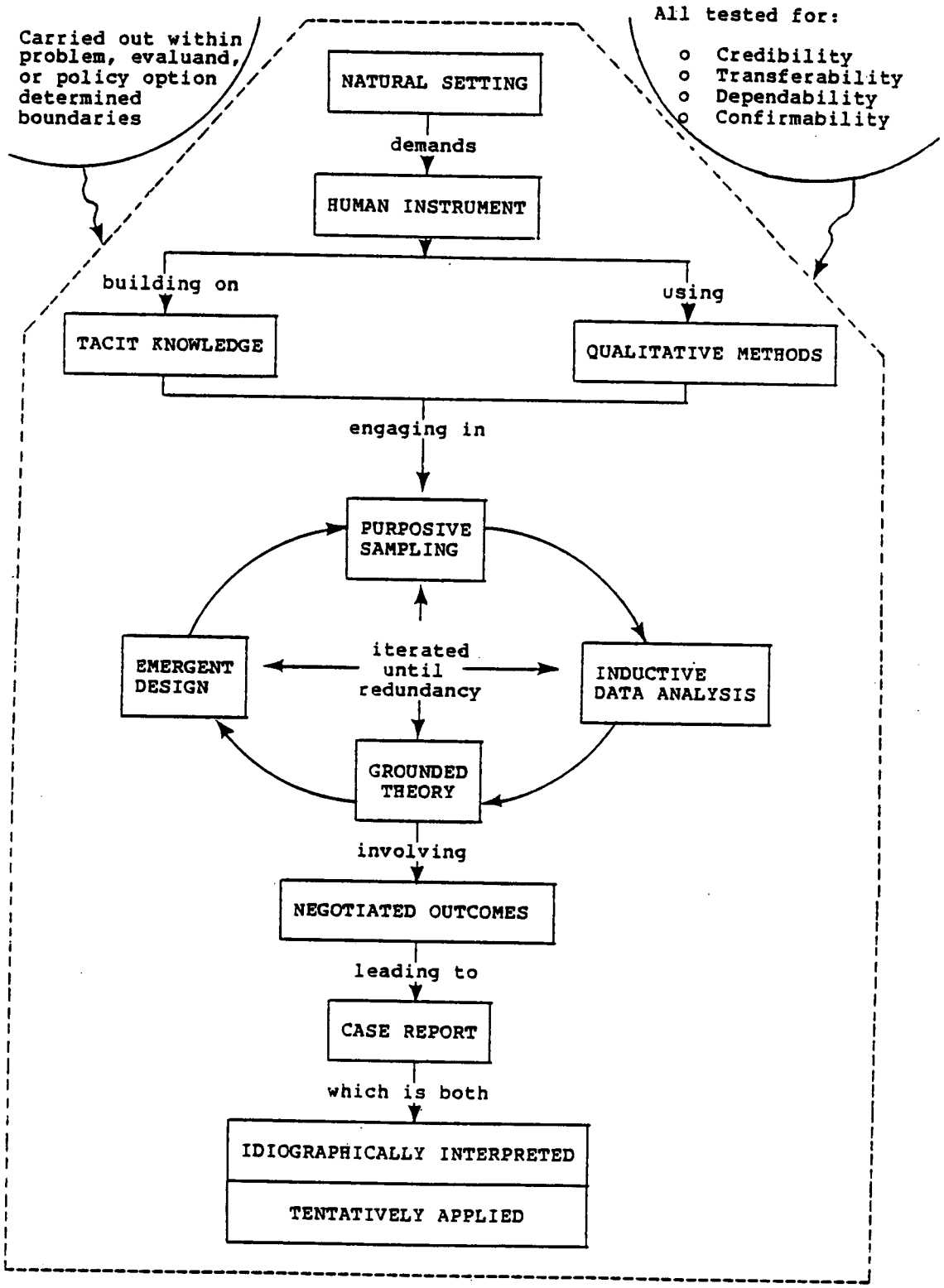


FIGURE 2. The Flow of Naturalistic Inquiry

[1]From Naturalistic Inquiry (p. 188) by Y. S. Lincoln and E. G. Guba, 1985, Beverly Hills: Sage Publications. Reprinted by permission.

Finally, Lincoln and Guba warn the naturalistic investigator against the complexities of analyzing qualitative data (p. 354). However, they also endorse the value of constructing visualizations of exploratory data as a substantial aid to comprehensibility. In that light, the analyses of the responses of all the evaluators was projected to be accomplished best by "selecting, focusing, simplifying, abstracting and transforming" the data into matrices as suggested by Miles and Huberman in Qualitative data analysis (1984, p. 21). Once constructed, response matrices greatly facilitated the constant analysis aspect of the inquiry yielding the completed evaluand for use in further, perhaps quantitative (or mixed approach) studies.

Summary

Stress in early childhood is a newly emerging multifaceted area of human development for which not all of the facets have been identified. In the literature on stress, the vulnerabilities and resiliencies of adults and children are defined as life itself. In primary prevention theory, approaches to reducing vulnerabilities and increasing resiliencies to the after-effects of stressful experiences are emphasized. In child development literature, stress often goes by other names such as anxiety or trauma but it is descriptively evident and integral to the issue of how children grow.

In the sparse area of primary prevention programs for

young children, there is agreement which echoes throughout all the pertinent literature that the three to five year old ages form a crucial period in human development. However, there was no information to be found regarding how or whether stress in children of this age group can be communicated and documented in a natural setting as they themselves experience it. Yet, there is exploratory qualitative research methodology in the literature which is suggestive of how such studies might be undertaken, at least in the formative stages. The present study seeks to investigate that facet in support of increased knowledge regarding "Childhood Stress," a term which is gradually becoming a bridge between any person's concept of life pressures and the mental health professions' conceptualizations regarding how children need help to grow.

CHAPTER III

METHODOLOGY

This study is an exploratory qualitative research approach designed to develop an instrument for recording behavioral indicators of stress in a nonclinical population of preschoolers by their teachers and aides. The outcome of this study will be a "Social/Emotional Development Checklist" rated for content and practicality by a group of early childhood experts, including experienced preschool teachers. The resultant instrument would be useful in further research on sources of and interventions into stress in early childhood, with implications for staff training.

Purpose of the Research

In the typical preschool, the gap between recognition of indicators of stress in young children and the adult participants' interventions is often filled by the mental health consultant who is called in as a participant observer. This is most frequently the case with requests for early identification of young children at risk for pathology. Less frequently, the consultant observes children, trains caretakers and influences the preschool ecology (including parents) for the purpose of bolstering

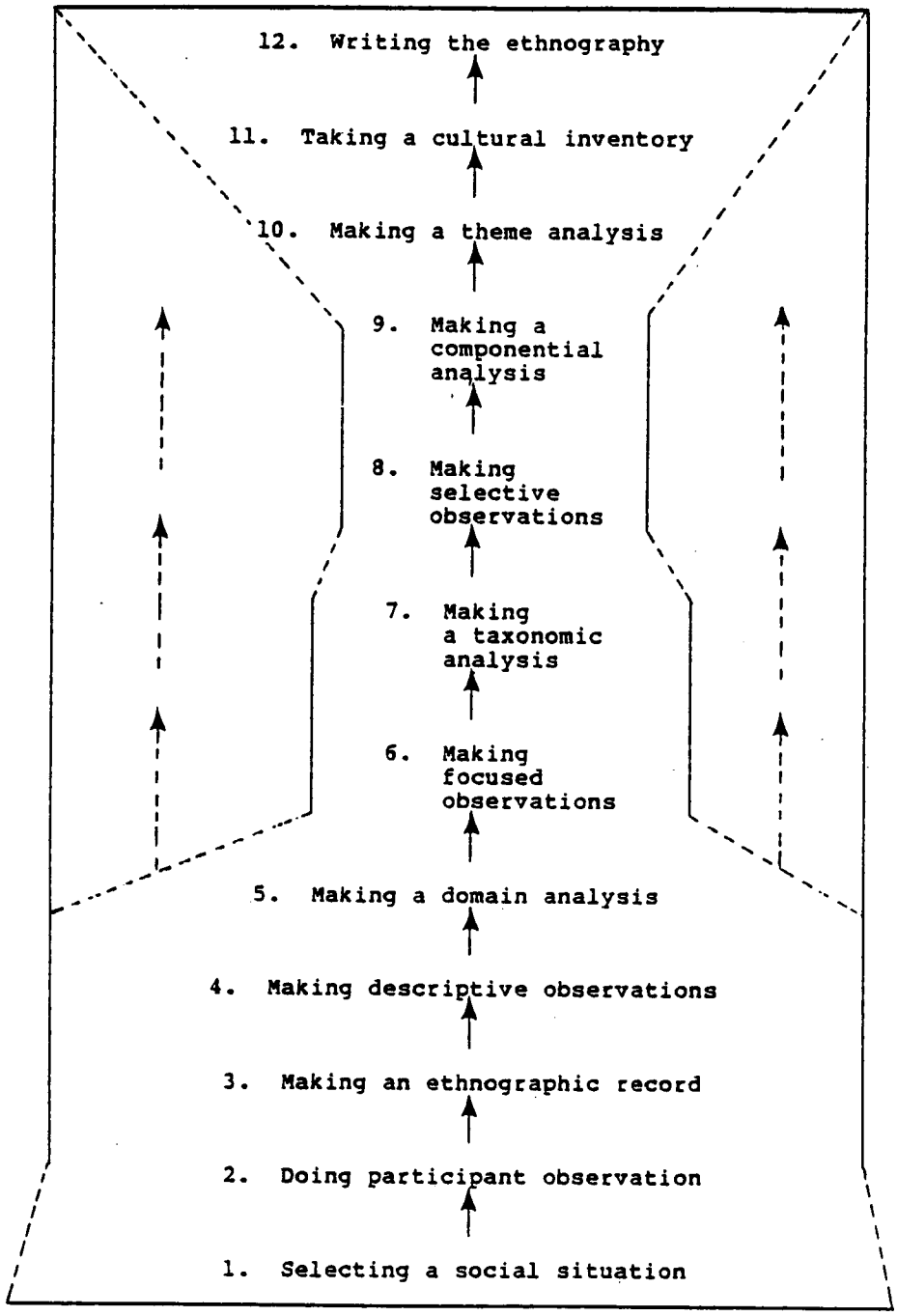
children's resiliency and well-being. Professionals with a primary prevention orientation are familiar with the latter category of intervention and the behavioral observations language which is a part of the preschool culture.

Development of the Checklist

As a primary prevention specialist I have been a participant observer in this culture for ten years and, in the course of my work, have naturalistically experienced what Spradley (1980) has charted as the first nine steps in ethnographic research (see Figure 3). What I have learned from my involvement in preschool classrooms has resulted in the integration of experience and theory into the instrument this study seeks to refine (steps 6-12), has provided the major impetus of this study (steps 10-12) and has been reinforced in the literature (steps 1-9)(1980, p. 103).

As detailed in the previous chapter, most observation formats for use in preschools are closely related to the detection of pathology. However, literature related to child development (e.g., Elkind, Piaget, Fraiberg) and primary prevention (e.g., Caplan, Bower, Reinherz) more accurately reflect the taxonomy of items in the "Social/ Emotional Development Checklist" (see Appendix C). The best representative from the literature consulted in this area is Sylvia Brody's criteria of mental health of preschoolers:

1. Feelings of body integrity and self-esteem: observable in the balance the child appears to be



The D.R.S. steps begin with a wide focus, surveying many possible social situations. When one is selected, the research includes the entire social situation from Steps 3 through 12. However, there is a dual focus, one narrow, the other broad and holistic. The ethnographer continues to use the skills learned in Steps 4 and 5 while at the same time focusing observations on selected cultural domains. Toward the end of the project the focus expands again to make a holistic description of the cultural scene.

FIGURE 3. The Developmental Research Sequence

[2]From Participant Observation (p. 103) by J. P. Spradley, 1980, New York: Holt, Rinehart and Winston. Reprinted by permission.

achieving, from day to day, between active and passive attitudes and behavior; in his capacity to alternate between leading and following, imitating and initiating, and between the pursuit of mental and physical activities; reactions to injury and illness; control or motility; self care.

2. Object relations: capacity to feel and to express emotional response to both teacher and other children; capacity to work and to play with at least one other child, and to sustain work or play when separated from preferred objects; ability to take direction from adults.

3. Tolerance of frustration and displeasure: capacity to withstand instinctual pressures without experiencing disorganization and without loss of relationship to persons or objects from whence the frustrations have come.

4. Impulse gratification: capacity to act upon impulse, but also to postpone gratification; ability to identify with realistic demands of familiar persons without excessive attempts to manipulate them toward surrender to his own impulses; the degree of narcissism attached to his own demands upon the environment.

5. The range and intensity of ego activities: capacity to undertake, pursue and enjoy meaningful tasks that involve some planning, some skill, some completion; capacity to make constructive use of materials in ways that can serve the development of sublimations; freedom to choose activity and to try new experiences without internal or external compulsion, stereotypy, or sexualization.

6. The depth and breadth of curiosities: response to intellectual challenge; intensity and pursuit of information; freedom to engross himself in new and more varied satisfactions with increasing maturity.

7. The nature and range of moods: capacity to acknowledge pleasure or pain, success or failure; to be affected but not overwhelmed by separations, vacations, birthday or other excitements, significant events in the lives of other closely related persons. (1961, p. 177)

The language of the checklist items was chosen for simplicity and clarity to (1) reflect the typical

caregiver's language, (2) avoid the inappropriateness of clinical jargon in a setting of nonclinical personnel, (3) facilitate objective observations of all preschoolers in a classroom, not just "problem children," (4) focus staff observations of child behavior, and (5) avoid stigmatization.

The periods of regular observation, October-January-April, are such to allow for the child's adjustment to the preschool initially and following Christmas break; and for near-year-end follow-up prior to the last parent conference of the school year. The instrument can also be used to focus the caretaker's concerns prior to consultation with the mental health professional or school special services. The Likert-type scale and comments section at the end are intended to encourage selectiveness of observations.

A very important part of checklist utilization will be staff inservice training. The content of that training will include (1) introduction to the concept of childhood stress emphasizing the value of promoting well-being, (2) discussion of each observation item with examples generated from staff, (3) discussion of questions from staff, and (4) group decision regarding a follow-up training session for feedback on checklist utilization.

Research Design

A formative evaluation procedure (as described in the previous chapter) was utilized in order to answer the research question. Due to the exploratory nature of the

question, the content of interviews with evaluators was qualitatively analyzed and applied to the evaluand (Patton, 1980, p. 58).

A formulative evaluation procedure was chosen for several reasons. A review of the literature reveals a dearth of material in the field that the evaluand addresses. The progress of the evaluand can best be achieved by review by other adults who are experienced in the field. The involvement of other adults as evaluators is best suited by the naturalistic inquiry paradigm which is built upon the interviewing interaction between the investigator and the evaluators. The qualitative analysis of the evaluation data will contribute to greater value or practicality for the field that the evaluand addresses.

The foregoing could be described as one channel of decisions carved out of the range of possibilities in exploratory research design. Theorists in social science research point out the importance of discovering needed information when a dearth of knowledge presents itself among existing literature. The process of discovery is integral to the present study and features three key methodological components (Sellitz, et al., 1959): the investigator's attitude of "alert receptivity, of seeking rather than testing," the intensity of the study which attempts to explain both the unique and generalizable with the help of "informants" and reliance upon the integrative skills of the investigator/researcher (p. 60).

The investigator/researcher role in this study follows the principle of participant observation in ethnographic field research (Patton, 1980). This means that it was the intent of the researcher to be open and flexible with the interviewees in order to communicate respect for their ideas stated in their own way and to encourage candor (p. 84). It was expected that the selection criteria (see below) would insure the needed familiarity with the natural setting of the preschool culture and child development. The data from the interviews was to be subjected to numerous iterations in order to facilitate the emergence of full contextual answers to the research questions (Miles & Huberman, 1984).

The major departure this study takes from what is usually thought of as ethnographic research is that the informants were asked to react to a program and participate in its development rather than as the subjects of inquiry themselves. (Regardless of this fact, informed consent and confidentiality procedures were strictly observed.) Miles & Huberman advise that the interview structure and questions must be chosen carefully so that the spontaneous responses of the informants can be uniform enough to facilitate an orderly process of data collection and analysis (1984, p. 35). Patton (1980) describes three types of qualitative interviewing approaches:

1) the informal conversational interview;
2) the general interview guide approach; and
3) the standardized open-ended interview. (p. 197)

In anticipation of focused yet freewheeling interviews, the standardized open-ended interview approach was chosen and will be illustrated in the remainder of this chapter and in the following one.

Data Entry

The individuals invited to act as evaluators were chosen purposively (Lincoln & Guba, 1985, pp. 199-202) so that their range of expertise and experience would maximize the investigator's ability to incorporate a wide range of knowledge and local values (p. 40) into revision of the evaluand. The evaluators represented two groups: mental health professionals with experience in early childhood development, measurement or preschool consultation; and teachers with a minimum of three years experience in preschools.

The criterion for the preschool teachers' experience reflects the typical staffing of preschools which meet state and federal guidelines. In terms of formal education, the range included preschool teachers with an Associated Arts degree in child development, others with a Bachelors degree, and others with postgraduate education and credentialing. The mental health professionals' criteria included a Masters degree in social work, child development or developmental psychology; or a Doctorate in psychology or clinical social work. They were also required to have five years minimum consultation experience in day care, preschool or other nonclinical settings for

young children.

Another decision made regarding the execution of this study involved the choice of interviewing about the checklist rather than requesting written responses on it from the informant/evaluators. First, while experts (according to the criteria of this study) were chosen for their enculturation to the areas the evaluand addresses, it was anticipated that written responses would vary too widely (owing to a range of perspectives and writing skills probable to the group) to accommodate an orderly process of evaluation (Spradley, 1979).

Second, it was felt that in-person, open-ended interviews would be a more respectful and a more efficient use of the time of busy people who comprised such a small sample. (Although invited to, nearly none of the evaluators made notes on the sample checklists they received in advance of the interviews.) Third, time constraints were also more appropriately considered by the simultaneous utilization of tape recordings and formal field notes to record the evaluators' reactions to the evaluand (Patton, 1980).

The primary question concerning this study (of whether the current experience of stress could be ascertained and recorded from a nonclinical population of preschoolers) revolved around two subquestions:

1) Can an instrument be designed which will help organize the behavioral observations of stress in young

children by their caretakers? and

2) Would such an instrument be deemed useful by professionals from the fields of early childhood development?

A formal field note was devised to aid the researcher in answering these questions by means of a three-part, standardized inquiry. The evaluators were asked to comment as follows:

1. Feelings about the content of the checklist;
2. Feelings about the practicality of the checklist;
3. Other areas that should be added or deleted.

The interview format was also standardized (which was greatly facilitated by the presence of the tape recorder) along lines suggested by Spradley (1979, pp. 58-67). (See Appendix D.) The elements of this format are as follows:

1. Greeting. The interviewer establishes rapport.
2. Explanation. The interviewer explains the ethnographic nature of the questioning to be done, obtains informed consent to be taped and estimates the length of the interview.
3. Questions. The three open structured questions described above regarding content and practicality.
4. Friendly question. The interviewee is invited to focus on any aspect of the evaluand they might wish to comment on further.

5. Taking leave. A brief statement of appreciation made by the interviewer to close.
6. Summary. The interviewer adds written notes to those made during the interview as soon after the interview as possible.

Other materials for this study included the initial procedural format for data collection (Appendix A), follow-up letters of information further explaining the process (Appendix B), the "Social/Emotional Development Checklist" (Appendix C), a formal thank you letter (Appendix E), the Informed Consent Form (Appendix F) and the Data Analysis Form (Appendix G).

Data Collection Procedures

As Lincoln and Guba state, data collection techniques are at the heart of a naturalistic inquiry because the primary "data collection instrument is the inquirer him- or herself." Further, the sources may be "both human and non-human. Human sources are tapped by interviews and observations, and by noting nonverbal cues that are transmitted while those interviews or observations are under way" (1985, p. 267). This approach is especially suited to the clinician's skills in contacting people, putting them at ease, drawing them out to give information and being open and flexible with what is disclosed. With this in mind, procedures for the study were formulated in the following manner (see Appendix A).

Each person chosen to be interviewed was contacted

initially by phone or in person to secure his or her participation in the study. While this may seem unusual to some readers, experienced consultants know that in some cultures it is more respectful to first visit a potential informant's classroom than to cause the disrupting effect of a phone call. Some consultant-evaluators for this study were located initially at meetings and conferences. In addition, gentle inquiries regarding experience in order to fulfill the evaluator criteria for this study were met with complete cooperation. In all cases, a best time and number for subsequent calls was cleared.

The follow-up letter confirmed the evaluator's commitment to the study and promised further confirmation by phone a day or two in advance of the actual appointment. The letter included an outline of the proposed staff orientation procedure and a sample copy of the checklist (Appendices B and C).

Each person was phoned as promised. In several cases the call provided a necessary reminder; and in all cases the call facilitated designation of the date, time, and location most favored by the evaluator. As a result, the interviews were conducted in homes, offices, empty classrooms, a quiet corner of a restaurant, and over the sleeping bodies of children. It was expected that giving the evaluator complete control over the conditions of the interview would closely approximate pure field work and encourage the informants' candor (Patton, 1980).

At the appointment time, evaluators were reminded that the interview would only take 20 to 30 minutes. They were also reminded that the interview would be taped for use by the investigator only; that interviews would be coded and tapes subsequently destroyed; and that their anonymity would be protected. Every evaluator signed an Informed Consent Form (Appendix F) to that effect as was recommended by the CICSW's Human Subjects Guidelines.

The interviewer simultaneously enlisted the use of audio tapes and formal field notes (Appendix D) at the advice of all the qualitative research references consulted for this study. By using the same open structured questions with each informant, it was expected that responses would be focused but individualized necessitating on-the-spot adjustments by the interviewer (pp. 206-207). The responses or "raw data" this kind of study produces is composed of quotes, impressions and descriptions of interactions rather than the numerical expressions typical of quantitative studies. The recording procedures are the first step in the creation of an audit trail which is necessary to validate qualitative research (Lincoln & Guba, 1985). The data was transcribed from tapes and field notes on to coded Data Analysis Forms created by the investigator (see Appendix G). From these forms conceptually clustered matrices were created in order to organize the data from the interviews for analysis.

Returning to the interview procedures, of the several

styles of interviewing pointed out by Lincoln and Guba, the investigator expected to conduct "depth interviews" wherein interviewer and interviewee are peers (1985, p. 269). Each interview was conducted with this in mind, future involvement by the informants (if necessary) was secured, friendly closure was achieved, and a formal thank you letter was sent (see Appendix E).

Data Reduction Procedures

The previously described data collection procedures--consistent interview content and format, recording protocols, data matrices and the audit trail--provide a congruent foundation for the analysis of qualitative data. As stated previously, the primary operation of reduction procedures involves the construction of conceptually clustered matrices from the data for inductive analysis. By definition, inductive analysis is a process of discovering and attempting to make sense of information in situations rather than imposing pre-existing expectations or hypotheses (Patton, 1980). The process is one of repeated iterations which permit the emergence of themes and concepts (Miles & Huberman, 1984).

"Repeated iterations" means that the raw data from the interviews was looked at over and over again with each additional reflection resulting in the emergence of data categories, their contents and more matrices. The data from this study generated seven matrices which will be described in detail in the next chapter. The taxonomy created by this

process described the evaluators' responses on checklist content and practicality. The evaluators' recommendations on training, the overall tone of each interview, unique contributions by each evaluator and the investigator's role as instrument were categories of emergent data.

The last chapter of this study will describe the decision making process which led to the revision of the evaluand, an improved Social/Emotional Development Checklist (see Appendix H), based on analysis of the matrices. Finally, the investigator's interpretations of the data and reflections on the process will be discussed, as well as implications for practice and for future research; and limitations of the study.

CHAPTER IV

FINDINGS

The present study has been undertaken to answer the following research question: Can the current experience of stress be ascertained and recorded from a nonclinical population of preschoolers? This question divided into two subquestions:

1) Can an instrument be designed which will help organize behavioral observations of stress in young children by their caretakers?
2) Would such an instrument be deemed useful by professionals from the fields of early childhood development?

From these subquestions, the areas of content, practicality and staff training or orientation were condensed into an open structured interview format by the investigator.

Related literature revealed that inquiry into the experience of stress in early childhood is in its own infancy. While there were seminal references on child development and primary prevention theory, existing programs in child safety and development revealed a dearth of the kind of material which is necessary to provide a generative base for developmentally appropriate approaches

to the life experiences of young children. The literature review also provided concurrence of expert opinion that integral to the experience of stress and resiliency to it in three to five year olds is the process of social and emotional growth. Due to the immaturity of cognitive and language development in this age group, there is clear agreement that assessment of such growth must rely on behavioral observations by a child's related caretakers. Observational protocols were reviewed and found wanting in several areas: (1) assurance of uniform contexts of meaning for the adult caretakers (and teachers) who use the instruments, (2) appropriate language and utilization procedures for the nonprofessional caregiver, (3) appropriate growth-related concepts free of pathological connotations.

For the present study, a sample checklist was designed by the investigator based on experience and related literature. Due to the exploratory nature of the research question and the investigator's preference, a qualitative research methodology was chosen. A purposive sample of preschool consultants and teachers was selected and interviewed; matrices were constructed from the resultant data in order to facilitate a qualitative analysis and, eventually, revision of the sample instrument.

Matrix Construction

The first matrix generated by this study visualized the entire plan of this study (Figure 4). This matrix

	(1) Research Question	(2) Literature Review	(3) Research Design	(4) Findings	(5) Recommendations
Content					Revisions
Practicality					Revisions
				Training	
				Unique Contribu-tions of Evaluators	
				Overall Interview Tone	
				Researcher: Use of Self	

FIGURE 4. Design of This Study

became an indispensable tool for keeping track of the organization of the study during the analysis process.

The next matrix to be developed, Figure 5, was an expansion of just the section on findings from the first matrix (see below). According to Miles and Huberman (1984), this constitutes a "meta matrix."

Responses to Research Questions			Emergent Data During Course of Interviewing			
Content		Practicality	Advice on Training	Unique Contribution of each Evaluator	Overall Interview Tone	Researcher Use of Self
Revisions	Additions					
				Dynamic Impressions Inductive Data		

FIGURE 5. Meta-Matrix of Research Findings for This Study

The findings for this study naturally divided into two categories: responses to the research questions, which produced comments on content and practicality; and data which emerged during the course of the interviews. Each section will be discussed in detail in the course of this chapter.

Qualitative research theorists uniformly refer to the process of iteration (see Page 60 of this study). The first iterations for this study occurred during the interviews themselves as subsequent interviews were somewhat influenced by prior ones (although the field interviewing format and procedures were strictly adhered to). The second level of iterations occurred as the investigator made additional notes after each review as

categories of data emerged. These categories underwent further refinement as the investigator listened to the tapes resulting in the creation of the data analysis form (Appendix G) and the four subcategories of emergent data shown on Figure 5. In short, the data for the matrices constructed in this study began with the third iteration.

Analysis of the Matrices

The taxonomic analysis (classification) of responses to the question on content began with the listing of each checklist item, the evaluators who suggested changes in them and actual revisions (see Figure 6.1). This was not done for the purpose of enumeration, but as an identification of the recognition value of the observations (Lincoln & Guba, 1985). This feature of the analysis is described as a member check, a "crucial technique for establishing credibility" which can occur informally (and naturally) during the process of interviewing (pp. 314-316). Whenever an evaluator sought clarification about an item, it was an indication of the dissatisfaction without a suggested revision. Most of the time, however, evaluators advised alternative phrasings aimed at improving either developmental applicability or linguistic simplicity. Some evaluators stressed the importance of specialized domains, e.g., "play" and "separation" (attachment theory).

To briefly restate the design of this study, the informants were brought in at the post-construction, formative level as experts rather than concurrent to the

Observation Items	Most Comments or Changes (3 to 5)	Evaluators
3. Plays alone with adult direction	Accepts and carries out tasks directed by adult Accepts and follows through Follows directions Accepts adult direction/support Clarification requested	C,E,F,G,L
31. Masturbates	Perhaps delete Clarification requested Separate as "special concern" Separate as "special concern"	A,I,M,N
18. Takes leadership role in unstructured (by adult) activities	Able to fill time unstructured by adult Self-directed Starts activities Seems similar to #2 & #4 - clarification	C,F,G,H
27. Able to verbalize health problems	Able to indicate Able to express Able to indicate Able to express; perhaps "uses baby talk"	D,G,I,L
4. Plays willingly alongside peers	Functions independently alongside peers Clarification requested Seems similar to #2 & #18	C,G,H
2. Plays cooperatively with peers	Cooperates with peers Initiates play with peers without bullying Seems similar to #4 & #18 - clarification	C,G,H
13. Shows concern for others	Willing to help others in non-distress situations Unchanged, seems similar to #19 Clarification on difference from #19 requested	B,D,E
16. Able to verbalize emotions	Able to express emotions without losing control Express instead of verbalize Express instead of verbalize	C,G,L
19. Shows interest in the hurts or problems of others	Clarification requested Seems to duplicate #13 Seems to duplicate #13 - clarification requested	B,D,E

	Least Comments or Changes (1 or 2)	
1. Separates easily from parent/caretaker at start of day	Delete "easily"; add "without a fuss" Delete "easily"; perhaps "without a fuss"	B,C
21. Participates in snack time willingly	Snack/meal (local values) "Food time" is more universal	C,E
22. Shares materials willingly	Seems to enjoy sharing with others Clarification requested	D,L
25. Gets along well with peer group	Gets along well with peers Seeks peer interaction	C,G
6. Seeks physical contact with staff	Starts physical contact with staff	G
8. Accepts preschool routine	Able to follow preschool routine	H
10. Focuses attention during rugtime activities	Adds to rugtime activities	F
11. Follows directions regarding learning activities	Dissatisfaction (no alternate suggestion)	E
17. Works willingly at new tasks	Willing to try new tasks	C
20. Shows enthusiasm for new tasks/situations	Shows satisfaction with (new) tasks/situations	B
24. Works well independently	Should be more different from #3	E
28. Daydreams	Should be special concern	A
29. Sucks thumb Twirls hair	Should be special concern	A
30. Bites people	Should be special concern	A
5. Tolerates reasonable amount of frustration without tears or anger 7. Seeks physical contact with parent figures/caretakers 9. Accepts changes in preschool routine 12. Follows directions re interpersonal/social activities 14. Accepts correction of behavior 15. Accepts new people in the preschool setting 23. Sits still when approrpiate 26. Able to ask for help	No changes	All

FIGURE 6.1 Content Revisions Suggested By Evaluators

process of checklist construction as in classical ethnography. A major finding was that all evaluators essentially agreed with the concepts supporting the checklist content. (Most observation items were cited for revision two to zero times.) Changes suggested were essentially semantic to enhance clarity or usability. Stated another way, the evaluators' points of view on observing child development were congruent with the researcher's experience and knowledge of the literature.

The content additions suggested by the evaluators seemed to fall into four categories: issues of physical development, observations of affect and additional instruction on frequency of observations (Figure 6.2). Some of the items suggested are measured by other instruments which are part of each child's "individualized development profile," a requirement in preschools under state and federal guidelines. Examples of this would be "language development" and "motor development." Some of the items suggested were reflective of the informants' assumptions that the checklist was a pathology or symptom identification tool (more on this later). Observations of affect and explanations of the frequency categories were deemed relevant to the staff training session by the investigator. The remaining additions became part of the decision-making process for the restructuring of the checklist. (See Chapter V.)

The responses to the question regarding practicality

	Concerns:	Evaluators
Physical Issues	Motor development: how child climbs ladder, rides bike, etc. Level of activity: high to low Behavior at nap time (setting applicable) Hyperactivity Sexual dev: curiosity, flirtation, doll play, etc. More symptoms: bedwetting, vomiting, etc.	A C B J I I
Object Relations	Has good ideas Ability to solve problems with peers Reunites with parent/caretaker at end of day without a fuss Language development	G C C E
Affect	Facial expressions at certain times of day Crying Ability to get angry (appropriately or inappropriately)	C D D
Frequency	Written explanations of "Always" to "Never" categories	K,I

FIGURE 6.2 Content Additions Suggested by Evaluators

of the instrument elicited views from the informants on uses for the content as well as impressions about the usefulness of the format--timing, length of the instrument, spacing, instructions and wording. (The researcher had not anticipated utilization of checklist content as a practicality issue.) There was a great deal of concurrence between all the informants on the need and usefulness of such an instrument for the setting for which it was designed. One informant questioned the ability of staff to read and use the checklist, regardless of training, and seemed to view staff and parents as adversaries. This finding was consistent with the dynamic impression of that interview, an analysis technique discussed later in reference to inductive data analysis. Again, from the perspective of member checks, responses on practical issues were essentially congruent with the researcher's projections (Figure 7).

The evaluators' advice on training was data which emerged in the course of interviewing, induced by the situation and foregoing discussion of content and practicality. While all were informed of the training component of the checklist in the confirmation letter (see Appendix B), a question regarding training was not included in the interview procedure. At the time of formulation of data collection procedures, the investigator chose to structure only two open questions on content and practicality, as Patton (1980) advised.

Regarding Utilization of Content		Regarding Format Utilization	
Response	Evaluators	Response	Evaluators
Tool for familiarization with children and child development	A,D,K,L,N	Timing: start of school year	A,J
Assists staff development planning	A,D	Timing: three times during school year	B,C,I,J,L, N,O
Tool for focusing observations for referral purposes	A,J,L,O	Timing: twice per year is enough; sees initial use as full day's project per child, subsequent lists - 25-30 mins.	K
Important for consultant's use	B	Useful for prevention, early intervention with children and parents	M
Useful detail for focusing staff observations	B,M,N	Overlapping items insure capture of observations on paper	E,J
True to language of classroom personnel	G,I,J	Brevity of 2 pages insures staff utilization	C,E,J,N
Useful for preparation for parent conferences	M	Suggests space large enough with each obs. item for additional comments as well as at end	O
Proposes an abbreviated checklist to be shared with or given to parents	N	Change "or for referral" to "and for referral"	L
Questions staff's literacy; ability to read and use checklist	H	Questions value without "opposing" checklists completed by parents	H

FIGURE 7. Evaluators' Responses on Practicality

Nevertheless, perhaps owing to the pertinence of training issues to instrument utilization, every evaluator except one commented on training either as it flowed from responses to the two questions or from the friendly question at the end regarding anything the evaluator wanted to add. It was also easier to cluster concepts for this matrix than any other. The overall concern about training was clearly related to the importance of shared contexts of meaning, an overriding concern of the investigator's and part of the impetus for this study. Analysis of this data was also an aspect of member checking (Figure 8).

Based on the preceding process described, the findings were related to the two research subquestions as follows:

1) The implications are that this study created an instrument that helps organize observations of stress in preschoolers by their caretakers. All informants essentially agreed with the content of the instrument.

2) The implications are that the instrument is appropriate for use both as an observation tool and for staff development. The informants essentially agreed on the usefulness of the instrument's design.

In short, the foregoing implies that the checklist is ready for use.

Unanticipated Findings

The most extensive iterations encountered in this study occurred for what is described in Figure 5 as "dynamic impressions-inductive data." In the broad sense

	Issues	Evaluators
General Principles	Like checklist/training design for training of teachers and aides	A,M,N,O
	Emphasize pre-use definitions/discussion combined with post-use discussion session	B,I
	Differences between sometimes and often; between all four points of scale	D,I,N
	Emphasize differences in communication developmentally as well as culturally	A,E,J
	Emphasize norms of child developmental stages	A,B,C,F,G
	Emphasize observing the withdrawn child	G
	Include interpretation of children's drawings, perhaps	I
	Cover how to convert information into feedback for parent conferences	M
	Participatory discussion format is important	N
	Emphasize importance of attachment and separation issues	F
	Emphasize richness of development rather than "childhood stress"	F
	Questions staff ability to learn about observing and recording child development	F,H
By Item Number	Special attention to #1, 8, 9, 13 and 19	B
	Special attention to #4, 5, 6, 7 and 26	C
	#15 will point out differences between individual teachers and individual classrooms	E
	#13 and 19 important for observing differences between curiosity and concern	E
	Emphasize potential for identification of issues for further staff development, e.g. #14	A,D,J
	Use of comments section for knowledge of actual events in child's family life	E
	Use videotapes to illustrate items 1 and 3	F
	#15 - emphasize range of possible child behavioral responses toward new people	F
	#28, 29, 30, 31 - important to discuss definitions & observations by developmental stages	I

FIGURE 8. Advice on Training by Evaluators

the entire study might be described as "inductive-generative-constructive-subjective" as Lincoln and Guba (1985) have labeled the naturalistic inquiry process. The use of interviewing for data collection means that there is an interaction between the interviewer and the informant as human beings (p. 268). In the naturalistic paradigm, the quality of that relationship, however brief, is a major concern for the investigator. The investigator considers and plans for the optimum comfort of the respondent within the interview situation by being fully overt about the purpose, accommodating to the respondent's needs (time, location, duration) and responsible about the pacing of the interview (pp. 269-271). Taking preparation into account, there is a dynamic component to every interview, because it is a relationship which is literally unknowable to the investigator until the interview actually happens (and afterward).

While in the process of reviewing notes and tapes following the interviews, the categories of Unique Contributions of Each Evaluator and Overall Interview Tone "popped out" at the researcher, just as the research literature said it would. It was during later iterations that the two categories appeared to be complementary and parallel. For example, Evaluator K was the most expediency oriented of all the evaluators and was unique in the suggestion of using the checklist twice instead of three times per year. (The informal member check during the

Unique Contributions of Each to Research Questions	Evaluators	Overall Interview Tone - Reactions to the Interviewer/Research Situation
Sees potential for emergence of cross-cultural issues which might indicate other areas for staff development	A	Collegial, resonant, positive
Strong identification with interviewer's formulations for checklist items	B	Collegial, resonant, positive
Emphasis on separating and reuniting as equally important	C	Professorial, pedagogic, warm
Felt need for more detailed directions in the cover letter and during the interview	D	Initially "fuzzy," collegial
Supplied copy of a mental health screening instrument from another consultant	E	Collegial
Suggested an observational protocol solely on child/other relationships: separation, etc.	F	Critical, especially of preschool staff
Provided references on child development and childhood stress	G	Collegial, positive
Suggested checklist for parents in order to refute staff observations	H	Competitive, critical of preschool staff
Supplied materials for use in training sessions	I	Professorial, pedagogic, warm
Suggested checklists be used by Kindergarten teachers before seeing ones completed in preschool	J	Consultee, help-seeking
To do checklist x2/year instead of x3/year	K	Collegial, pleasant, expediency oriented
Emphasis on the checklist as training in child development; and dearth of such training in her early childhood education course	L	Learner, positive
Suggests sending this checklist to Kindergarten as part of each child's record; and revision after one year's use	M	Collegial, positive, very enthusiastic
Sees checklist as guideline for content of parent conferences; maybe a revised checklist could be shared with/given to parents	N	Collegial, positive
Enough space with each item for writing in comments	O	Collegial, warm

FIGURE 9. Dynamic Impressions - Inductive Data

process of interviews revealed the majority opinion that growth during the preschool stage is so rapid that three times per year was considered most appropriate.) As to overall tone, the "pleasant" feeling of K's interview was not quite as warm as "warm" but a little more than "collegial." This evaluator seemed to want to spend as short a time as possible on the interview, although clearly interested in the project (see Figure 9).

The terms which occurred to the investigator to describe overall interview tone require additional description because their sources were partly the nonverbal cues and other indicators of the interviewees' internal perspectives (Patton, 1980). The "collegial" tone was a desired outcome of the data collection procedure, the "depth interview" in which interviewer and respondent are "peers" (Lincoln & Guba, 1985).

In addition to the egalitarian feeling of most of the interviews, some seemed additionally "resonant," i.e., somehow "tuned in" to the research project. The term "positive" is meant to describe the enthusiasm certain evaluators conveyed regarding desire to use the checklist. On the other hand, "warm" describes the interpersonal feeling that some evaluators seemed to have toward the interviewer, perhaps toward the interview accommodations.

In a couple of instances the evaluators adopted the stance of teacher to the interviewer-as-learner. In both interviews, these "professional, pedogic and warm"

evaluators literally showered the researcher with information stemming from many years of experience with preschoolers. Another evaluator who was "helpful" provided a resource for the project like a co-investigator.

Two evaluators placed themselves in what Lincoln and Guba call the asymmetrical-trust interview (1985, p. 269). An evaluator actually used the checklist with a specific "problem child" in mind and became a "consultee." The other evaluator demonstrated enthusiasm for the checklist mostly as a learning tool for herself. The most "enthusiastic" evaluator is a man who is very family oriented and was particularly interested in the use of the checklist to facilitate communication with parents. One evaluator's "fuzziness" with the procedures for the study indicated mild dissatisfaction at the start of the interview. However, as the literature points out, the interview was successfully carried out with changes in interviewing techniques.

Patton's advice about interviewing strategies was quite useful with the foregoing interview and the last two to be described (1980). The tone of these two interviews represented substantial departures from all the others. The term "critical" seemed best to convey the aura of skepticism and/or pessimism about the purpose and execution of the checklist in these interviews (see Figure 9). One evaluator though, as stated previously, was in concurrence with the concepts behind the creation of the evaluand, but

had misgivings about staff ability to utilize it. The other evaluator was as pessimistic about the concept behind the evaluand as the capabilities of potential users for whom it was created. The unanticipated findings related to the foregoing interview situations provide convergent data with the last section of the study's findings pertaining to the researcher's use of self, or the "human-as-instrument" paradigm.

Patton speaks of several interviewing strategies essential to qualitative research in Qualitative evaluation methods (1980). Some, such as the use of standardized open-ended questions, have been discussed in Chapter III of this study. He further emphasizes the importance of the open interview format's allowing for the complexities of the respondents' individual perceptions and experiences to be captured. This openness is achieved by the researcher's flexibility in phrasing the unplanned spontaneous comments and questions which contribute to the process findings in a qualitative study. For example, "presupposition questions" communicate the interviewer's expectation that the informant has something valuable to say (p. 220). "Neutral questions" are part of establishing rapport and convey the interviewer's assurance that nothing the informant says can make the interviewer think less of him or her (p. 231).

There were, of course, "probe questions" which encouraged greater depth of response in certain areas during discussion (p. 238) and "support and recognition"

responses which demonstrate overtness of intentions about the interview itself (p. 240). Patton states:

> The point here is that the interview is an interaction. The interviewer provides stimuli to generate a reaction. That reaction from the interviewee, however, is also a stimulus to which the interviewer responds. The interviewer must maintain awareness of how the interview is flowing, how the interviewee is reacting to questions, and what kinds of feedback are appropriate and helpful to maintain the flow of communication. (p. 23)

Patton mentions another type of interviewer response (clarity questions) especially useful to this study which will be discussed below.

Returning to the last interview tone described, review of the tape revealed that this informant (Appendix G, Subject Code H) had the most difficulty with the design of the project, including the purpose of the research. The interviewer's efforts to employ Patton's strategies with this respondent paid off with regard to H's candor, willingness to participate and friendliness. However, the investigator's designation of "competitive" as the overall interview tone became puzzling at the point of analysis. The process finding regarding this interview interaction was that the investigator became aware that the interviewee's discomfort with the study was probably due to "work difficulties" (Caplan, 1970). Caplan lists the sources of such difficulties as "a) a lack of knowledge, b) lack of skill, c) lack of self-confidence and d) lack of professional objectivity" (p. 127). The informant's adversarial (competitive) perspective regarding parents and

staff and other interview content were the primary clues to the existence of these difficulties; and the secondary clue was that despite the interviewer's employment of interview strategies, a common language could not be achieved (p. 6), although rapport was.

What Caplan refers to as "finding a common language," Patton (1980) calls "Clarity Questions" (p. 225). Every evaluator except two required clarification regarding the purpose of the checklist from twice to ten times in the course of the interviews. This clarification was that the evaluand for this study was not a pathology identification tool. This process finding had implications for much of the data collected for this study.

CHAPTER V

DISCUSSION

This chapter describes what has been learned from the inquiry. The decisions made with regard to the revised instrument are discussed. Within a primary prevention theoretical framework, the relevance and benefit of the instrument to preschools and implications for social work consultation practice will be discussed.

Due to the application of the naturalistic paradigm as the methodological base for this study, discoveries made in the course of inquiry will be reviewed and summarized. Following discussion of limitations of the study and the researcher's conclusions regarding the process, implications for future research will be projected.

Revision of the Instrument

The first issue considered in the redesign of the Social/Emotional Development Checklist was practicality. The feeling was that there were many good suggestions from the evaluators but if the evaluand was lengthened, its usability by preschool staff would be threatened. Therefore, the two-page format provided an organizing principle wherein to determine and fit the content.

The content changes were revised based on either the

adoption of better wording from the evaluators or the researcher's extrapolations from the inductive analysis of the research data (see Appendix H). The changes finally made were not based on "majority rule" as would be the case in a study based on enumerative analytic procedures. For example, only one evaluator suggested adding "reunites with parent figure at end of day without a fuss," yet this addition was so in keeping with the spirit of the instrument that it was included in the revised checklist. In another instance, "gets along well with peer groups," which was essentially acceptable to every evaluator, was deleted from the new instrument because it became a duplication of other items that were revised. Another revision example was the change of "shares materials with others willingly" to "seems to enjoy sharing with others," the former of which conveyed a moral judgment of the behavior.

A few of the items changed in the evaluand were as the result of the researcher's judgment based on the contextual experience of the study. This aspect of the study derives from what is referred to on Figure 5 as inductive data related to the researcher's use of self. An example of this would be to change "masturbates" which several evaluators questioned without posing alternatives (see Appendix C). At the time of the original checklist construction, the researcher had included the item based on the experience of the omission of the observation from most consultations--until it became viewed as a problem.

However, to be consistent with the purpose and language of the instrument, "rubs or fingers own genitals" is a much better fit with the other items (see Appendix H).

Another process finding of the study was that some of the checklist wording was reflective of the "native language" of the culture in that it exemplified the usual preschool teacher's perspective on maintaining order in the classroom. (A couple of the evaluators were especially helpful in bringing this out.) For example, "accepts preschool routine" from the original checklist (see Appendix C) emphasizes compliance with an external structure rather than indications of the child's developmental readiness. Another example of this slant would be "plays alone with adult direction" which was revised to "accepts adult direction/support," more reflective of the caregiver as nurturer. The reasons why preschool personnel emphasize behavior management in such young age groups could be the subject of another study. Suffice it to say that this is apparently a pervasive characteristic of the public education macrosystem.

It is interesting to note that, while most of the evaluators initially assumed that the evaluand was a symptom identification tool, inductive analysis revealed that the investigator, to a degree and on some level, did as well, despite the intention to avoid the pathology model of child observation. For example, the last three items had been referred to as "special concerns" by one of the

evaluators. Again, these are growth related behaviors that consultees tend to overlook but are very useful in providing a profile of the total child. Therefore, at the start of the school year, 3 years-3 months old children may "Always" suck their thumbs; but by the end of January, one might observe the frequency to change to "Sometimes," at the age of 3 years-7 months. By placing these items in such close proximity to each other and at the end of the instrument, the investigator demonstrated a degree of symptom orientation. The decision was made to disperse these items on the revised instrument.

A major process finding of this study was the undercurrent to much of the interview data: the influence of the medical model upon all of us and upon our perspective of child growth. This is perhaps reflective of our current evolution of beliefs as a society about childhood problems, what Bronfenbrenner refers to as the macrosystem. Mental health professionals come into preschools bringing the microsystem of a professional culture with them. Within the culture of child therapists (from psychology, psychoanalysis, psychiatry, clinical social work), the rigorous training tradition emphasizes assessment and treatment of individual psychopathology. This predisposition to perceive symptoms overrides the intent to make neutral observations. This preparation has influenced not only the mental health practitioner in the role of consultant but also the consultee for whom service is provided.

By the early 1960s, the primary prevention perspective, exemplified by the works of Gerald Caplan, proposed an alternative use of clinical expertise in the direction of pre-morbid interventions aimed at increasing strengths and promoting positive mental health (1964, pp. 26-27). However, the principles of primary prevention have so far had less influence on the fields of child therapy than the rigorous training on assessment and treatment. In addition, as Garmezy points out, the society as a whole has undergone change in how it views children; from encumbrances or possessions, to perpetrators of troublesome behaviors, to victims of a range of physical and psychological traumata which eventuate in mental illness or social maladaption (see Page 12 of this study). This current state of thinking about children, although in transition, is no less pervasive in the preschool culture as was discovered in the process of the inquiry.

The Preschool Culture - Implications of the Findings

Stress in early childhood is as much a developmental issue as it is a life event issue. The preschool is an important and influential setting for the study of stress in the lives of three to five year olds because of the proximity to the beginnings of life, the level of developmental tasks which are occurring faster than those at older ages and the potential for influencing parental attitudes and practices. Unfortunately, many preschool personnel do not begin work in this setting with much of a background in

child development.

Primary prevention programs enhance the preschool setting by impacting staff and parent knowledge and, thereby, support the young child's development and resiliency to the occurrence of life stressors. The relevancy of such programs is achieved by basing them on the principles of human ecology and child development. Research in primary prevention, a relatively new area of inquiry, serves the need for a generative base for such programs.

The instrument which is the focus of this study is an attempt to provide such a tool for the mental health professional in the role of preschool consultant. The utilization of the instrument in the preschool setting will encourage the observation of normal growth and development in young children and widen the sphere of influence of the consultant. The resultant cost effectiveness to the environment in improved understanding, by staff and parents, of how children grow also increases the likelihood of early intervention into childhood problems before they become symptoms of greater disturbance. The Social/ Emotional Development Checklist was created for this purpose.

Qualitative Research Considerations

The foregoing examples of judgments on the checklist revision are supported by Patton's discussion of "qualitative analysis and interpretation" (1980):

> Qualitative analysis does not have the parsimonious statistical significance tests of

> quantitative analysis. Statistical tests of significance are shorthand ways of telling the reader how seriously to take the findings. In qualitative analysis the analyst must make judgements that provide clues for the reader as to the writer's belief about variations in the credibility of different findings: when are patterns "clear"; when are they "strongly supported by data"; and when are the patterns "weak." Readers will ultimately make their own decisions and judgements about these matters, but the evaluator's opinions and speculations, after he or she has struggled with the data, deserve to be reported. (pp. 343-344)

To paraphrase the above with reference to this study, the importance of the investigator's feelings, judgments and experience of the inquiry is a constant source of data throughout every phase of it.

A qualitative research approach for instrument design was the subject of this study because the preschool environment is a naturalistic (nonclinical) setting calling for unobtrusive measures and because of the exploratory nature of the question. Further, the techniques of naturalistic inquiry, which are similar to the ethnographic research strategies of anthropologists, are consonant with the perspective and skills armamentarium of the clinical social work practitioner. Of particular note is the internal analytic process of the researcher at every state of the inquiry. The formulation of decisions and judgments about what and how to pursue information in an interview for assessment and interpretation of data from another human is common territory to the qualitatively oriented researcher and the social work practitioner.

The formative evaluation aspect of this study was a

rewarding learning experience for the investigator. While it required the learning of professional jargon which was new to the researcher, the richness of the experience was well worth the re-training. Of special interest was the creation of the audit trail which in qualitative research functions as the documentation of the data collection-to-analysis continuum. The audit trail becomes the defense tool, which can be subjected to the rigorous scrutiny of retracing steps from the completion of the study to the raw data and back again.

Finally, the collaborative feeling of most of the interviews made the project more of a "committee" process of joint decision-making and contributory involvement than had been anticipated.

Limitations of the Study

There are several possible limitations to this study beginning with the choice of methodological model. Qualitative research methods are usually criticized for what Lincoln and Guba (1985) refer to as the "inductive-generative-constructive-subjective" dimensions of research technique. This study, relying as it did upon interview data and the investigator's analysis of it, could be challenged on the basis of "neutrality" or "objectivity" by the reader who is more familiar with conventional methods (p. 329). However, if the "source respondents" attest to the credibility of the research findings because of their resonance to their experience, and as potential users or

consumers of the results, trustworthiness is achieved (p. 328).

A second limitation is that the sample of evaluators for this study was small and only one round of interviews was done. Exploratory studies of this kind often include "triangulation" as a means of establishing credibility. Triangulation means the use of multiple sources, methods, investigators and/or theories in order to establish reliable findings. The design of this study, however, by eliciting reactions to an instrument created from their cultural domain, enlisted respondents as critics. The findings, subjected as they were to multiple iterations for analysis and interpretation, were validated in the process of the inquiry, a technique called "member checking."

Finally, the reality of funding any kind of program is that most sources require conventional enumerative summative evaluation techniques for outcome measures. Further, primary prevention programs tend to be misunderstood conceptually by funding sources, as was pointed out by the EIP program described on Page 27 of this study. Therefore, the type of subject and methodology of this study would not be carried out except in the self-funded circumstance of academic research. However, a descriptive, exploratory study can provide the knowledge base for the construction of scales and other instrumentation which are then subjected to statistical analysis. In addition, the researcher-as-human paradigm does not preclude the

development of mixed models which satisfy both funding sources and the ethical, ecological and humanistic preferences of the researcher.

Conclusions and Interpretations

Based on the findings of this study, the current experience of stress can be ascertained and recorded in a nonclinical population of preschoolers by their caretakers. In relation to the two subquestions, the data conclusively support the content of the developed instrument as valid and its implementation as practical for the setting for which it was designed. The data from this study also conclusively support staff training for utilization of the instrument and the importance of training to promote shared meanings among the adult caregivers.

There were further implications based on the unanticipated data generated in this study. The instrument, from staff orientation to utilization and post-use training, can provide a primary prevention program in and of itself. It use would promote awareness and understanding of stress in early childhood by caregiving adults whose knowledge of child development would also be enhanced in the process. The instrument would also serve as an adjunct to the consulting process in preschools, whether between staff and mental health professionals or staff and parents. Utilization of the instrument can also identify issues for further staff development and assist in the enculturation of new staff.

Finally, the developed instrument is growth oriented in quality, incorporating neither behavior control nor symptom identification issues. The major implication of this interpretation is that the instrument provides the kind of approach to normal groups of preschoolers that the researcher sought to develop; a protocol for organizing and recording observations of young children without precipitous labeling. In other words, an instrument was developed by means of this study generated from the naturalistic setting for which it is intended rather than from models adapted either from clinical settings or from older age groups.

Future Research

Exploratory studies frequently are undertaken in order to generate baseline data for areas of further inquiry. The instrument this study developed can now be utilized in further research on stress in early childhood. For example, taking this study as "Study A," Study B might utilize checklist content after use in preschools to generate a truly appropriate stress scale for young children, similar to those developed by researchers for older age groups. Study C might utilize the checklist in a comparative study of preschools in different communities preliminary to the development of a scale or other intervention program. Another possible use of the instrument could be for program evaluation.

In summary, this study produced an instrument which is

ready for use in the settings for which it was intended. It can become a tool for assisting with program planning or part of the methodology of outcome studies in programs designed for normal preschoolers. It can also stand on its own as a tool to help preschool personnel to focus and record their observations of young children as well as for identification of specific areas for staff development.

APPENDIX A

DATA COLLECTION PROCEDURE FORMAT

1. Call contact person requesting his/her participation as an evaluator. If the person agrees to participate, state that there may be one or two interviews, the first being the longest @ 30 to 45 minutes. Set up appointment date, time and location.
2. Send letter confirming evaluator's involvement in the study; and include staff training format and a copy of the checklist. (Appendices B and C)
3. At least 24 hours before the appointed date, call evaluator to reconfirm date, time, etc.
4. At the start of the interview, secure evaluator's written consent to be audiotaped and the "Human Subjects Informed Consent," if necessary.
5. Do interview. (Appendix D)
6. Review and organize data from the interview.
7. Call evaluator to reschedule if another interview is necessary.
8. If no further interviews are required with the evaluator, a thank you letter will be sent. (Appendix E)

APPENDIX B

RHEA E. JOHNSON, L.C.S.W.
3540 Wilshire Blvd., Suite 509
Los Angeles, CA 90010

(213) 388-0262

Dear

Thank you for agreeing to participate in this research on recording observations of stress in preschool-aged children.

As you know from your work in preschools, the mental health consultant is sometimes invited to observe a child in the classroom and confer with staff and/or parents. Usually the request stems from the caregiver's concerns about a child's behavior. The behavior may be a sign of stress stemming from development or from events in the life of the child and may or may not be observable at the time of the consultant's classroom visit. Sometimes the caregiver has difficulty pinpointing changes in a child's behavior in a timely manner.

The enclosed checklist was devised in order to provide a record of the preschooler's behavior so that the caregiver might have a tool for organizing observations over the course of the school year and when particular behaviors emerge which become a concern. Use of the checklist would be introduced through staff training which would include 1) introduction to the concept of childhood stress, 2) discussion of each observation item with examples from staff, 3) discussion of questions from staff and 4) group decision regarding a follow-up training session for feedback on use of the checklist.

In a few days, I will phone you to reconfirm the appointment we made for the interview. At that time, I will also obtain your written permission to audiotape our conversation for the purpose of coding your comments on the checklist with those of other evaluators.

Please feel free to call me if you have any questions or need to reschedule.

Yours truly,

Beatrice Sommers, Ph.D.
Principal Investigator

Rhea E. Johnson, L.C.S.W.
Investigator

SOCIAL/EMOTIONAL DEVELOPMENT CHECKLIST

To be completed 3 times each academic year: (1) 6th or 7th week (October); (2) end of 2nd semester (January); (3) mid 2nd semester (April) or for referral purposes.

Child_____ D.O.B._____ Age_____

Date_____ Site_____ Teacher/Aide_____

Please read each of the following statements about this child's functioning and behavior in school and check the appropriate point on the frequency scale.

Observation	Never	Sometimes	Often	Always
1. Separates easily from parent/caretaker at start of day				
2. Plays cooperatively with peers				
3. Plays alone with adult direction				
4. Plays willingly alongside of peers				
5. Tolerates reasonable amount of frustration without tears or anger				
6. Seeks physical contact with staff				
7. Seeks physical contact with parent figures/ caretakers				
8. Accepts preschool routine				
9. Accepts changes in preschool routine				
10. Focuses attention during rug time activities (stories, songs and other learning activities)				
11. Follows directions regarding learning activities				
12. Follows directions regarding interpersonal/ social activities				
13. Shows concern for others				
14. Accepts correction of behavior				
15. Accepts new people in the preschool setting				
16. Able to verbalize emotions				
17. Works willingly at new tasks				
18. Takes leadership role in unstructured (by adult) activities				

Observation	Never	Sometimes	Often	Always
19. Shows interest in the hurts or problems of others				
20. Shows enthusiasm for new tasks/situations				
21. Participates in snack time willingly				
22. Shares materials with others willingly				
23. Sits still when appropriate				
24. Works well independently (such as at a puzzle)				
25. Gets along well with peer groups				
26. Able to ask for help				
27. Able to verbalize health problems				
28. Daydreams (seems to be in own world				
29. Sucks thumb___ twirls hair___ rubs navel___ or objects___				
30. Bites people				
31. Masturbates				

Comments (Any appearance behavior not previously mentioned such as wetting)

RJ:sm
5/1/86

APPENDIX D

FORMAL FIELD NOTE FORM

Date:

Evaluator:

Occupation:

Place of Employment:

Address:

Phone Number:

Interview Format:

1. Greeting

2. Explanation:

   2.1 Project Explanation:

   2.2 Question Explanation:

   2.3 Recording Explanation and Consent:

   2.4 Interview Length:

3. Questions about the Evaluand:

   3.1 "How do you feel about the content?"
   3.2 "Is there anything you would add? delete?"
   3.3 "How do you feel about the practicality?"
   3.4 "Is there anything you would change?"

4. Friendly Question: "Do you have anything to add that would give me more insight into the needs of preschool personnel/consultants?"

5. Take leave

6. Write summary of session from tape and written notes so that data can be easily transcribed onto a matrix, then taxonomy and, finally incorporated into a revised evaluand.

APPENDIX E

RHEA E. JOHNSON, L.C.S.W.
3540 Wilshire Blvd., Suite 509
Los Angeles, CA 90010

(213) 388-0262

Dear

Thank you for taking time out from your busy schedule to participate in "The Development of an Instrument to Measure Stress in Nonclinical Populations of Preschoolers."

Your willingness to participate in this study was generous and greatly appreciated.

Yours truly,

Beatrice Sommers, Ph.D.
Principal Investigator

Rhea E. Johnson, L.C.S.W.
Investigator

APPENDIX F

CALIFORNIA INSTITUTE FOR CLINICAL SOCIAL WORK

Informed Consent Form

I, _____, hereby willingly consent to participate in the Development of an Instrument to Measure Stress in Nonclinical Populations of Preschoolers, research project of Beatrice Sommers, Ph.D., of ICSW.

I understand the procedures to be as follows:*

The interview will be audiotaped in order to facilitate coding the responses from all the evaluators. The tape is for use by the investigator only and will be destroyed upon completion of the study. My anonymity will be preserved.

I am aware of the following potential risks involved in the study:*

There are none.

I understand that I may withdraw from the study at any time without penalty. I understand that this study may be published and my anonymity will be protected unless I give my written consent to such disclosure.

Date: _____

Signature _____

WITNESS:

_____

***To be filled in by the subject in his or her own writing if he or she is defined to be "at risk."**

APPENDIX G

DATA ANALYSIS FORM

SUBJECT CODE A

CONTENT: "looks very good"

wanted items re: aggressiveness initially but quickly adapted to the continuum of the 4-pt scale connected to positively stated items.

did not feel that "special concerns" (28-31) should be set apart, allows developmental continuum for each child according to age & stage, x3/year

motor development - how child climbs ladder, rides bike, etc. (usually included in other profiles in child's file, eg. Clark Motor Test)

Clarification RE: purpose of the instrument x2

PRACTICALITY:

liked timing, for referral purposes, of start of the school year.

pointed out own bias toward detection of problem kids in the group, and interviewer's "compromise" in making the instrument a tool for focusing the teacher's observations, regardless of time of year (2 wks after first checklist is filled out, for example).

TRAINING:

liked design, especially for teacher training. frequency rating of behavioral occurrences and general behavior should help staff develop and learn more about normal child development.

UNIQUE CONTRIBUTION OF THIS EVALUATOR: gave resources

Potential for emergence of cross-cultural issues eg. "active black boys" which might indicate need areas for further staff development.

OVERALL INTERVIEW TONE:

Collegial, resonate and positive

APPENDIX G

DATA ANALYSIS FORM

SUBJECT CODE B

CONTENT: "overall good"

Add: behavior at nap time (where applicable to setting)
#1 - would add "without a fuss" (like another interviewee)
Question re: autonomy. perhaps #18 & 24 "able to fill unstructured time." interviewer suggested adding #15 as part of that category.

Add: #20 "satisfaction" instead of enthusiasm, "new" is perhaps unnecessary.

#13 - willingness to help others in non-distress situation

#19-identification with child who is hurt or films/stories on life events

Clarification RE: purpose of the instrument x4

PRACTICALITY:

useful for focusing teacher's thoughts
would also be useful to the consultant, as well as to review checklist completed by staff and compare.

likes x3/year format

TRAINING:

importance of definitions during staff training, especially #1; and post-use session for clarification.

feels #8, 9, 13 & 19 would require special attention in training sessions also.

UNIQUE CONTRIBUTION OF THIS EVALUATOR:

strong identification with interviewer because we graduated from the same child fellowship program.

OVERALL INTERVIEW TONE:

Collegial, resonate and positive

APPENDIX G

DATA ANALYSIS FORM

SUBJECT CODE C

CONTENT: "all issues relevant" Clarification RE: instrument x2

Changes:
#1 - "without a fuss"; "easily is too judgemental."
#2 - "cooperates with peers"
#3 - "accepts & carries through on tasks directed by adult"
#4 - "functions" independently along side peers
#16 - "able to express emotions without losing control"
#17 - "willing to try new tasks"
#18 - "able to fill time unstructured by adult"
#21 - "snack/meal"
#25 - "well with peers"
Add: a. affect - something re: facial expressions (times of day?)
b. level of activity - high to low
c. ability to get angry (approp'ly or inapprop'ly) or solve problems with peers
d. reunites with parent figure with a fuss end of day

PRACTICALITY:

likes x3/year format

likes brevity, important for staff compliance

TRAINING:

areas for emphasis in staff development:
#4 - without distracting or being distracted by others
#5 - on what constitutes "reasonable" amount
#6 & 7 - positive or negative
#26 - when do they, when don't they, types of situations

UNIQUE CONTRIBUTION OF THIS EVALUATOR: 45 years of preschool cons exp.

emphasis on separating and reuniting as equally important

OVERALL INTERVIEW TONE:

Professorial, pedagogic, warm

APPENDIX G

DATA ANALYSIS FORM

SUBJECT CODE D

CONTENT: "good & understandable"

Add: "crying" somehow (affect?)
#22 - "seems to enjoy sharing with others" (re: material things); comments that some children never learn to own anything

#27 - able to "indicate" health problems

#13 & 19 - initially questioned whether these items were duplications

Clarification RE: purpose of instrument x1

PRACTICALITY:

enhances teachers' observational skills

also assists staff in program planning

TRAINING:

areas for emphasis:
differences between sometimes and often

may lead to further staff development and program development on educational philosophy, etc. (example #14)

UNIQUE CONTRIBUTION OF THIS EVALUATOR:

Felt the need for more detailed directions in the cover letter and during the interview.

OVERALL INTERVIEW TONE:

Collegial, initially "fuzzy"

APPENDIX G

DATA ANALYSIS FORM

SUBJECT CODE E

CONTENT: "good"

Add: language/communication items (usually part of other profiles in Children's "Individualized Development Profile")
Question: pair similar items closer together in the checklist?
#1 - good starting point
#3 - clarification: "accepts and follows through"
#11 - perhaps vague but no alternative suggested; questioned staff ability to assess
#13 & 19 - seemed like duplication at first, then clarified
Questions overlapping of some items
#21 - "food times" more universal to types of settings
#3 & 24 - maybe aren't duplications

Clarification RE: purpose of instrument x2

PRACTICALITY:

likes four point range for responses
overlapping items may make list longer than necessary; but may also insure capturing of an observation
feels checklist is clear, comfortable for staff use - keep to 2 pp

TRAINING:

#15 - will also show individual differences between staff and each classroom operation
#13 & 19 - staff will need help in differentiating curiosity and interest
Comments section - the place for staff's actual knowledge of high stress situations in the child's home life
emphasize communication styles: culturally as well as developm'ly

UNIQUE CONTRIBUTION OF THIS EVALUATOR:

supplied copy of the "Tucson Mental Health Screening Form" from another consultant

OVERALL INTERVIEW TONE:

Collegial

APPENDIX G

DATA ANALYSIS FORM

SUBJECT CODE F

CONTENT: "very competent, covers all issues"

"contextual experience is missing"
#1 - (major interest to this evaluator but unable to suggest change of wording which would be accessible to preschool staff and unable to move on for long time)
#3 - change "play" to "follows directions"
#10 - (after initial confusion) change observation to "adding to" or spontaneous association
#18 - self directed

Clarification RE: purpose of instrument x2

PRACTICALITY:

No comments

TRAINING:

emphasis on importance of attachment/separation issues
suggests very "graphic" videotape on #3 and 1
emphasis on training staff in "richness of development" than concept of developmental stress
#15 recommends training staff to understand vicissitudes of child behavior toward new people

UNIQUE CONTRIBUTION OF THIS EVALUATOR:

Suggested an observational protocol on child/other relationships: separation, etc.

OVERALL INTERVIEW TONE:

Critical, especially of preschool staff

APPENDIX G

DATA ANALYSIS FORM

SUBJECT CODE G

CONTENT: "looks very complete"

wanted more items on "potential problems"
#2 - child initiated (self-directed) "without bullying"?
#4 - in classroom only?
#6 & 18 - initiation & autonomy ("starts"?)
#16 & 27 - "expresses"?
#25 - "seekspeer interaction"
Add: "Asks questions or explores"
#3 - adult direction/support
Add: Has good ideas

Clarification RE: purpose of checklist x1

PRACTICALITY:

observed interviewer's immersion in the control-oriented language of classroom personnel

TRAINING:

emphasis on:

more understanding & awareness of child growth & development, especially of the withdrawn child

UNIQUE CONTRIBUTION OF THIS EVALUATOR:

provided sources on child development checklists and readings on childhood stress

OVERALL INTERVIEW TONE:

Collegial, positive

APPENDIX G

DATA ANALYSIS FORM

SUBJECT CODE H

CONTENT: "pretty thoroughly covered"

#2, 4 & 18 - seem similar
#8 - "able to follow" instead of "accept"
likes more comprehensive checklists including learning skills and other developmental areas

Clarification RE: purpose of checklist x10

PRACTICALITY:

Points out difficulty with reading and writing for staff

"no one" will see the checklist unless a referral is made. (in the preschool settings this consultant goes to)

TRAINING:

only evaluator to doubt staff's capacity to learn how to observe child growth and development

UNIQUE CONTRIBUTION OF THIS EVALUATOR:

suggested checklist for parents in order to refute staff observations

OVERALL INTERVIEW TONE:

Competitive, critical of preschool staff

APPENDIX G

DATA ANALYSIS FORM

SUBJECT CODE I

CONTENT: "most significant areas of social & emotional development are covered"

Add: "sexual development" - referring to sexual curiosity, flirtation, etc.
#27 - "able to indicate health problems"
Change: separate #28-31 as "special concerns"
Add: more symptoms eg. bedwetting, vomitting, etc.
Add: more written explanations of "Always, Often, Sometimes, Never" categories

Clarification RE: purpose of checklist x3

PRACTICALITY:

likes x3/year format

likes the language of the checklist

TRAINING:

suggests definitions and observation examples of observations; especially of "special concerns"

emphasis on four point categories with examples

perhaps interpretation of drawings should be included?

UNIQUE CONTRIBUTION OF THIS EVALUATOR:

gave interviewer materials for use in training sessions

OVERALL INTERVIEW TONE:

Professorial, pedagogic, warm

APPENDIX G

DATA ANALYSIS FORM

SUBJECT CODE J

CONTENT: "good. no changes"

Add: perhaps hyperactivity)something easily meant for "Comments" section)

important for individual development profile (required on all children)

Clarification RE: purpose of instrument x2

PRACTICALITY:

likes format, timing, language

only evaluator to use checklist. done with particular "problem child" in mind. on that basis, finds it immensely useful, practical

TRAINING:

projects seeing more growth in Hispanic kids who are "handicapped by having an English speaking only teacher"

sees potential for identification of staff development needs

UNIQUE CONTRIBUTION OF THIS EVALUATOR:

suggests that this checklist be utilized by Kindergarten teacher before looking up the ones completed in preschool

OVERALL INTERVIEW TONE:

Evaluator as consultee; turned into consultation; help-seeking

APPENDIX G

DATA ANALYSIS FORM

SUBJECT CODE K

CONTENT: "very good, no changes"

asked for clarification of "Never & Always"

Clarification RE: purpose of checklist x0

PRACTICALITY:

sees checklist as full day's project per child, then 25-30 mins for subsequent lists

TRAINING:

No comment

UNIQUE CONTRIBUTION OF THIS EVALUATOR:

to do checklist x2/year instead of 3

OVERALL INTERVIEW TONE:

pleasant, collegial, expediency oriented

APPENDIX G

DATA ANALYSIS FORM

SUBJECT CODE L

CONTENT: "really good"

requested clarification of #3
sees #16 as needing revision until we discuss her suggestion - to not make it dependent upon language development ("express")
#27 - same issue, needs to be "express" instead of "verbalize"
questioned whether baby talk should be added

requested clarification on #22 about "sharing materials"; restated observation of changes in behavior

Clarification RE: purpose of checklist x1

PRACTICALITY:

likes use for every child plus at times when changes occur

Change: "or for referral" to "and for referral"

likes need that staff focus on every child in classroom

likes x3/year format because of the way young children change so much in the course of school year

TRAINING:

feels follow up (post-use) training session is especially important

UNIQUE CONTRIBUTION OF THIS EVALUATOR:

highlights the importance of this checklist and dearth of such training in child development in her course of early childhood education

OVERALL INTERVIEW TONE:

Positive, evaluator as learner

APPENDIX G

DATA ANALYSIS FORM

SUBJECT CODE M

CONTENT: "excellent tool" "good source of information in timely manner"

likes detail, different areas for "child evaluation"

nothing to add

might delete #31 - as natural developmental need. clarified importance of staff not leaving out the observation

wanted relationship to parents observed (#1 &7)

Clarification RE: purpose of checklist x1

PRACTICALITY:

Feels checklist is important for allowing/expediting familiarity with class of 24 children; also useful for parent conferencing

Also very aware of primary prevention aspect of potential checklist use

TRAINING:

good tool for staff development

important for focusing developmental observations and thereby providing information for parent conferences

UNIQUE CONTRIBUTION OF THIS EVALUATOR:

would send this instrument on with child to Kindergarten as part of health record. maybe could be revised after one year's use

OVERALL INTERVIEW TONE:

Collegial, positive, very enthusiastic

APPENDIX G

DATA ANALYSIS FORM

SUBJECT CODE N

CONTENT: "like it"

likes simplicity of the language

clarification on #31 - interviewer spontaneously revised to "rubs or fingers own genitals"

important for observation of normal development rather than screening for pathology

Clarification RE: purpose of checklist x2

PRACTICALITY:

Clarification: not to be sent home to parents

likes two page format

likes x3/year schedule; almost suggesting x4

TRAINING:

emphasized need for training on differences between Never, Always, etc.; especially for training of new staff

also emphasizes importance of including aides in this endeavor and supportive of participatory, discussion-type format for sessions

UNIQUE CONTRIBUTION OF THIS EVALUATOR:

Sees instrument as guideline for content of parent conference; further might see revised checklist which could be share with/given to parents

OVERALL INTERVIEW TONE:

Collegial, positive

APPENDIX G

DATA ANALYSIS FORM

SUBJECT CODE O

CONTENT: "good, useful"

no changes in content suggested

sees no problem with overlapping items, which may insure thinking through process

Clarification RE: purpose of checklist x0

PRACTICALITY:

likes spacing of x3/year and at times of referral
also likes 4 point range in categories

suggested room for comments, details on each item line

TRAINING:

emphasized the importance of involving aides in the training to improve their knowledge of child development

UNIQUE CONTRIBUTION OF THIS EVALUATOR:

the suggestion for space for comments on every item line

OVERALL INTERVIEW TONE:

Collegial, warm

APPENDIX H

SOCIAL/EMOTIONAL DEVELOPMENT CHECKLIST

To be completed 3 times each academic year: (1) 6th or 7th week (October); (2) end of 1st semester (January); (3) mid 2nd semester (April) and for referral purposes.

Child_____ D.O.B._____ Age_____

Date_____ Site_____ Teacher/Aide_____

Please read each of the following statements about this child's functioning and behavior in school and check the appropriate point on the frequency scale.

Observation	Never	Sometimes	Often	Always
1. Separates from parent figure at start of day without a fuss				
2. Cooperates with peers				
3. Accepts adult direction/support				
4. Can start play with peers without bullying				
5. Tolerates reasonable amount of frustration without tears or anger				
6. Seeks physical contact with staff				
7. Seeks physical contact with parent figure				
8. Able to follow preschool routine				
9. Accepts changes in preschool routine				
10. Focuses attention during rug time activities (stories, songs and other learning activities)				
11. Daydreams (seems to be in own world)				
12. Follows directions regarding interpersonal/ social activities				
13. Offers to help others in non-distress situations				
14. Accepts correction of behavior				
15. Accepts new people in the preschool setting				
16. Able to express emotions				
17. Willing to try new tasks				

Observation	Never	Sometimes	Often	Always
18. Sucks thumb___ twirls hair___ rubs navel___ bites nails___				
19. Shows interest in the hurts or problems of others				
20. Shows interest in sex (such as in doll play, curiosity, etc.)				
21. Participates in food time willingly				
22. Seems to enjoy sharing with others				
23. Sits still when appropriate				
24. Works well independently (such as at a puzzle)				
25. Able to express anger				
26. Able to seek help				
27. Able to express health problems				
28. Has and shows good ideas				
29. Able to solve interpersonal problems with peers				
30. Bites people				
31. Rubs or fingers own genitals				
32. Reunites with parent figure at end of day without a fuss				

omments: (Any appearance or behavior not previously mentioned or family life events)

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