

THE EFFECTS OF PRESCHOOL DAY CARE, SELF-ESTEEM,
AND LOCUS OF CONTROL ON THE COPING BEHAVIOR
OF CHILDREN IN THE FIRST GRADE

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CHAPTER I

INTRODUCTION

In a recent survey report of physician consultations in an urban school district, Boyce, Springer, Duncan, and Sobolewski (1983) stated: ". . . psychosocial problems constitute the single most prevalent issue addressed in the course of physician consultation . . . nearly one third of child centered consultations were directed toward a behavioral or emotional problem" (p. 308).

Coping is the ability to influence and control environmental demands to which an individual is exposed. Such environmental demands require the individual to manage the person-environmental relationship and regulate stressful emotions (Folkman and Lazarus, 1980; Lazarus, 1977). Coping is assessed on a continuum from maladaptive to adaptive. Adaptive coping facilitates solutions to enhance efforts to care for oneself and demonstrate appropriate responsiveness to the demands of the environment. Maladaptive coping is the obverse: it does not generate a satisfying solution, although it may protect the individual from the stress of the moment.

Murphy (1962), the originator of the term coping and the pioneer of children's coping behavior, concluded that biological, behavioral and psychodynamic referents are important considerations in the coping process. Also, the nature of situational events, such as traumatic

incidents, illness, the newness of an event, or transitional periods have been noted to be critical (Crouter, 1982; McCubbin and Patterson, 1981; Porquer, 1982).

The school experience has been identified as having transitional periods that require adaptation (Baldwin, Cole and Baldwin, 1982; and Oliver, 1974). Schools are a powerful socializing force in human development. Virtually all members of modern society carry important imprints of their school experience throughout life. The school places two broad sets of adaptive demands on the child. The child must learn to master and assimilate increasingly complex bodies of knowledge and must also learn to meet the school environment's behavioral and interpersonal requirements. These two sets of demands often interlock. Thus adaptive failings restrict the child's ability to learn, just as deficits in educational mastery generate psychological or adaptive problems.

The first grade is a critical period of transition for children (Pothier, 1976; Lassers, Nordan, and Bladholm, 1973; Damon, 1977). Even the six-year-old who has attended preschool day care embarks on a new career when entering the first grade. A child who has attended preschool has already had some experiences in a school setting, but the break from family is more final and the nature of the curriculum much more demanding when a child is expected to devote five to six hours a day to the mastery of primary grade subjects. The first grader needs to adapt to the demands of school routine and establish positive relationships with classmates. At the present time, little is known about the

factors that influence the coping behavior of children having this experience.

Bee (1974) has estimated that there are more than five million working mothers with children under five using preschool day care in the United States. This great increase in numbers of women who work has been attributed to their liberalization which has occurred in part as a result of the feminist movement and in even greater part to economic pressures (Rosenfeld and Perrela, 1965). The increased educational level of women and of the general population (Waldman and Gover, 1971) may also have some effect. It seems to follow that parents with advanced education would believe that preschool day care will accelerate their child's development and ability to learn, and would therefore elect to have their child attend preschool day care as an added positive experience. Since preschool day care is being substituted widely for parental care during a substantial portion of the day for many children, it may be expected to have an influence on the development of their personality characteristics and ultimately their coping behavior. It is through experiences in coping that the child develops a patterned way of dealing with newness (Kagan and Moss, 1972).

A personality characteristic that has received wide attention over a period of time as being a critical factor for survival and maintenance of the human psychological self is self-esteem. Brissett (1972), Coopersmith (1967), Fitch (1970), Rosenberg (1965), and Ziller, Hagey, Smith and Long (1969) have stated that high self-esteem is necessary

for adaptive coping. Pearlin and Liberman (1977), Rosenberg (1979), and Ziller (1973) all have reported that an individual's self-esteem is directly related to vulnerability to environmental influence.

A personality characteristic that has received attention as being a formidable barrier to the stressful consequences of social strain is the individual's sense of control over the environment (Dadich, 1972; Lazarus, 1966; Pearlin and Schooler, 1978; Rotter, 1966; Seely, 1973). This concept, referred to by Rotter (1966) as locus of control, has come to be of central importance in explaining coping responses (Brim, 1976; Crandall, Katkovsky and Crandall, 1965; Epstein, 1973; Gunnar, 1980; Lazarus, 1966; Nowicki and Strickland (1973). Gilmore (1978) has cited evidence suggesting that internal locus of control is related to success in many areas of human endeavor - e.g., academic pursuits, persistence at tasks, and interpersonal relations. To develop a sense of self-esteem and control the child must have a feeling of confidence in his ability to deal effectively with his environment and develop mastery and skill in manipulation within the rules that are connected with each function (Erikson, 1963; Mahler, 1963; Seligman, 1975).

Of specific relevance to this study is the conceptualization that the child is active as well as reactive, and coping is learned from mutual interactions of child and environment. The earliest environment for children is their family - the environment in which psychological referents and personality characteristics develop. The literature overflows with speculation as to the type of parental behaviors that

facilitate the child's developmental progress. One theme that repeatedly emerges is the belief that the child's optimal potential for health is most likely to be reached when parents communicate a genuine sense of caring and respect for the child. Although there are a number of studies of children's coping with emotional disturbance and medical diseases, or socioculturally deprived backgrounds, there is a paucity of life events research of children from populations of healthy families and none of children's coping with the transitional period of the first grade school experience.

Problem of Study

This study examined the coping behavior of first grade public school children. The study was designed to investigate the relationships between three predictor variables, preschool day care, self-esteem, and locus of control, and the criterion variable, children's coping behavior. The specific research questions the study sought to answer are:

1. What is the relationship between preschool day care experience and children's coping behavior?
2. What is the relationship between self-esteem and children's coping behavior?
3. What is the relationship between locus of control and children's coping behavior?
4. If expected positive correlations are found, what is the best prediction equation that can be derived utilizing the

score from the Zeitlin Coping Inventory, which represents children's coping behavior, as the dependent variable, and preschool day care, self-esteem and locus of control as the independent variables?

5. Do age, gender, or parental educational level have an effect on children's coping behavior?

Justification of Problem

Coping is an interaction of individuals and environment. The reaction an individual has to an environmental event is as important as the event itself (Lazarus and Launier, 1978). Therefore, not only does a person's coping ability have implications for mental and physical health, but the person's state of health also influences coping responses (Antonovsky, 1979; Lazarus and Launier, 1978). Coping involves a number of factors, including the presence of stressful environmental conditions, the perception by the individual that such conditions are stressful, and the relative ability of the individual to cope with or adapt to these conditions.

Encountering new situations initiates coping. Adaptive coping involves confronting and engaging in new situations, showing neutral or positive feelings in the process. Coping is a learned behavior - learned from early interactions within the family - that requires reality testing. Reality testing is both a cognitive and a manipulative function and proceeds by creative restructuring in order to test potentialities. Once the child learn methods of coping successfully in

certain situations, the child integrates these methods for use in new situations. Murphy and Moriarity (1976) found that children who are flexible in their selection and use of coping strategies are better equipped to manage new experiences than are children who are locked into repeated use of one or two strategies.

Reiss and Oliveri (1980) suggested that family members experience the normal crises of transition during normal transition points in the family life cycle such as the birth of a child, children entering school, and children leaving home. The Harvard Preschool Longitudinal Study supported the use of preschool day care to encourage competence in the social and intellectual development of children (Ainsworth and Wittig, 1969). Bee (1974); and Poznanski, Maxey and Marsden (1970) have reported that children who attend preschool day care are somewhat more likely than home-reared children to do well in school and to develop nonstereotyped conceptions of male and female roles.

Apple (1942); and Jersild and Markey (1935) suggested that children need to learn to settle their differences on their own, and preschool day care provides the social atmosphere in which this can occur. Swift (1964) reported that attending preschool day care did not lead to any permanent improvement in relationships with other children or participation in group activities. Hartup (1967) stated that children who seek assistance from peers and are eager for their approval have more satisfying interpersonal relationships than those who are seen as interested in attracting attention only. Seeking peer assistance and

approval is an example of an adaptive coping behavior, as it facilitates solutions to enhance efforts to care for oneself and demonstrates appropriate responsiveness to the demands of the environment. Attention-seeking behavior exemplifies maladaptive coping, as it does not generate a satisfying solution to the demands of the environment even though it may protect the child from the stress of the moment.

The earliest environment for children is their family. Families organize the physical environment and supervise activities and interpersonal relationships. It is within this interactive environment that the personality characteristics of self-esteem and locus of control have their origins. Self-esteem has been studied in various ways. Pearlin and Liberman (1977), Rosenberg (1979), and Ziller (1973) all have reported that an individual's self-esteem is directly related to vulnerability to environmental influence. Crandall and Lehman (1977), for example, asserted that it is likely that people high in self-esteem have a history of successfully managing environmental crises. This sense of efficacy decreases the panic response to threat and contributes to adaptive coping. Pearlin and Liberman (1977) found that individuals with low self-esteem feel immobilized by their own inability to cope, and become depressed and anxious. Coopersmith (1967) suggested that people evaluate themselves in terms of their ability to control events and that their self-esteem rests to some extent on the feeling that they have this power. His work with school-aged children has shown that

children with high self-esteem have good social relationships with peers and perform well academically.

Another personality characteristic that has also come to be of central importance in explaining coping responses is locus of control (Crandall, Katkovsky and Crandall, 1965; Epstein, 1973; Gunnar, 1980; Harman and Brim, 1980; Lazarus, 1966; Nowicki and Strickland, 1973). From preschool years through adolescence, locus of control is a fairly stable characteristic (Achenback and Edlebrock, 1978). Fuller, Endress and Johnson (1978); Johnson, Rice, Fuller and Endress (1978); Langer, Janis and Wolfer (1975); and Pervin (1963) suggested that the provision of sensory information promotes cognitive control that leads to purposeful selection of coping strategies that are adaptive. Gilmore (1978) cited evidence suggesting that internal locus of control is related to success in many areas of human endeavor - academic success, persistence in tasks, and interpersonal relations. When 14- and 15-year-olds were tested for degree of formal thinking and locus of control, the internal control subjects scored higher in formal thought than external control subjects (Reiling and Massari, 1973). Moffatt and Pless (1983) reported that diabetic children who score high on internality respond to illness management better than do those high in external control. Lefcourt (1976); Phares (1976); Tennen and Eller (1977); and Worthman and Brehm (1975) all have maintained that the relationships between manipulations of uncontrollability and subsequent coping behaviors are mediated by perceptions of control. Lefcourt

(1976) concluded that external locus of control is related to depressive and helpless behavior in adults. Dweck and Reppucci (1973) have reported similar results with children: external locus of control predisposes the child to perceive events as severely uncontrollable, and this perception leads to maladaptive coping. Geist and Broeckl (1982) reported that low self-esteem individuals express social anxiety, are more likely to have an external locus of control, and believe they have less control over the rewards in life. Those with high self-esteem are comfortable in new situations and believe they control the rewards in life.

These variables have been directly or indirectly implicated as affecting the adaptive response conceptually defined in this study as coping. Increasing the adaptation of children to critical school transitional periods is important. If variables can be identified that predict a positive adaptation to the first grade, priorities for interventions and support may be directed to those factors that are alterable and to those situations in which greater supportive intervention is needed. This would promote the mental health of children and increase their potential for effective functional experiences in later life.

The causal basis for exposure to preschool day care, as well as its impact on adaptation, remains obscure (White, 1971; White and Watts, 1973). Recent research has suggested that what takes place in school has disappointingly little impact on ultimate student achievement and learning (Coleman, 1966; Jencks, 1972).

Personality characteristics have also been correlated with successful adaptation experiences (Mechanic, 1962), with perceived stress of life events (Chiriboga and Dean, 1978), and with recent life changes and current well being (Cullen, 1980). The results of such studies indicate the need to explore more thoroughly the exact nature of the relationship between these factors and adaptation of children.

One approach to clarifying adaptation is to investigate preschool day care experience, self-esteem, and locus of control as component parts of coping. Such a delineation allows for the examination of the unique contribution to each factor to adaptation, by presenting a more precise measure of coping. Such research is needed to build a substantive body of knowledge for health promotion.

Nursing voices commitment to society to promote the health of individuals, families, and communities. Central to realization of this commitment is nursing's acceptance of responsibility for the identification of models of the life experience that promote health. Nurses are presently involved in such activities as family counseling, child/parent clinic work, school nursing, family practice, and so forth, in which such information is sought, acted upon, and transmitted to parental and other caretakers.

Conceptual Framework

This study utilized a social, psychological conceptual framework as the theoretical basis to explain the relationship between coping, preschool day care, self-esteem, and locus of control. This theoretical

base relies heavily on the constructs of imitation and reinforcement, derived from Social Learning Theory, to explain the child's personality characteristics and behavior as developed within the child's earliest environment - the family. Such a perspective assumes that human behavior through interaction with others allows for the child to imitate the behavior of others, and when reinforced, sustain that behavior in future similar situations. Bandura and Walters (1963) demonstrated that merely observing another person might be sufficient to lead to a learned response, and that reinforcement is not always necessary. Bandura (1969) has deviated from the traditional behaviorist assertion that reinforcement influences behavior without the conscious involvement of the individual. He has suggested that human beings are capable of choosing how they will respond to situations, because many types of human behavior are under anticipatory control. That is, children and adults are capable of observing the effects of their actions, and they are also able to anticipate what will happen under certain circumstances. As a result, they are able to control their own behavior to a significant extent by choosing between different solutions and experiences which are anticipated to produce pre-selected consequences. These reformulations of stimulus-response theory offer an explanation for children's behavior as being vested in their knowledge of contingencies, and in their imitation. Both of these play a role in forming expectancies regarding outcomes. The factor that mediates the impact

of observational learning is reinforcement on the part of the model which increases the likelihood of the child's imitating that model.

Even though children of working mothers are cared for in other than preschool day care - e.g., relatives' homes, and care centers (Woods, 1972) - for the purpose of this study, preschool day care has been identified as a potentially important variable for mediating the adaptative response of first grade school children to the transition from home to the experience of attending public school for a full day. Preschool day care, a social concept, has its roots in the two professional traditions of social work and education. Social work concerned itself with licensing and services, while education contributed the educational tradition which developed into progressive education and parent cooperatives, a model of enrichment for children (Emlen, 1974; Perry, 1963). The central mission of preschool day care is not to promote a particular care-giving arrangement, but rather to conceptualize a set of procedures needed to develop optimizing environments in the home, playground, center, and school (Fein and Clarke-Stewart, 1973). Its focus is developmental, rather than custodial; services are universally available to all families, not just the poor and disadvantaged. Preschool day care centers may be proprietary ventures (e.g., university related), or franchised operations that are State licensed. Preschool day care presents to children a new social setting and vast new opportunities for learning. Here, some well established responses acquired in the home are reinforced and strengthened, while others are modified

and extinguished. Peers as well as teachers serve as models for imitation of new and different responses. Thus preschool day care facilitates adaptation of children to a critical transition. Research findings concerning the enduring benefits of preschool day care are contradictory. Mussen, Conger and Kagan (1972) caution interpreting results of studies that make comparisons of preschool day care attendance and non-attendance, suggesting that there are many important factors operating. Parental attitudes and the child's personality characteristics are often not considered.

The situational context in which early behaviors occur has implications for children's perception of themselves. One of these perceptions that has been studied is self-esteem. Self-esteem is a social psychological concept which measures attitudes individuals hold regarding themselves. Self-esteem develops early in life and remains fairly constant. It expresses a personal judgment of approval or disapproval, and indicates the extent to which the individual believes himself or herself to be capable, significant, successful, and worthy. It is a subjective experience which the individual conveys to others by verbal report and other overt expressive behavior (Coopersmith, 1967).

James (1896) was first to note the subjective nature of self-esteem - the evaluative component of the self concept. Rosenberg (1979) stated that self-esteem is an attitude of approval (or disapproval) of self. Christian (1978), Fitch (1970), Kellerman (1980), Rosenberg (1965), and Silverman (1964) all reported to varying degrees than an

individual's levels of self-esteem, task accomplishment, and well being are related.

Another important concept in the perception of self is locus of control. Rotter (1966) integrated this psychological concept into Social Learning Theory. He distinguished between two types of control - internal and external. Individuals who believe they have control over events in their lives are said to have internal control. Those who believe fate or some external force determines the outcome of their experience are said to have external control. This concept has generated research by many investigators in a variety of situations - e.g., persons experiencing group isolation seem to cope better if their locus of control is internally oriented (Cooper and Green, 1976). Other categories of situations in which internality proved adaptive include business owners or managers following hurricanes (Anderson, 1977), and student concern and academic progress (Kjerueff and Wiggins, 1976). Locus of control has been found to be related to life changes and maladjustment (Crandall and Lehman, 1977; Gilmore, 1978); and to withdrawn, fearful, and aggressive behavior of both adults and children (Rothbaum, Wolfer and Visintainer, 1978).

Because behavior toward the child is conducted in terms of symbolic meaning and value, self worth and perceptions of the controller are integrated and generalized as motivation for the child's behavior in other situations. In this way, attitudes surrounding the treatment of the child within the family context become part of the child's personal

definition and may be reinforced or modified by experiences in preschool day care.

Coping encompasses the problem-solving efforts that individuals make when faced with the demands that are relevant to their well being (Lazarus, 1966). Coping is a learned behavior which becomes gradually modified throughout life. It is a matter of personal-cognitive congruence, implying meaning spheres and pre-logical and logical processing of information. For coping to be adaptive, children must manage the person-environment relationship and regulate stressful emotions.

Even though enrollment in preschool day care has soared over the past 20 years, there has been little systematic investigation of the role of preschool day care in the adaptation process. There is little reliable information about the actual outcome of preschool attendance on children's personality, behavior and cognitive development. Research concerning self-esteem of children has been meager. However, it does appear reasonable to believe that high self-esteem would have a positive effect upon coping. Research has demonstrated that internality as a psychological perception of self enhances adaptation to newness of experience, task and stress demands, and coping with catastrophic illness (Achenback and Edlebrock, 1978; Holmes, 1976; Lefcourt, 1976; Phares, 1976). Even though there has been little investigation of these three concepts related to coping of children, it is reasonable to assume they have some effect. This study has been conceived because it is important

to know what effects preschool day care, self-esteem, and locus of control do have on coping.

Assumptions

A basic assumption is that children define their performance and respond according to their perceptions of past and present experience, including others' responses to them. Another assumption is that the societal values continue to portray preschool day care as an opportunity for role rehearsal of the academic experience by providing positive role models. Such an attitude encourages the notion that all parents and caretakers have not internalized these societal views and consequently have not used preschool day care. It was assumed that the children could understand directions and mark their papers correctly.

Hypotheses

The hypotheses formulated for the study are:

H₁ There is no significant relationship between length in months of exposure to preschool day care and first grade children's coping behavior score as measured by the Zeitlin Coping Inventory.

H₂ There is no significant relationship between self-esteem score as measured by the Canadian Self Esteem Inventory for children and first grade children's coping behavior score as measured by the Zeitlin Coping Inventory.

H₃ There is no significant relationship between locus of control score as measured by the Stanford Internal External Scale and first grade

children's coping behavior score as measured by the Zeitlin Coping Inventory.

Definition of Terms

Coping is conceptually defined as an active process using strategies to manage one's world. It is assessed on a continuum from maladaptive to adaptive.

Adaptive coping - behavior which facilitates solutions that enhance efforts to care for oneself and/or is appropriately responsive to the demands of the environment.

Maladaptive coping - behavior which does not generate a satisfying solution, except that it may protect the child from the stress of the moment.

The operational definition of coping behavior is a score on the Coping Inventory (CI) developed for children by Zeitlin (1978). The CI is a criterion-referenced instrument that measures adaptive behavior in young children.

Preschool Day Care is conceptually defined as an environment legally licensed and regulated by the state to meet the needs of a developing child. The focus of the environment is developmental, not custodial. The services are universally available to all families, not just the poor or disadvantaged. It may be a proprietary venture or a franchised operation. It is State licensed.

Preschool daycare was measured by intervals ranging from 0 (no experience) to the integer (number of months) reported by the parents/caretakers.

Self-esteem is conceptually defined as a combination of attitudes one holds regarding the self. It is the evaluation one makes with regard to self: personal judgment of worthiness that is expressed in the attitudes one holds towards self. It is a subjective experience which the individual conveys to others by verbal report and other overt expressive behavior (Coopersmith, 1967).

Self-esteem was measured by a score on the Canadian Self Esteem Inventory (CSEI) for children, Form B, developed by Battle (1976). The CSEI contains 30 items, all selected from an earlier scale developed by Coopersmith (1967).

Locus of control is conceptually defined as an individual's generalized expectancy about whether or not he/she has control over what happens to him/her.

Internal control - the perception of positive or negative events as being the consequence of one's own action and therefore under personal control (Rotter, Seaman and Liveraut, 1962, p. 499).

External control - the perception of positive or negative events as being unrelated to one's own behaviors in certain situations and therefore beyond personal control (Rotter, Seaman and Liveraut, 1962, p. 499).

Locus of control was measured by a score on the Stanford Preschool Internal External Scale (SPIES) developed by Mischel, Zeiss and Zeiss

(1974). The SPIES consists of 14 forced-choice questions and is scored in the internal direction.

Limitations

This study was subject to the following limitations:

1. The sample was not random, but consisted of volunteers who met the criteria of being six- to seven-year-old first-time first grade children in an urban public school system in the Midwest and whose parents were willing to have their children participate in the study.
2. No variable was used to determine the influence of various ethnic or cultural backgrounds.
3. Sample size may not be large enough to represent the population adequately - e.g., controlling for effects of extraneous variables such as intact or single parent families, or presence of siblings.
4. The findings cannot be generalized to all six-and seven-year-olds, since a random sample was not used and the sample was drawn from a single geographic area.
5. The teacher may hold expectations for certain students which influence behavior patterns unduly.
6. There was no control over the differences in the teacher's ability to score the Coping Inventory.

Organization of the Study

Chapter I has presented an introduction, problem of study, justification of the problem, conceptual framework, assumptions, hypotheses,

definition of terms, limitations and organization of the study. Chapter II contains a review of the literature, Chapter III describes the methodology and procedures used in the study, and Chapter IV contains an analysis of the data. Chapter V is a summary of the study, including conclusions and recommendations.

CHAPTER 2

REVIEW OF THE LITERATURE

This chapter contains a review of the literature pertaining to the topic under investigation. The discussion is concerned with coping, preschool day care, and the personality characteristics of self-esteem and locus of control.

Coping

Coping is the result of an interaction of an individual and the environment. The reaction an individual has to an environmental event is as important as the event itself (Lazarus and Launier, 1978). Therefore, not only does a person's coping ability have implications for mental and physical health, but the person's state of health also influences coping responses (Antonovsky, 1976; Lazarus and Launier, 1978). Coping involves a number of factors, including the presence of stressful environmental conditions, the perception by the individual that such conditions are stressful, and the relative ability of the individual to cope with or adapt to these conditions. Situations that are new, unfamiliar or call for a change in behavior are such conditions.

Coping is the ability to influence and control environmental demands to which an individual is exposed. This conceptualization of coping is within the Cognitive Phenomenological Theory of psychological

stress developed by Lazarus (1966) and his colleagues (Folkman and Lazarus, 1980; Lazarus, Kanner and Folkman, 1980; Lazarus and Launier, 1978). Such a formulation provides for transaction, in that the person and the environment are seen in an ongoing relationship of reciprocal action, each affecting and in turn being affected by the other. For an individual to conduct a successful transaction with his/her environmental demands, the person must have self knowledge, maintain satisfactory internal conditions for action and for processing of information, while continually securing information about the environment, receiving feedback, and selecting a behavior. Hence, such environmental demands require the individual to manage the person-environment relationship and regulate stressful emotions (Folkman and Lazarus, 1980; Lazarus, 1977). This dual function of cognitive and emotional focus has also been reported by Billings and Moos (1981); George (1974); Kieley (1972); Kohn, Wolfe, Quinn, Snoek (1964); Mechanic (1962); Murphy (1962); Murphy and Moriarity (1976); and Peck (1981). Studies of the coping of individuals at different developmental levels experiencing various life change events have identified characteristic indices of each function (Baldree, Murphy and Powers, 1982; Carlson, 1981; Haan, 1977; Ilfeld, 1980; Janis and Mann, 1976; Jalowiec and Powers, 1981; Lazarus and Launier, 1978; Lipowski, 1970; Moos and Tsu, 1977; Weissman, 1979; Woods, 1972; and Woods, 1979).

Coping has been measured in a variety of ways, including the interpretation of case studies (Hinz, 1980; Moos, 1977; Murphy, 1962; Parkes,

1972), observation (Ebra and Toth, 1972; Gerhart, 1979; Goosen and Bush, 1979; Gunnar, 1978, 1980; Hamburg, 1953; and Hamburg and Adams, 1967), and self report (Katz, Weiner, Gallagher and Hellman, 1970; Levine and Spivak, 1964; Lowenberg, 1970); and by physiological indices (Jalowiec and Powers, 1981; Katz, Wwiner, Gallagher and Hellman, 1970; Luborsky, Blinder and Schimek, 1965; Lucas, 1969; Venham, Murray and Gavlin-Kremer, 1979) and the development of coping scales (Jalowiec, 1983; Zeitlin, 1978, 1980).

Murphy (1962), the originator of the term coping and the pioneer of children's coping behavior, defined coping behavior as the child's individual patternings and timings of his/her resources for dealing with specific problems or needs or challenges. Thus her definition of children's coping is compatible with that of Lazarus and others who have studied coping in adults and children. Encountering new situations initiates coping behavior. Adaptive coping involves confronting and engaging in new situations, showing neutral or positive feelings in the process. Coping is a learned behavior - learned from early interactions with the family - that requires reality testing. Reality testing is both a cognitive and manipulative function and proceeds by creative restructuring in order to test potentialities. Once the child learns methods of coping successfully in certain situations, the child integrates these methods for use in new situations. Murphy and Moriarity (1976) found that children who are flexible in their selection and use of coping strategies are better equipped to manage new experiences than are children who are locked into repeated use of one or two strategies.

Biological, behavioral, and psychodynamic referents are important considerations in the coping process. It has been noted that situational events, the newness of an event, transitional periods, the availability of support systems, and the personal styles of social interaction and information processing of the individual are critical for coping to be adaptive (Crouter, 1982; McCubbin and Patterson, 1981; Porquer, 1982; and Ziemer, 1982). Johnson, Kirchhoff and Endress (1975) demonstrated that sensory information given prior to a threatening or stressful event can affect the amount of behavioral distress (measured by pulse-rate change) for children undergoing orthopedic cast removal. Cain and Staver (1976) have suggested that children's adaptation to such traumatic events as parental death or frequent hospitalization is mediated by awareness of the children's information needs and protection against their feelings of abandonment.

Studies of the coping behaviors of children undergoing treatment for an acute episodic medical condition and children undergoing prolonged hospitalized treatment report emotionality, decreased verbalization, and behavioral regression as ways of coping (Ahnsjo, Humble, Larrson, Settergren-Carlsson and Sterky, 1981; Gerhart, 1979; Hinz, 1980; Minde, 1978; Tesler and Savedra, 1981; Woods, 1979). Sturmer and Rothbaum (1980) studied 68 children, ages 4-12, undergoing venipuncture during hospitalization. Their findings suggest that information rehearsal and supportive care have a positive effect on adaptive coping. Research findings of the coping behavior of exceptional

children (mentally retarded, handicapped, or catastrophically ill) suggest that maladaptive coping can be prevented and/or ameliorated (Hartman, 1979; Mohr, 1980; Zeitlin, 1980, 1983). Beder and Weinstein (1980) studied 102 adolescents with congenital and acquired facial disorders. Their findings reveal that adolescents with facial anomalies have psychological problems of feelings of inadequacy and anger, and sensitivity. Girls' problems were more severe than those of boys, but the magnitude of the facial disorder was not an important factor. Coping was maladaptive for both boys and girls, but the mechanism remains unclear.

Moriarty and Toussieng (1976) documented the adolescent coping styles of the sample initially studied as babies in 1952, in toddlerhood and preadolescence (Murphy and Moriarity, 1976). Moriarity and Toussieng (1976) identified 4 coping styles in the children as adolescents: 2 groups of "censors" -- the obedient traditionalists and the ideological conservatives -- and 2 groups of "sensors" -- cautious modifiers and passionate reviewers. The authors concluded that the pattern of school success, future aspirations, background, and family variables sets in motion a sequence of life events that tend to follow rather directly from early years through high school and the early college years; adolescence appears to be the period for the consolidation of one's coping style.

In general, therefore, it seems that children of all ages are better able to cope with new or stressful situations when normal social

support is provided (Viney and Clark, 1974). When separation from family is involved, the child's emotional vulnerability may impede adaptation to new social or physical environments (Harding and Looney, 1977).

The family system is a child's primary socialization environment - his/her learning laboratory in which a child experiments with his/her uniqueness to fashion a way of encountering the world. Bandura (1969, 1974), Murphy (1962) and others have supported the conceptualization that the child is active as well as reactive, and coping is learned from mutual interactions of child and environment.

Reiss and Oliveri (1980) suggested that family members experience the normal crises of transition during the various periods of change in the family life cycle such as the birth of a child, children entering school, and children leaving home. The school experience has been identified as having transitional periods that require adaptation (Baldwin, Cole and Baldwin, 1982; and Oliver, 1974). Mechanic (1976) viewed adaptation as a transactive process between people and their life situations. Adaptation depends upon the degree of fit between the skills and capacities of individuals and the types of challenges which confront them. Capacities to meet life demands depend on personal attributes and acquired skills (Mechanic, 1976; Murphy, 1962). Murphy and Moriarity (1976) identified the use of these capacities by the individual as coping.

The school places two broad set of adaptive demands on the child. The child must learn to master and assimilate increasingly complex

bodies of knowledge and must also learn to meet the school environment's behavioral and interpersonal requirements. These two sets of demands often interlock. Thus adaptive failings restrict the child's ability to learn, just as deficits in educational mastery generate psychological and adaptive problems (Rutter, 1983). Piaget (1970) believed that the impact of any environmental event on a child depends on what the child takes from that event - how the child interprets what has happened and how the new information is integrated with what the child already knows. Children are active participants in their learning (Bandura, 1973; Favell, 1977; Patterson, 1976).

Reports of studies of children's school behavior have indicated that overall, boys at various ages have more difficulty than girls in adapting to the demands of the school experience (Baldwin, Cole and Baldwin, 1982; Feshbach, 1969; Oliver, 1974; Olweus, 1979; Patterson, 1976; Werry, 1968; Witelson, 1976). The exact nature of the differences between the school behavior of boys and girls has generally been attributed to physiological development (Schachter, Shore, Hodapp, Chalfin and Bundy, 1978; Taylor and Ounsted, 1972; Witelson and Pallie, 1973), social and cultural conditioning (Feshbach, 1974; Patterson, 1976; Ross, 1971), and psychological attributes such as activity levels (Battle and Lacey, 1972; Ross and Ross, 1976), reflectiveness (Messer, 1976), and frustration tolerance (Feiring and Lewis, 1979; Van Leishout, 1975); the rationale for the differences continues to remain unclear.

Starting school is a critical period of transition for children (Damon, 1977; Lassers, Nordon, and Baldholm, 1973; Pothier, 1976). At the present time, little is known about the factors that influence the coping behavior of children having this experience. The transition from kindergarten to first grade may also be considered a critical transition period because children change from half-day to full-day attendance. Not only are cognitive and time demands increased, but familial interaction, the usual familiar support network, is decreased. The young child attending school at the lower grades is still engaged in formulating a link between family and another social institution (Hill, 1965). Upon entry into the educational system, the child experiences pressures to develop relationships outside of the family, altering role patterns within the family system. To the extent that role changes impede the functioning of the family in its affectional and emotion-satisfying performance, such an evolutionary transition may be stressful.

Preschool Day Care

Bee (1974) estimates that there are more than five million working mothers with children under five using preschool day care in the United States. This great increase in numbers of women who work has been attributed to their liberalization which has occurred in part as a result of the feminist movement and in even greater part to economic pressures (Rosenfeld and Perrela, 1965). The increased educational level of women and of the general population (Waldman and Gover, 1971) may also

have some effect. It seems to follow that parents with advanced education would believe that preschool day care will accelerate their child's development and ability to learn, and would therefore elect to have their child attend preschool day care as an added positive experience.

Preschool day care, a social concept, has its roots in the two professional traditions of social work and education. Social work concerned itself with licensing and services, while education contributed the educational tradition which developed into progressive education and parent cooperatives, a model of enrichment for children (Emlen, 1974; Perry, 1963). The central mission of preschool day care is not to promote a particular care-giving arrangement, but rather to conceptualize a set of procedures needed to develop optimizing environments in the home, playground, center, and school (Fein and Clarke-Stewart, 1973). Its focus is developmental, rather than custodial; services are universally available to all families, not just the poor and disadvantaged. Preschool day care centers may be proprietary ventures (e.g., university related), or franchised operations that are State licensed. Preschool day care presents to children a new social setting and vast new opportunities for learning. Here, some well established responses acquired in the home are reinforced and strengthened, while others are modified and extinguished. Peers as well as teachers serve as models for imitation of new and different responses. Thus preschool day care facilitates the adaptation of children to a critical transition period.

Some researchers believe that preschool day care provides enduring benefits for the school performance of children of low socio-economic status (Blank and Solomon, 1968; Gray and Klaus, 1965). Moderate gains in intelligence scores have been reported by Wellman (1940), although disconfirmed by Douglas and Ross (1964). Brown and Hunt (1961) found in pairs of children matched for age, sex and I.Q., that those who had not experienced preschool day care surpassed those who had attended in personal adjustment, relations with other children, and participation in group activities, concluding that there was no support for "the hypothesis that preschool day care will enhance later school adjustment" (Brown and Hunt, 1961). On the other hand, Mussen, Conger, and Kagan (1972) stated that the positive consequences of preschool day care attendance include sociability, self expression, interest in the environment, and independence. They did caution, however, interpreting results of studies that make comparisons of preschool day care attendance and non-attendance, suggesting that there are other important factors operating. Parental attitudes and the child's personality characteristics are often not considered. They have contended that preschool day care is not likely to influence the intellectual functioning of middle class children, but may affect their personality and social behavior.

Mussen, Conger and Kagan (1979) stated also that although the central figure in preschool day care, the teacher, will respond to the child in many ways as his mother does, the teacher expects much more independence than a mother would, and is less tolerant of dependent

behavior. In view of the importance of teachers in the child's life, they can hardly avoid becoming socialization agents. As part of their work, teachers attempt to enhance the child's personal adjustment and, at the same time, to foster the child's independence. Findings of the extensive Harvard preschool day care studies reveal that there may be a tendency for children of working mothers to be more dependent in middle childhood and that boys may experience some problems of sexual identification. More positively, children in preschool day care tend to develop nonstereotyped conceptions of male and female roles and to do well in school (Goodenough and Maurer, 1970; Kagan, 1964, 1971, 1973; White and Watts, 1973). The longitudinal study also supported the use of preschool day care to encourage competence in the social and intellectual development of children (Ainsworth and Wittig, 1979; Kagan and Coles, 1971).

Bee (1974), and Poznanski, Maxey and Marsden (1970) have reported that children who attend preschool day care are somewhat more likely than home-reared children to do well in school and to develop nonstereotyped conceptions of male and female roles. They conducted extensive reviews of studies of the impact of preschool day care, and concluded that if preschool day care is provided by trained personnel responsible for small groups of children, no negative effects on child behavior are apparent.

Appel (1942) and Jersild and Markey (1935) suggested that children need to learn to settle their differences on their own, and preschool

day care provides the social atmosphere in which this can occur. Swift (1964) reported however, that attending preschool day care did not lead to any permanent improvement in relationships with other children or participation in group activities. Hartup (1967) stated that children who seek assistance from peers and are eager for their approval have more satisfying interpersonal relationships than those who are seen as interested in attracting attention only. The former, seeking peer assistance and approval, is an example of an adaptive coping behavior, as it facilitates solutions to enhance efforts to care for oneself and demonstrates appropriate responsiveness to the demands of the environment. The latter behavior, vying for attention, exemplifies maladaptive coping, as it does not generate a satisfying solution to the demands of the environment even though it may protect the child from the stress of the moment.

Since preschool day care is being substituted widely for parental care during a substantial portion of the day of many children, it may be expected to have an influence on the development of the personality characteristics and ultimately their coping behavior. It is through experiences in coping that the child develops a patterned way of dealing with newness (Kagan and Moss, 1972).

Self-Esteem

Theories of child development differ in their basic assumptions about the nature of children and the direction of their growth; however,

belief that early familial interpersonal relationships affect behavior and personality characteristics is longstanding and apparently universal (Aristotle, 300BC; Bandura, 1963; Erikson, 1963; Freud, 1936; Locke, 1690; Piaget, 1970; Plato, 380 BC; Sears, 1948; Skinner, 1953; and Watson, 1925).

A personality characteristic that has received wide attention over a period of time as being a critical factor for survival and maintenance of the human psychological self is self-esteem. Brissett (1972); Coopersmith (1967); Fitch (1970); Rosenberg (1965); and Ziller, Hagen, Smith and Long (1969) have stated that high self-esteem is necessary for adaptive coping. Self-esteem as a hypothetical construct of social psychological theory has been important in personality theories, such as those of Rogers, Murphy, Horney and Adler, where survival and maintenance of the human psychological self are seen as analogous to physical survival in other animal species. It has been utilized in a variety of ways: studies of attitude change (e.g., Janis, 1954), where low self-esteem is often associated with persuasibility, and in a wide variety of social psychological experiments and field studies (e.g., Gordon and Gergen, 1968).

Low self-esteem has been related, by scholars, writers, and clinicians, to political behavior, social disturbances, and various other forms of personal and group dissatisfaction (McClosky and Schaar, 1965). The usual explanation is that people with low self-esteem are also likely to be alienated and unhappy about their lives, and to feel

incapable of controlling their futures. Thus, under a variety of labels - ego strength, competency, self regard, personal efficacy, self respect - self-esteem has been linked with other attitudes (Wells and Marwell, 1976).

Yet, after many years of conceptual prominence and utilization in research, the self-esteem variable has been difficult to operationalize well. Scales purported to measure self-esteem or some related concept such as "competence" continue to proliferate, with most being used only once. One of the major faults, according to Wylie (1968), is its being confounded with the self concept literature. Her critical review of this phenomenon has discouraged research of this personality characteristic. However, Coopersmith's Self Esteem Inventory has survived, and has not been diminished in its usefulness for explanation of human behavior.

Self-esteem is the evaluative component of the self concept; it is the individual's attitude and perception of self, one's judgment of one's behavior in relation to one's own criteria - a self judgment about one's own worth. Individuals with high self-esteem perceive themselves as worthwhile and significant; they feel confident in influencing desired outcomes.

Rutter (1981) noted that self-esteem is a critical factor for the developing child. High self-esteem serves as a buffer throughout the developmental process of a child's life. It enhances adaptive coping in times of vulnerability - e.g., developing needed social networks and

close personal relationships, in the loss of a loved one, or the experiences of multiple hospitalizations. Persons with low self-esteem feel worthless, of little importance, and unable to affect outcomes (Coopersmith, 1967; Rosenberg, 1965).

Pearlin and Liberman (1977), Rosenberg (1979), and Ziller (1973) have reported that an individual's self-esteem is directly related to vulnerability to environmental influence. Crandall and Lehman (1977) asserted that it is likely that people high in self-esteem have a history of successfully managing environmental crises. This sense of efficacy decreases the panic response to threat and contributes to adaptive coping.

Self-esteem appears to have its roots in infancy, when attachment behavior, the system of mutual signaling and gratification between infant and significant other, develops (Maccoby, 1980). This earliest environment of children is their family. Families organize children's physical environment and supervise their activities and interpersonal relationships. It is within this environment that the personality characteristics of self-esteem and locus of control have their origins. Gevirtz (1965) has suggested that the rate of development of the child's social responsiveness depends on the responsiveness of that child's caretakers. By the fourth month of age most infants exhibit ability to discriminate, as shown by response to familiar faces and voices (Bower, 1974), and by eighteen months are attached to at least three people (Schaffer and Emerson, 1964). The relationship of attachment and

emotional security was first suggested by Blatz, Bott and Millichamp (1935) and was reaffirmed by Ainsworth, Bell and Stayton (1971); Ainsworth and Wittig (1969); Bowlby (1969, 1973); Flint (1959); Harlow (1961); and Sroufe and Waters (1977). Attachment behavior usually appears during the last half of the first year, peaks during the second year, and wanes gradually as the child becomes more competent and independent (Emmerick, 1977).

This developmental achievement of being able to influence the actions of the caretaker is the beginning of self knowledge and control behavior. Cognitive growth enables the child to classify situations so that their relationship to previously encountered events can be seen. The development of language for communication with others and mastery of tasks enables the youngster to decrease attachment bonds and develop feelings of competency and high self-esteem. The parents' most lasting influence comes through modeling ways of interacting with other people and teaching certain modes of adaptation to changing life circumstances (Maccoby, 1980).

Pearlin and Liberman (1977) found that individuals with low self-esteem feel immobilized by their own inability to cope, and become depressed and anxious. Colletta, Donohue and Hunter (1981) studied vulnerability to stress in 64 black adolescent mothers, ages 14-19, enrolled in a large metropolitan public high school. They found that self-esteem is related to coping style: those with high self-esteem took direct action to alter the stress stimulus, while those low in

self-esteem withdrew from the noxious demand. High self-esteem was also related to ability to elicit support from peers.

Coopersmith (1967) suggested that people evaluate themselves in terms of their ability to control events and that their self-esteem rests to some extent on the feeling that they have this power. His work with school-aged children has shown that children with high self-esteem have good social relationships with peers and perform well academically. Williams and Haven (1980) studied reinforcement for performing in front of the class in fourth and fifth grade children matched for age and I.Q. Investigators concluded that it was not the attractiveness of the reward offered, but the child's level of self-esteem, which motivated the desired behavior. Self-esteem has also been associated with prediction of pupils' academic achievement in mathematics and reading skill (Silvern, Brooks, Griffin and Lee, 1980). High achievers in their study drew self figures that were taller than those drawn by low achievers, within both reading and mathematics contexts. Fox (1980) found significant correlations between the cognitive and academic functioning of foster children and their self-esteem scores. In addition, it was found that the foster children's general level of functioning was similar to that of low income and minority children living with their own families. This suggests that low self-esteem may have a deleterious effect on coping.

Significant differences in self-esteem have been reported at the pre-adolescent level of boys, both with and without specific learning disabilities (Price and Marsh, 1981; Rutter, 1981). Reynolds (1980)

found a positive correlation between self-esteem and classroom behavior in elementary school children. Battle and Blowers (1982) reported that children with special training in enhancement of self-esteem experienced greater gains in self-esteem and perception of ability than did those in regular classes. Maruyama, Rubin and Kingsbury (1981) found social class and ability to be interrelated and to "cause" both achievement and self-esteem. Jones (1981) reported that pre-adolescent children with high self-esteem feel less anonymous in the school situation than do those with low self-esteem. Bynner, O'Malley and Bachman (1981) stated that self-esteem plays a part in teenage behaviors and subsequent orientations. Battle (1980) demonstrated a relationship between self-esteem and depression among high school students: low self-esteem students displayed maladaptive coping. Miller (1968) demonstrated that high self-esteem breeds success in performing life roles and provides confidence in undertaking new roles. Cohen (1959) stated that persons with high self-esteem are able to deny, repress or ignore conflicting impulses. Persons with low self-esteem may view new situations as threatening to their esteem. In like fashion, children with low self-esteem would view the transitional period as threatening and display maladaptive coping, while high self-esteem children would be able to ignore conflicting impulses and display adaptive coping. A sense of mastery (adaptive coping) is based on the child's behavior as being consistent with self expectations and the expectations of others (Brissett, 1972). Also, persons with high self-esteem are more sensitive to information about self

(Shrauger and Rosenberg, 1970), while low self-esteem individuals may misinterpret nonverbal clues (Miller, 1979).

Miller (1980) suggested three broad categories the nurse can assess to determine level of self-esteem of patients. These categories are good interpersonal relationships, a paucity of negative self-talk, and accounts of accomplishments in role performance. Low self-esteem patients report the opposite. This assessment can then serve as a guide for esteem-building exercises. Rabkin and Strueing (1976) have stated that the effects of personal variables as variables for mediating stressful conditions are fairly obvious - e.g., skills, assets, experience, and resources. Personality characteristics and vulnerability for adaptive coping are less clearcut.

Locus of Control

Another personality variable that a considerable amount of research has shown to be of importance for optimum development is locus of control. This concept has come to be of central importance in explaining coping responses (Brim, 1976; Crandall, Katkovsky and Crandall, 1965; Epstein, 1973; Gunnar, 1980; Lazarus, 1966; Nowicki and Strickland, 1973).

Many different types of self assessment methods, including self report questionnaires (Nowicki and Strickland, 1973), forced-choice formats (Mischel, Zeiss, and Zeiss, 1974) and scales (James, 1957; Phares, 1957, 1976; Rotter, 1966; Wallston, Wallston, and deVellis, 1978) have

been utilized to study locus of control. From preschool years through adolescence, locus of control is a fairly stable characteristic (Achenback and Edlebrock, 1978). Fuller, Encress and Johnson (1978); Johnson, Rice, Ruller and Endress (1978); Langer, Janis and Wolfer (1975); and Pervin (1963) all have suggested that the provision of sensory information promotes cognitive control that leads to purposeful selection of adaptive coping strategies. Gilmore (1978) cited evidence suggesting that internal locus of control is related to success in many areas of human endeavor - e.g., academic success, persistence at tasks, and interpersonal relations. Reiling and Massari (1973) tested 14- and 15-year-olds for degree of formal thinking and locus of control, and found that the internal control subjects scored higher in formal thought than did the external control subjects. In another study, the same researchers examined 1,000 grade school subjects with academic and social success in school, and found that the personality characteristic that successful students shared was internal locus of control - the belief that it is possible for humans to gain control over their environment. Coleman, Hobson, McPartland, Mood, Weinfeld, and York (1966); and Kohn and Rosman (1973) also reported this in their surveys of educational opportunity. For disadvantaged groups, internal locus of control showed the strongest relation to cognitive functioning, while for the more advantaged subjects, self-esteem and educational aspirations seemed to be of more importance. Moffatt and Pless (1983) reported that diabetic

children who scored high on internality responded to illness management better than did those high on externality.

Lefcourt (1976); Phares (1976); Tennen and Eller (1977); and Worthman and Brehm (1975) have maintained that the relationships between uncontrollability and subsequent coping behaviors are mediated by perceptions of control. Lefcourt (1976) has stated that external locus of control is related to depressive and helpless behavior in both adults and children. Dweck and Reppucci (1973) have reported similar results in studying children: external locus of control predisposes the child to perceive events as severely uncontrollable, and this leads to maladaptive coping. Geist and Broeck (1982) reported that low self-esteem individuals express social anxiety and are more likely to have an external locus of control and to believe they have less control over the rewards in life. Those with high self-esteem are comfortable in new situations and believe they control the rewards in life.

Since parents are the significant others whose attitudes matter most when children begin to form their self-esteem, the manner in which parental figures act as role models and reinforcers is vital. If children see that parents regard them with affection, respect, and trust, they they come to think of themselves as worthy persons. Coopersmith (1967) has identified as critical the amount of respectful, accepting, and concerned treatment that children receive from their significant others, plus children's experiences of success and failure, and their social status. Firm management helps children develop firm inner

controls. Clear, firmly enforced rules help them establish accurate self definition, and parental restriction is seen as proof of concern (Coopersmith, 1967).

Learning to make decisions (to make things happen or refuse to let them happen) is the beginning of internal locus of control. Gunnar (1980) reported that control is the critical factor that alleviates fear in 12-month-old infants. At about that same time children discover that withholding compliance may also provide them with a sense of control (Brim, 1976; Epstein, 1973). Crandall, Katkovsky, and Crandall (1965); Epstein (1979); and Nowicki and Strickland (1973) reported that children's assumptions about their locus of control become gradually stabilized. Seligman (1975) stated that a sense of control develops when the things that happen to the child are contingent on the child's own actions. Responsiveness fosters the development of a secure attachment, and this secure attachment is in turn associated with the child's being able to explore new situations and approach strange persons. A sense of control is an important element in this sequence of events. Loeb (1975) suggested the parental technique of being suggestive rather than directive in offering help, in order to foster an internal locus of control in children. Bee (1967) elaborated on this and demonstrated that parents who leave the actual solution-finding to the child have children who are more likely to have an internal locus of control and be able to resist distractions.

Summary

For coping to be adaptive, children must manage the person-environment relationship and regulate stressful emotions. In order to enter into a cooperative, mutually trusting relationship with other people, children must learn to monitor their own behavior, and ask themselves how their behavior looks to other people and how it fits with others' expectations. Although the process of self monitoring can become quite complex as the child enters a variety of social situations, according to Brim (1976), there is continuity in the presentation of self to different audiences. The consistent core grows out of self-appraisal in which the actions of the self are judged in terms of the self's own standards and values, rather than in terms of what others want to be; in other words, self-esteem is a motivator and controller of emotions (Maccoby, 1980). As new situations are encountered, children perceive the effects of their own efforts along a continuum of control. To the extent that subsequent situations are appraised to be similar to prior experience, reinforced behavior is repeated. Thus, children learn to anticipate outcomes of selected behavioral responses, and to develop a locus of control based on belief about the self or others (or fate) as being responsible for reinforcement. Having a storehouse of positive past experiences, which may include preschool day care, should enhance coping.

CHAPTER 3

PROCEDURE FOR COLLECTION AND TREATMENT OF DATA

To answer the research questions of relationship between preschool day care, self-esteem, locus of control, and coping, a non-experimental predictive correlation study was conducted. "In non-experimental research, data are collected without trying to introduce any new treatments or changes. Measurements are made concerning existing states, conditions, behaviors, or characteristics"(Polit and Hungler, 1983, p. 44). The inferential statistical treatment of multiple regression analysis was applied to the data. Parents of the study subjects provided information related to preschool day care experience and parental educational level; teachers provided assessment of coping; and an inventory and scale completed by the children and the investigator elicited information related to self-esteem and locus of control.

Hypotheses

The null hypotheses subjected to testing in this study were:

- H₁ There is no significant relationship between length of exposure to preschool day care and first grade children's coping behavior score as measured by the Zeitlin Coping Inventory.
- H₂ There is no significant relationship between self-esteem score as measured by the Canadian Self Esteem Inventory for children and

first grade children's coping behavior score as measured by the Zeitlin Coping Inventory.

- H₃ There is no significant relationship between locus of control score as measured by the Stanford Internal-External Scale and first grade children's coping behavior score as measured by the Zeitlin Coping Inventory.

Setting

First grade children in a midwestern urban public school system were measured on several variables. The children in the sample were all in three elementary schools, within five miles of each other, in the same city school district.

The community is a small university setting and therefore has a relatively homogeneous population in terms of income and educational status. The total student enrollment is approximately the same for each school, but numbers of classes within grade levels may vary; one school has three classes of first grade children and the other two have two classes each. The student/teacher ratio is the same in all schools in the district.

Population and Sample

The population for the study consisted of children who are enrolled in their first term of first grade in the public school. All the children had reached the age of six. Entry into first grade may be considered to be a transitional period for them, for it was their first

experience with a full day in the public school system; in kindergarten all the children attended only half-days. The sampling frame was the total list of children enrolled in classes whose teachers agreed to participate in this study. There were 18-20 students in each class. Seven teachers, one male and six females, teach the seven first grade classes. The sample consisted of those children whose parents or caretakers provided consent to participate in the study. The sample size was 108.

Protection of Human Subjects

Ethical considerations in this investigation included: 1) the explanation of the purpose and procedures of the study, 2) informed written consent from the volunteers, 3) instruction that the participants could withdraw from the study at anytime if they wished, 4) the protection of confidentiality and anonymity of the subjects, 5) an offer to answer any questions during the study, and 6) the provision of information concerning potential risks and benefits. Protection of the rights for human subjects in research was assessed by The University of Iowa College of Nursing Committee for the Rights of Human Subjects in Research, by the Texas Woman's University Research Committee, and by the Board of Education for public schools of the midwestern urban school district in which the study took place. Prior to the subjects' indicating their willingness to participate, the Board of Education was informed by the investigator about the nature of the inquiry and the roles of the teachers, parents, and subjects. They were told that the

teachers would score the coping inventory for each child participating in the study, and that the study subjects would be asked to complete two personality measures - one in a group-administered session, and the other by individual interview with the investigator. Also, the time required for scoring each coping inventory would be approximately 15-20 minutes, and for the personality measures, 10-15 minutes each. The same content was conveyed to parents by letter (Appendix A). These volunteers were asked to sign consent forms and respond to two questions (Appendix A). The parents were made aware that if they wished to withdraw their child's participation from the investigation, they were free to do so at any time.

The anonymity of the subjects was protected through the use of code numbers. The consent forms contained no code numbers, but the questionnaire responses were matched to the child's code number. To further ensure anonymity, the names of the schools that participated have not been mentioned. As a result, the risk of anyone's being able to identify individual study subjects or their responses is highly unlikely.

The potential risks and benefits of the study were explained to all appropriate bodies, and the risk was determined to be minimal. A potential benefit to the subject from participation is that a coping profile would be prepared for each child, and in the process of preparation, teacher awareness of the child's coping ability was focused upon. Also, the study findings have been shared with the personnel of the schools participating in the study.

Details of the entire procedure follow. Members of the Board of Education for the public schools were contacted for review of the purpose of the study, agreement about human subject risk, and permission to conduct the study. When approval was granted, the Board designated a member to serve as liaison representative of the investigator for dialogue with the principals of the elementary schools. The member facilitator presented by letter an introduction of the investigator, the Board's approval, and the study's purpose, transposed onto a school district form (Appendix A). An abstract of the study was also enclosed. The investigator scheduled a meeting with each of the principals who approved the study, to answer any questions and to schedule a meeting with the first grade teachers at those schools.

At the meeting with the teachers, questions were answered and the purpose of the study was presented, along with a copy of the letter of description and provision for confidentiality and voluntary participation that was to be sent to the home of each child. The letter explained the study and the participation of the children in the study, and indicated that the parents may telephone the investigator to answer any questions. Provisions for confidentiality and voluntary participation were described, stating that no names would be used in the coding, data analyses, or reports of findings. Demographic data were gathered from two sources. The consent form asked for the length of preschool day care attendance and the educational level of the parents. The age, race, and gender of the children were gathered from the Coping Inventory. An offer

to share study findings was included. The letter was sent home with the child on the usual school communication day (Friday) to parents, along with the teacher's usual communique. Parents were asked to respond within a week. If no response was obtained within seven days, another letter was sent. This procedure was repeated just once before the total sample was attained.

Instruments

Preschool day care was measured by intervals ranging from 0 (no experience) to the integer (number of months) reported by the parents/ caretakers.

Self-esteem was measured by a score on the Canadian Self Esteem Inventory (CSEI) for children, Form B, developed by Battle (1976). The CSEI contains 30 items, all selected from an earlier inventory developed by Coopersmith (1967) for use with third to sixth grade children (ages 8 to 10). The Coopersmith Self Esteem Inventory (SCEI) originally contained 58 items. This inventory was then reduced by Battle (1976) to 30 items for use with children ages 6 to 10. Twelve items remain in the original form and the remaining 18 have been shortened and/or rephrased. The items retain the original categories of the individual's perception in relation to peers, parents, teachers, and self. Even though Coopersmith's results suggest that defensive biasing is generally of little importance in these studies, two of the five items in this category have been rewritten. Battle termed this set of five items "the lie scale"

and noted that use of the lie scale is optional. It was omitted in this study; thus the inventory used consists of 25 items (Appendix B).

For children in the third grade and beyond, the inventory is self-administered; for younger children it is suggested that it be administered in small groups of 3-4 or individually with the investigator reading each item, making sure the children understand the procedure. The inventory requires that the subject check either "like me" (yes) or "unlike me" (no) in response to each of the 25 items. An assistant was used to monitor each child's accurate movement from item to item. The range of the scores of the self-esteem inventory is from a low of 0 to a high of 25. A score of 0-8 indicates low self-esteem; 9-16, medium self-esteem; and 17-25, high self-esteem. Coopersmith established reliability in his first sample ($N=30$); test-retest reliability after five weeks was .88. For a subset of the larger population ($N=56$), the test-retest reliability after a three-year interval was .70. The scale has shown considerable construct validity in a series of studies by Coopersmith, establishing theoretically consistent relationships with creativity, anxiety, parental treatment, level of aspiration, and other variables. It has been used extensively in research (Battle, 1976, 1977; Calhoun and Lottman, 1970; Christian, 1978; Connell and Johnson, 1970; Coopersmith, 1959; Fitch, Fox and Accuri, 1980; Geist and Borecki, 1982; Mussen, Harris, Rutherford and Keasey, 1970; Silverman, Shrauger and Rosenberg, 1978; Ziller, Hagery, Smith and Long, 1969). Construct validity was established by both observational and mathematical analysis

of the inventory. Intercorrelations among measures to index the same construct were found. Internal item analyses and factor analyses were made of the instrument as a whole.

Battle also examined responses on the CSEI in relation to other stimulus response variables, including depression, intelligence, and teachers' ratings. Concurrent validity was established with Cooper-smith's Self Esteem Inventory (1967), which has known reliability and validity. Correlations between the two instruments were significant for all grade levels (total sample: .71 to .80; boys: .72 to .84; girls: .66 to .91). Reliability was established by test-retest. In his first sample (N=198), a combination of all grades up to 6, the test-retest reliability was .81 to .89 (boys: .72 to .93; girls: .74 to .90). Mean averages were: total groups: 35.23; boys: 34.86; girls: 35.86. Findings from a 2-year test-retest reliability of Form B were (N=110) .79 to .92; subscale correlations for the group ranged from .49 to .80. Correlations between Form A (consisting of 60 items) and Form B with 30 items (N=160) are .80 to .89. The test has been standardized on boys and girls in several elementary school grades.

Locus of control was measured by a score on the Stanford Preschool Internal External Scale (SPIES) developed by Mischel, Zeiss and Zeiss (1974) (Appendix B). The SPIES consists of 14 forced-choice questions and is scored in the internal direction. Each stem describes a positive or negative event that could plausibly occur in a child's life and is followed by two alternative answers: 1) the event occurred because

of external persons or circumstances, and 2) the event occurred because of the child's own activity or desires.

The SPIES is administered orally to each child in individual testing sessions. To accustom the child to the testing procedures, three training questions are asked at the start: (a) Is your name Steven or David, David or Steven? (b) Are you a girl or a boy, a boy or a girl? (c) Am I a lady or a man, a man or a lady? Each of the questions had two alternative answers, and they are repeated in reverse order. Thus, the child has to wait until both alternatives are repeated before responding. The child is instructed to answer with the content of his/her chosen alternative, rather than with a yes or a no. Questions are presented in random order with positive and negative questions intermixed. The range of the scores of the SPIES is 1-14; a score of 0-5 represents external locus of control; 6-9, middle locus of control; and 10-14 internal locus of control.

Mischel, Zeiss and Zeiss also established content validity of both positive and negative items by asking children about the content affect of the situations described; there was 97.6% agreement. Concurrent validity and predictive validity have been established through continued use in many research studies (Lao, 1970; Mischel and Underwood, 1974; Mischel and Moore, 1973; Mischel, Zeiss and Zeiss, 1974; Mischel, Zeiss, Zeiss and Fernandez, 1972; and Moore, 1972). Split-half and subscale reliabilities were assessed by Pearson product-moment correlation and ranged from .21 to .72. Intercorrelations ranged from .17 to .37, indicating

that the scale samples a diversity of non-redundant stimulus situations. The SPIES appears to be a useful measure for research use with children ages four to nine.

Coping behavior was measured by a score on the Coping Inventory (CI) developed for children by Zeitlin (1978) (Appendix:B). The CI is a criterion-referenced instrument that measures adaptive behavior in young children. It is theoretically derived from Murphy's (1962) longitudinal study of adaptation patterns in children, and assesses the behaviors and skills children use to meet their own needs in relation to the demands of their environment. Two categories of behavior: Self and Environment, and three dimensions of style: Productive, Active, and Flexible, are included. These categories and dimensions are defined by 38 observation items divided into 6 subsections. The rating is made on a Likert Scale of 1-5 with subcategories: 1) self-productive, 2) environment-productive, 3) self-active, 4) environment-active, 5) self-flexible and 6) environment-flexible, yielding 12 raw scores. Tables are supplied in the instruction manual for converting raw scores to index scores.

Content validity of the CI is based on its theoretical derivation from a literature review of children's adaptive capabilities. Field tests by mental health and child care workers and teachers were used to establish concurrent and predictive validity. Inter-observer reliability coefficients were computed on observations by four trained pairs of observers of 44 handicapped children and 37 non-handicapped children.

Populations of different ages have been utilized for standardization (Zietlin, 1983).

The inventory is completed informally, based on the parents', teachers', or counselors' experience and knowledge of a child's behavior over a period of time. Maladaptive scores begin at 1, and the continuum runs to 5 for adaptive scores. If behaviors are not observed, an X is entered. The X's indicate that more time is needed in observing the child.

Data Collection

The data were collected during a time in the school year when the routine of the classroom was sufficiently established so that testing did not have any untoward effect upon the children. The preschool day care data were the first collected, as they accompanied the signed consent form the child returned to the teachers. The SPIES data were collected next, by means of an individual, 10-minute interview with the investigator. The teacher provided to the investigator a class schedule and list of first names, and short descriptors of the children approved for participation, so that the child might be accompanied from the classroom to the testing room and returned to the classroom without disruption. A quiet corner room in the library was used for all of the testing. Each class had a different routine, and the testing of all of the children in a school was done in two days. The SCEI data were then collected in small groups of 3-4 children. The investigator provided the

instructions for scoring, and read each item to the children. An assistant monitor was also in the room to note whether the child was addressing the correct item and understanding the marking process. The CI information was provided by the child's classroom teacher. The teachers completed 5 inventories per week which were scored at their convenience. The initial 5 were returned before another 5 were prepared.

Treatment of Data

Inferential statistical treatment was applied to the data. Multiple regression analysis was the method used. This treatment is appropriate for studying the effects and the magnitudes of the effects of more than one independent variable on one dependent variable, using principles of correlation and regression (Kerlinger, 1973). The correlations between the criterion variable, coping, and the predictor variables, preschool day care, self-esteem, and locus of control, were determined in order to ascertain the predictor equation. The multiple regression equation weights each variable in terms of its importance in making the desired prediction - in this instance, adaptive coping.

CHAPTER 4

ANALYSIS OF DATA

This study was conducted to investigate the relationships between three predictor variables, preschool day care, self-esteem, and locus of control, and the criterion variable, first grade children's coping behavior. The variables were examined for strength of relationship for prediction of coping. In addition, the descriptive variables of child's age and gender, and parental educational level were also determined for strength of relationship for prediction of coping. Data were collected through a parental questionnaire which obtained data concerning the child's preschool day care experience and the parents' educational level; teacher-scored coping scale which noted the child's gender, age and race; and children's self report inventory and scale, regarding self-esteem and locus of control.

To provide a complete description and statistical analysis of the data, this chapter has been divided into two sections. The first part describes the sample of children and the major study variables of the investigation. The next section discusses the findings resulting from the measurement of study variables and the testing of hypotheses. Where appropriate, the data are displayed in tables.

Description of Sample

All of the first grade students in the three schools met criteria for admittance to the study. They were public school children who had reached the age of 6 and had entered the first grade for the first time. Of the 133-student data pool, the families of 5 of the children had moved, and so the pool was reduced to 128. Of these, 108 (84%) parents signed consent forms to volunteer their child's participation. All of these children were tested; therefore, the study sample consisted of 108 initial entry first grade public school children. The children reside in an urban region of the midwestern United States. Before data from each school were pooled, they were examined for statistical differences. Group means were tested by the appropriate F test and the multiple range test, on major study variables, and no significant differences between child groups were found. The sample is described in this section in terms of the following demographic variables: child's age, gender, race, and parental educational level.

Age

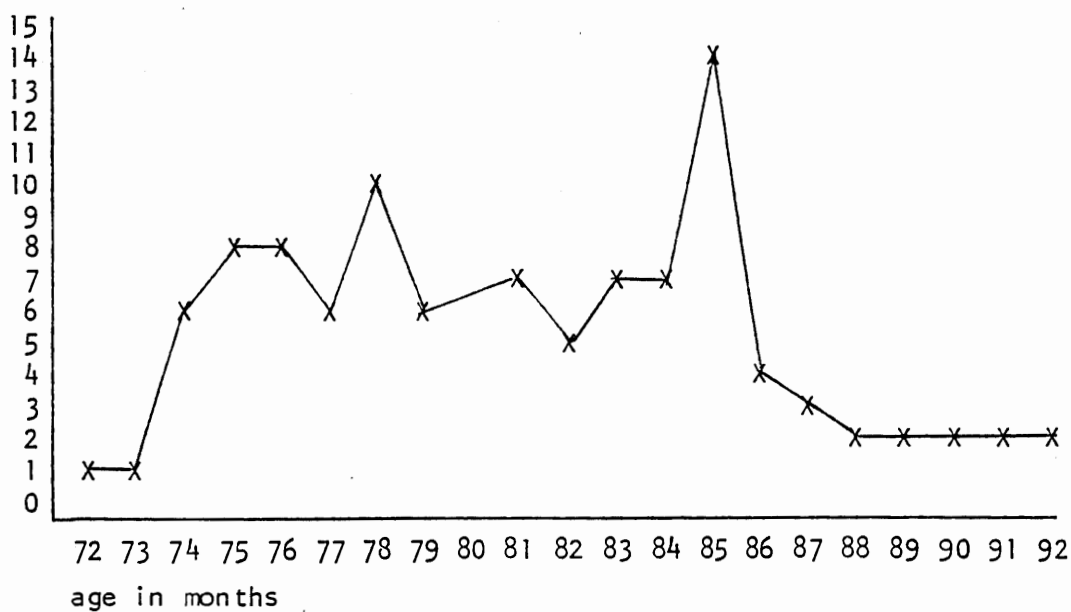
As may be seen in Table 1a, the mean age for the study sample was 6 years, 7 months. The range was from 6 years to 7 years, 9 months. Further categorization of the data shows that the majority of children were in the 6 years, 6 months to 6 years, 11 months age range. The rest were fairly evenly distributed at both ends. Table 1b shows the frequency distribution.

Table 1a
Age of Children

Mean	Median	Mode	S.D.	Range
6 years, 7 months	6 years 10 months	7 years 1 month	.44	6 years to 7 years, 9 months

Table 1b
Frequency Distribution for Age in Months

N=108



Gender

The gender distribution in the study sample consists of 61 (59%) males and 47 (41%) females. Thus there were approximately 18% more males than females.

Race

An examination of the sample by race revealed that 97 (90%) were caucasian, 6 (5%) were of Spanish origin, 4 (3%) were black, and 3 (2%) were oriental. Based upon the disproportional majority of caucasian children, race was not utilized as a variable in subsequent analyses.

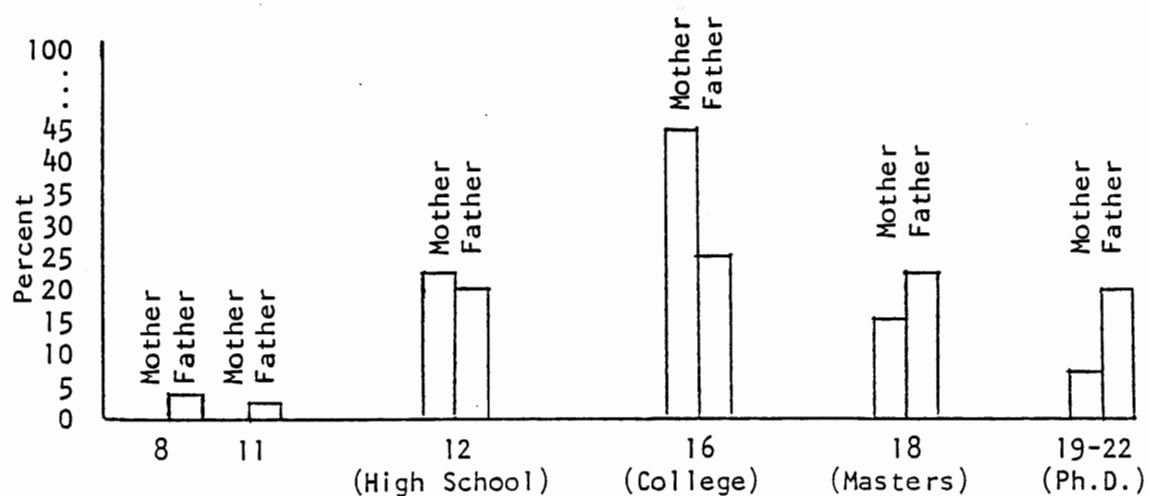
Educational Level of Parents

The unit of measurement for educational level was the number of years of formal education completed. In Table 2 it can be seen that the mean level of education completed was 14.9 years (S.D. = .215) for mothers, and 15.6 years (S.D. = .307) for fathers. All of the mothers, and all but 4 of the fathers had completed high school. Fifty-nine (54%) of the mothers and 65 (61%) of the fathers had completed at least 4 years of college. Sixteen mothers (15%) also had completed graduate school, and of those, 3 (3%) had completed the Ph.D. Thirty-nine (36%) of the fathers had had some graduate work; 16 (15%) had earned the Ph.D.

Table 2
Highest Educational Level Attained
by Parents in Years

	Mean	Median	Mode	S.D.	Range
F	15.6	15.5	16	.307	8-22
M	14.9	16	16	.215	12-20

N=108



Descriptive data for the study variables preschool day care, self-esteem, locus of control, and coping are also provided in this section. These variables, conceptually derived from social/psychological theory, were measured by parental report, children's self-scoring and teacher assessment.

Preschool Day Care

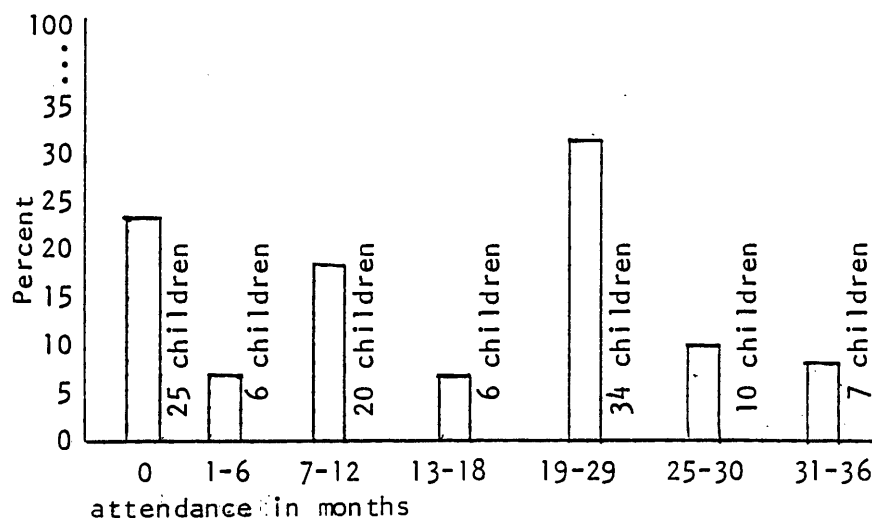
Preschool day care is defined as an environment legally licensed and regulated by the state to meet the needs of a developing child. The focus of the environment is developmental, not custodial. The services are universally available to all families, not just the poor or disadvantaged.

Preschool day care was reported by parents and measured by integers ranging from 0 (no experience) to the number of months attended. The score indicated the degree to which the child experienced new situations and had contact with role models other than family members. As seen in Table 3, the number of months ranged from 0 to 36. The mean experience was 15.9 months (S.D. = .116). Twenty-five (23%) of the children had had no preschool day care experience. Of those who had attended, 34 (31%) had attended for two years.

Table 3
Length of Attendance at Preschool
Day Care in Months

Mean	Median	Mode	S.D.	Range
15.9	15	24	.116	0-36

N=108



Self Esteem

Self-esteem was measured by the Canadian Self Esteem Inventory (CSEI) developed by Battle (1976) for children. The CSEI was self scored by the child, and the score indicated the child's evaluative perception of self - a self judgment of one's own worth. The range of scores of the CSEI is from a low of 1 to a high of 25. For this study, a score of 1-8 indicated low self-esteem; 9-16, medium self-esteem; and 17-25, high self-esteem. As can be seen in Table 4, the range for this sample was 8-24; the mean was 18.1 (S.D. = .36). Seventy-eight

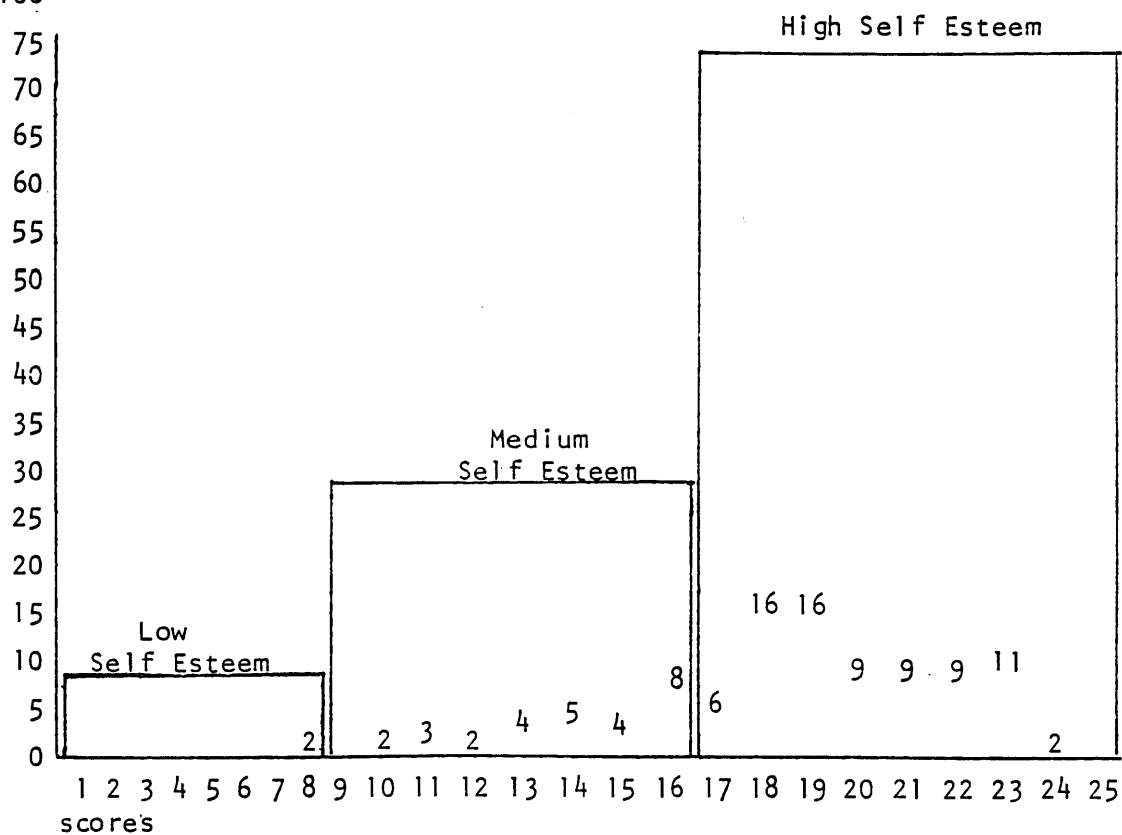
children's ratings (72.3%) were in the high self-esteem category, 28 (25.9%) were in the medium self-esteem category, and only 2 (1.8%) were in the low self-esteem category.

Table 4

Numbers, Percent, and Categories of
Children's Self Esteem

Mean	Median	Mode	S.D.	Range
18.1	18	18.5	3.6	8-24

N=108



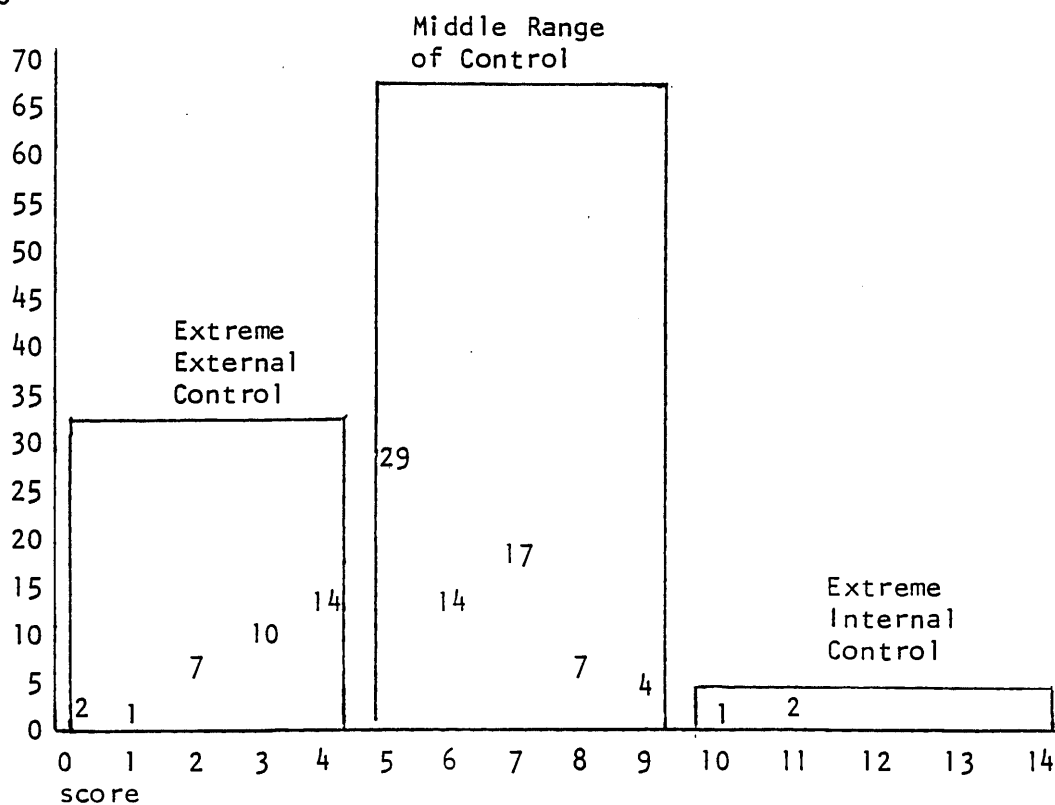
Locus of Control

Locus of control was measured by the Stanford Preschool Internal External Scale (SPIES) developed by Mischel, Zeiss and Zeiss (1974). The child's responses to 14 forced-choice questions posed by the interviewer resulted in a score that indicates the child's degree of internal/external control, which is an individual's generalized expectancy about whether or not he/she has control over what happens to him/her. The scale is scored in the internal direction, with 0 representing extreme externality, (the perception of positive or negative events as being unrelated to one's own behaviors and therefore beyond personal control) to 14, representing extreme internality (the perception of positive or negative events as being the consequences of one's own action and therefore having control over one's own fate and/or environment). Table 5 presents these data. The scores indicate the children's perception of control. The scale value of 0-4 was determined to be external control; 5-9, middle range of control; and 10-14, internal control. As can be seen, the range for this sample was 0 to 11, and the mean was 5.3 (S.D. = .21). Thirty-four (31%) of the children were in the extreme external range, 71 (66%) were in the middle range, and 3 (3%) were in the extreme internal range. The frequency distribution of the scores of the sample of children utilized for this study tend to reflect the normal bell curve.

Table 5
Descriptive Statistics for
Locus of Control

Mean	Median	Mode	S.D.	Range
5.3	4.66	5.0	.21	0-11

N=108



Coping

Coping, defined as an active process using strategies to manage one's world, was measured by the Coping Inventory (CI) developed by Zeitlin (1978). The CI is a criterion referenced instrument that measures adaptive coping in young children. The CI addresses the behaviors

and skills children use to meet their own needs in relation to the demands of the environment. Two categories of behavior: self and environment, and 3 dimensions of style: Productive, Active and Flexible are included. These categories and dimensions are defined by 48 observational items that the observer/rater scores on a Likert scale, with the computed scale value of 1, representing maladaptive coping, to 5, representing adaptive coping. The teacher completed the CI informally on each of the children in her class, based upon her experience and knowledge of the child's behavior over a period of time. As can be seen in Table 6, the range of scores for this sample was 1.5 - 5, and the mean was 3.7 (S.D. = .76). Seventeen (16%) of the children's coping scores were in the maladaptive range; 51 (47%), in the middle range; and 40 (37%), in the clearly adaptive range.

Table 6
Frequency Distribution of Coping Scores

N=108

Mean	Median	Mode	S.D.	Range
3.70	3.70	3.70	.76	1.5-5

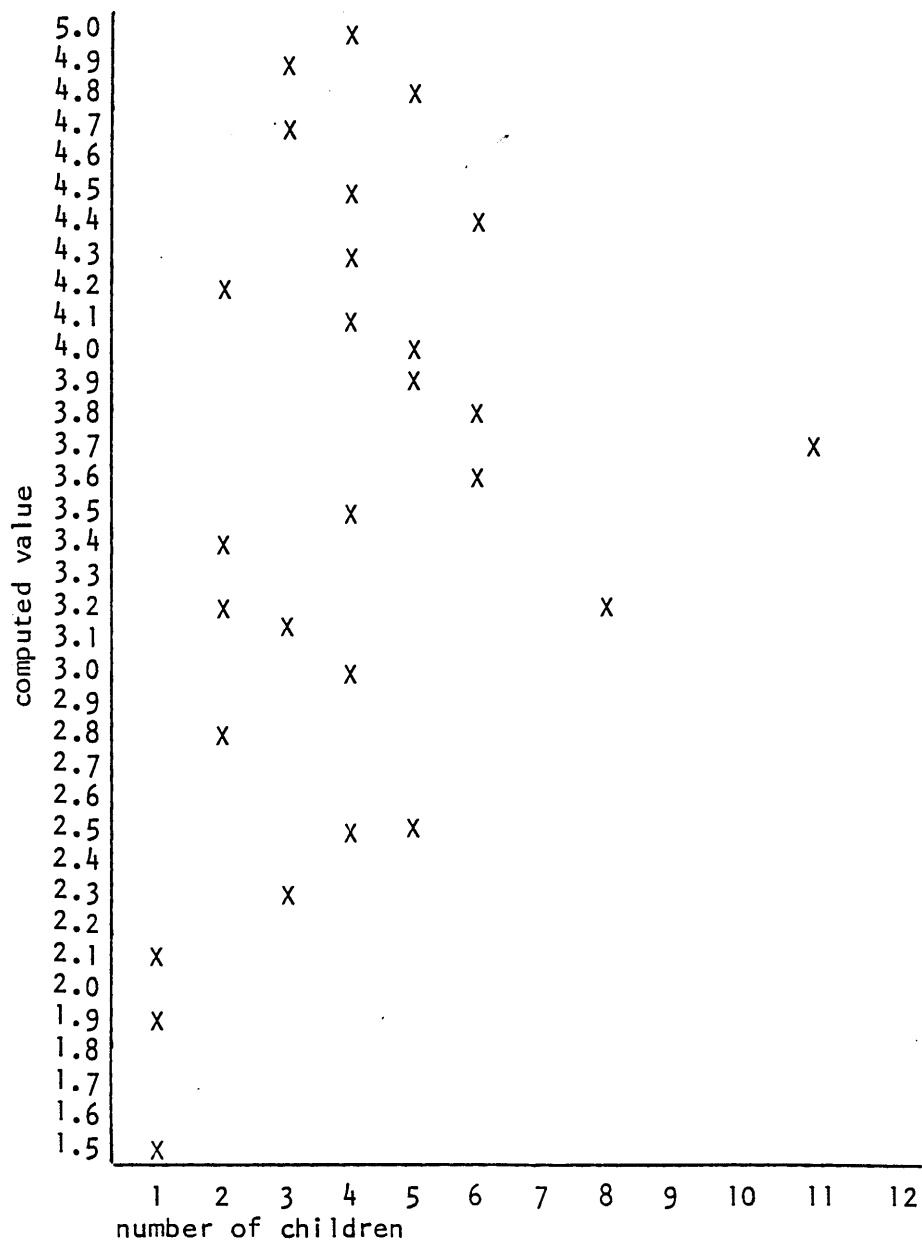


Table 7 presents a summary of all the data that were entered into the regression equation.

Table 7
Means and Standard Deviations
for All Variables

N=108

Variable	Mean	S.D.
Age of Child in Months	80.6	.44
Mother's Educational Level	14.9	.21
Father's Educational Level	15.6	.30
Preschool Day Care in Months	15.9	.11
Self-Esteem Score	18.1	.36
Locus of Control Score	5.3	.21
Coping Score	3.7	.76

TEST OF HYPOTHESES

To test the hypotheses, multiple regression procedures and an extension of bivariate analysis was used. The multiple regression coefficient, or R , indicates the strength of relationship among all of the predictor variables, preschool day care, self-esteem, and locus of control; the demographic variables, gender, age, and parental educational level; and the criterion variable, children's coping behavior. The bivariate correlation coefficients (r 's) are presented in Table 8.

Table 8

Matrix of Intercorrelations

	Gender	Age	Preschool Day Care	Mother's Education Level	Father's Education Level	Self Esteem	Locus of Control	Coping
Gender	1.00000	0.15516	-0.03886	-0.05541	-0.11429	0.10369	-0.00567	-0.07916
Age		1.00000	0.00808	-0.03800	-0.04051	-0.01578	0.01020	0.11231
Preschool Day Care			1.00000	0.20821	0.21859	0.25654	0.18231	0.17484
Mother's Ed. Level				1.00000	0.68029	0.20381	0.15619	0.20690
Father's Ed. Level					1.00000	0.26159	0.08791	0.30450
Self Esteem						1.00000	0.19951	0.22478
Locus of Control							1.00000	0.11749
Coping								1.00000

Testing of Hypotheses

The nature and measurement of each variable: preschool day care, self-esteem, locus of control, and coping is provided in this section. These variables, derived from a social, psychological conceptual framework, were measured to describe the nature of each variable's relationship to coping and to explain each variable's contribution for prediction of children's coping. The effect of the demographic variables: age, gender, and parent's educational level on children's coping was also measured for relationship and prediction and is presented.

As can be seen in Table 8, the relationship between coping and the major variables, preschool day care ($r .17$), self-esteem ($r .22$), locus of control ($r .11$) is positive. The relationship between coping and the demographic variables of age ($r .11$) and parental educational experience, (mother, $r .20$; father, $r .30$) is positive and inversely related for gender ($r -.07$). The range of intercorrelations among predictors in Table 8 is from $-.11$ between father and gender to $.68$ between mother's educational level and father's educational level. The lowest bivariate correlations between predictors were (1) gender and locus of control ($-.005$); (2) age and preschool ($.008$); (3) age and self-esteem ($-.01579$); and (4) age and locus of control ($.01$). The highest intercorrelation of variables was between mother's and father's educational level ($R .68$); this is not surprising; the expectation would be that the parents' educational levels were similar. Among the correlations of the major variables, preschool day care and self-esteem had the highest

($r = .25$); correlations between preschool day care and locus of control ($r = .18$), and self-esteem and locus of control ($r = .199$) were slightly lower.

As can be seen in Table 9, the standard deviations of all the variables were low (S.D. = .11 to .44), which may explain the low multiple R values. The standard deviation for preschool day care was the lowest (S.D. = .116), and for age (S.D. = .44), the highest. The bivariate correlations between each predictor and the criterion are shown. Because father's educational level had the strongest relationship to coping ($r = .30$), it was the first to be entered into the stepwise regression equation.

Stepwise multiple regression is a method by which all potential predictors can be considered individually and through which the combination of variables providing the most predictive power can be selected. Predictors are stepped into the regression equation sequentially in the order which produces the greatest increments to R^2 (proportion of variance in the criterion variable scores that is explained by all predictor variables). The first step involves the selection of the single best predictor of the dependent variable, (the independent variable with the highest bivariate correlation coefficient with the criterion variable). The task is to determine the values for the beta weights that will minimize the sum of squared errors or residuals. The beta weight for each predictor indicates the relative contribution the variables makes to the prediction of the criterion.

The multiple regression coefficient (R), which ranges from 0 to 1, indicates the strength of the relationship between the criterion and all the predictors taken together, R^2 represents the proportion of variance. All of the other variables were entered according to their strength of relationship to coping to determine their importance and contribution to explaining variance when considered with all other predictors.

Table 9

Means, Standard Deviations, Bivariate r and
P: Values of All Variables

N=108

Variable	Mean	Standard Deviation	Bivariate r	P: Values
Age	80.6296	.442	.11	2.68
Gender			-.07	2.45
Mother's Education	14.9074	.215	.20	2.02
Father's Education	15.6019	.307	.30	3.92
Preschool Day Care	15.9352	.116	.17	2.29
Self Esteem	18.1944	.364	.22	3.07
Locus of Control	5.3056	.211	.11	2.17

Hypothesis One

There is no significant relationship between length in months of exposure to preschool day care and first grade children's coping behavior score as measured by the Zeitlin Coping Inventory.

To test hypothesis 1, multiple regression analysis was applied to the data. As was shown in Tables 8 and 9, the strength of the positive relationship between coping and preschool day care ($r .17$; $R^2 .03$), was not statistically significant and only 2.89% of children's coping behavior can be explained or predicted by preschool day care experience.

Table 10

Variable Regression to Coping

N=108

Variable	Multiple R	Source	D.F.	S.S.	M.S.	F.
Father's Education	.30	Regression Residual	1 106	5.84645 57.21021	5.84645 .53972	10.83*
Self Esteem	.33	Regression Residual	2 105	7.27208 55.78458	3.63604 0.53128	6.84
Age	.36	Regression Residual	3 104	8.26615 54.79052	2.75538 0.52683	5.23
Gender	.37	Regression Residual	4 103	8.73911 54.31755	2.18479 0.52735	4.14
Preschool Day Care	.37	Regression Residual	5 102	9.08889 53.96778	1.81778 0.52910	3.43
Locus of Control	.38	Regression Residual	6 101	9.25379 53.80288	1.54230 0.53270	2.895
Mother's Education	.38	Regression Residual	7 100	9.26568 53.79098	1.32367 0.53791	2.46

*Significant at the .05 level

Hypothesis Two

There is no significant relationship between self-esteem score as measured by the Canadian Self Esteem Inventory for children and first grade children's coping behavior score as measured by the Zeitlin Coping Inventory.

To test Hypothesis 2, multiple regression analysis was applied to the data. As can be seen in Tables 8 and 9, the strength of that positive relationship between coping and self-esteem (R .22, R^2 .04) was not

significant and only 4.84% of children's coping behavior can be explained or predicted by self-esteem. The null hypothesis must be accepted. As can be seen in Tables 9 and 10, when self-esteem was entered on Step 2 (R .33, R^2 .11, F 6.84) self-esteem added .1558 (beta; F 2.68) to the prediction equation.

Hypothesis Three

There is no significant relationship between locus of control score as measured by the Stanford Internal External Scale and first grade children's coping behavior score as measured by the Zeitlin Coping Inventory.

To test Hypothesis 3, multiple regression analysis was applied to the data. As can be seen in Tables 9 and 10, the strength of the weak positive relationship between coping and locus of control (r .11, R^2 .01) was not statistically significant, and only 1.21% of children's coping behavior can be explained or predicted by locus of control. The null hypothesis must be accepted. As can be seen in Tables 9 and 10, when locus of control was entered on step 6, (R .38, R^2 .14, F 2.89) locus of control added .0527 (beta; F .32) to the prediction equation.

Additional Findings

In order to answer the question: do age, gender, and parent's educational level have an effect on children's coping behavior?, multiple regression analysis was applied to the data. As can be seen in Tables 8 and 9, the strength of the relationship between coping and age (r .11, R^2 .01) was positive and insignificant. Only 1% of children's

behavior can be explained or predicted by age. As shown in Tables 9 and 10, when age was entered on Step 3 (R .36, R^2 .13, F 5.23), age added .1257 (beta; F 1.88) to the prediction equation.

As can be seen in Tables 8 and 9, the strength of the relationship between coping and gender (r -.07, R .004) was inverse and not statistically significant. Gender contributes .4% of explanation of children's coping behavior. As shown in Tables 9 and 10, when gender was entered on step 4 (R .37, R^2 .13, F 4.14) gender added (-.0891 beta; F .89) to the prediction equation.

As can be seen in Table 8, the strength of the relationship between coping and father's highest educational level was positive and the highest of all the variables (r .30). Therefore, it was the first variable to be added to the prediction equation. The R (.30, R^2 .09, F 10.83) was significant at the .05 level. Tables 9 and 10 present this. They also show that approximately 9% of children's coping behavior can be explained by father's educational level (.25530 beta; F 3.88). Therefore, this variable is the best predictor of all those entered.

As can be seen in Tables 9 and 10, the strength of the relationship between coping, and mother's highest educational level (r .20, R^2 .04) was positive but statistically insignificant; 4% of children's coping behavior can be explained or predicted on mother's educational level. As can be seen in Tables 9 and 10, when mother's educational level was entered at step 7 to the prediction equation (R .38, R^2 .14, F 2.46) its contribution was .0190 to beta; (F .02).

Table 11 presents a summary of all the variable relationships. The strength of the relationship between coping and all the predictors taken together is $R .38$, which approaches statistical significance. Therefore, 15% (R^2) is the proportion of coping that can be explained on the basis of preschool day care, self-esteem, locus of control and the demographics of age, gender and parental educational level.

Table 11
Summary Table of Coping

N=108

Variable	Multiple R	R ²	F	Rsqr Change	Simple R	B	Beta
Father's Education	0.30450	0.09272	3.884	0.09272	0.30450	0.06877	0.25522
Self Esteem	0.33960	0.11533	2.047	0.02261	0.22478	0.03021	0.14340
Age	0.36206	0.13109	2.113	0.01576	0.11231	0.02361	0.13608
Gender	0.37228	0.13859	0.777	0.00750	-0.07916	-0.12933	-0.08392
Preschool Day Care	0.37966	0.14414	0.538	0.00555	0.17484	0.00476	0.07192
Locus of Control	0.38308	0.14675	0.322	0.00262	0.11749	0.01975	0.05442
Mother's Education	0.38333	0.14694	0.022	0.00019	0.20690	-0.00677	-0.01896
(Constant)						0.37939	

Summary of Findings

The analysis of data collected through parental report, teacher assessment, self-scored personality inventory, and the personality interview score used for this study concerning the coping behavior of first grade public school children provided the findings presented in this section.

As shown in the summary table (Table 11), 15% of children's coping behavior can be explained by the variables preschool day care, self-esteem, locus of control, age, gender, and parental educational level. Eighty-five percent is unexplained on the basis of these variables. The relative contribution of each predictor to the overall prediction of coping, and the nature of the relationship between each predictor variable and coping were presented. It was found that the demographic variable, father's highest level of education, had the strongest relationship ($r .30$) of all the variables to coping, and was the best predictor of coping. Of the major variables, self-esteem ($r .22$), also was positive but not statistically significant in strength of relationship; it was the second best predictor. These variables were entered as first and second into the predictor equation. At each step of the analysis, F tests are performed to determine the contribution of each variable in the equation. Those variables whose F scores are significant at the .05 level are variables that contribute significantly to the prediction of coping. As noted earlier, father's educational level had a significant F score (10.83). When entered as first into the regression equation,

the relative sizes of the beta weights for the variables that contribute significantly also denote the degree of contribution in order of importance. The sign of the beta weight describes the nature of the relationship (positive or inverse) to coping. The quality of the prediction is determined by the size of each beta weight relative to the size of the standard error of the beta. The smaller the size of the error and the higher the size of the beta, the more accurate the prediction.

CHAPTER 5

SUMMARY, CONCLUSIONS, AND RECOMMENDATIONS

Chapter 5 presents an overall summary of the study. The significant findings are discussed, and conclusions are based on these findings. Implications for nursing are considered, as well as recommendations for further study.

Summary

A descriptive-correlational study was conducted to describe the coping behavior of first grade public school children by investigating the correlational relationships between the criterion variable, coping, and three predictor variables, preschool day care, self-esteem and locus of control. The demographic variables of child's age, and sex, and parental educational level were also examined for relationship and a prediction equation of adaptive coping.

Prediction and relationship studies are similar in that both involve computing correlations between a complex behavior pattern, the criterion, and the variables thought to be related to the criterion. In prediction studies, the predictor variables are measured prior to the criterion behavior occurrence. Also, prediction studies are concerned with maximizing the correlation between the criterion and the predictor variables.

A standardized test of teacher observational techniques (Zeitlin Coping Inventory) was used to measure children's coping behavior. Self reports of parental educational level and preschool day care; the Canadian Self Esteem Inventory, a standardized test; and an interview (Stanford Preschool Internal External Locus of Control Scale) were used to measure the predictor variables.

This method of investigation was used with first time first grade public school children in a Midwestern urban city school district whose parents volunteered participation. The findings were:

1) First grade public school children in this Midwestern school district sample have a wide variety in length of preschool day care experience. The relationship between coping and length of preschool day care experience is very weak.

2) First grade public school children in this sample report high self-esteem. Only 2 subjects did not. Coping and self-esteem have a weak relationship.

3) The majority of first grade public school children in this sample hold perceptions of an external locus of control. Coping and locus of control have a very weak relationship.

4) The age of the first grade public school children in this sample reflects the usual age level of first grade children in most areas of the United States. Age showed a very weak relationship with coping.

5) The girls in this sample of first grade public school children showed slightly more adaptive coping than did the boys.

6) Father's educational level showed the highest relationship to coping of all the study variables. It also was the strongest predictor of coping behavior in the children in this sample from the first grade in public school.

The investigator found that father's educational level was the best predictor of adaptive coping; self-esteem was second best. The combined predictors have 15% of common variance with coping, while father's educational level has 9% common variance with coping.

Coping is a complex, yet elusive, phenomenon. The literature, replete with various descriptions as well as conditions antecedent and following its demonstration, attests to this complexity. Murphy (1962) began the examination of this concept, and it continues to be studied from a variety of perspectives (Ilfeld, 1980; Porquer, 1982) and under varying conditions (Beder and Weinstein, 1980; Jalowiec and Powers, 1981; Ziemer, 1982). The author wishes to acknowledge that there is not support in the literature for the findings of this study.

Discussion of Findings

The mean child age was 6 years, 7 months; the child must have reached 6 years before entrance to first grade. The sample was predominantly caucasian, 97 (90%), which reflects the composition of the population in the study. There were 61 (56%) males, which is within normal expectations at this age level. The mean level of education completed by the parents was: mother, 14.9 years, and father, 15.6 years, which one would expect to find in a small university community. The mean length

of preschool day care experience was 15.9 months; 25 children had had no preschool day care experience. This was a perplexing finding for the particular population, since it was an assumption that this type of population would have used day care extensively. However, it may also explain why such a disproportionately small number of the children fell into the highly adaptive coping group. The general belief is that preschool day care experience promotes adaptive coping. However, the vast range of experiences of the children in the preschool milieu may have had an untoward effect. Along with this, one must consider the great variation in preschool environments themselves as well as parental interpretation of preschool day care. Companion to this, there are differences in the teachers themselves, with regard to attitudes, knowledge, mind set and possible bias. As Mussen, Conger and Kagan (1972) have noted, there are other important variables besides preschool day care experience that may affect coping. The majority of this sample were in the middle range of coping effectiveness. In the predictor equation, preschool day care accounted for 2.89% of the variance.

Hypotheses

H₁ The hypothesis that there is no significant relationship between exposure to preschool day care and first grade children's coping behavior was accepted. The relationship was positive, but the degree of correlation ($r .17$) did not differ significantly from zero. Thus, the relationship is weak. It is possible that the sample size was not large enough to detect a difference. Since such a wide range of preschool day

care experience (0 to 3 years) was reflected in the sample, the exposure of those who did attend was so varied (1 month to 3 years), and the relationship between coping and preschool day care was so weak, the question of whether there is an optimal length of preschool day care experience arises. Is there a point at which benefits are reaped and after which detrimental effects accrue? Such a formulation is compatible with the concepts of imitation and reinforcement derived from Social Learning Theory. These concepts suggest that behavior is mediated by cognition as reinforcement.

Complex behavior is the unfolding of various operants controlled by discriminative stimuli (occasions for responding) and by reinforcing stimuli (signals that indicate whether the response was acceptable). Upon entering preschool, the child has a patterned way of responding to newness. Over the course of the preschool day care experience, in response to the demands of the environment, a child comes under the control of new discriminative stimuli and new rewards generated by and for himself as well as by peers and teachers who serve as models for imitation and as reinforcers. Children differ in their ability to associate stimuli, respond to different types of reinforcement, and form discriminations. Such increasing selectivity forms the basic process of learning.

As children develop this increasing selectivity, it allows them to control the direction of their attention and interest, to control their anxiety, and to manage stress so that negative or anxiety reactions are

balanced with positive gratification (Kagan and Moss, 1972). This may account for the weak relationship between length of preschool day care experience and adaptive coping. Perhaps the children who spent a longer time in preschool day care had become bored with the old stimuli, and new ones were not conducive to adaptive coping. Possibly their experiences did not motivate them to increase their selectivity which would lead to adaptive coping.

H₂ The hypothesis that there is no significant relationship between self-esteem and first grade children's coping behavior was accepted. The correlational relationship was positive ($r .22$) indicating a very slight relationship with only 4% of variance in the two measures (coping and self-esteem) common to both. In this instance, one might rely on practical significance as being more important than statistical significance, as the literature and clinicians both attest to self-esteem as having significance for well being, accomplishment of tasks and skills, and the achievement of life goals. The finding that only 2 children fell into the low self-esteem range, and that the majority of the children (78, or 72%) were in the high self-esteem range, was reassuring. On the other hand, it was disquieting to note that the number of children with adaptive coping was not as large (40, or 37%). It would be interesting to determine the specific reasons for this phenomenon. This may be accounted for by the fact that esteem building had occurred within the family, and/or the preschool day care environment. Either one may have provided the developmental, social, and interpersonal milieu necessary

for the healthy development of this personality characteristic. Also, age itself introduces other variables that may influence coping to some degree.

H₃ The hypothesis that there is no significant relationship between locus of control and first grade children's coping behavior was accepted. The correlational relationship was positive but not significant, and very weak in strength ($r .11$), indicating that the perception of an internal locus of control and adaptive coping are not strongly related in this sample of children. The majority of the children (66%) fell into the middle range of locus of control; 34 children (32%) had perceptions of extreme externality and only 3 had perceptions of extreme internal control. When considered along with the distribution of coping abilities, only a few (17 or 15%) of the children were rated as having maladaptive coping skill; a majority (51 or 47%) demonstrated average coping skills; and 40 (37%) were rated as having clearly adaptive coping behavior. This finding was surprising, as it indicates that effective coping was not limited to the children who were high on internal control; indeed, the children with adaptive coping skills included those in the middle range of internal/external control. It seems that adaptive coping may or may not increase with internality. Even though an internal orientation has been widely associated with adaptive responses, and externality with maladaptive responses, a U-shaped relationship has also been postulated between locus of control and emotional adjustment (Phares, 1972, 1976). The very internal individual is likely to be self punitive regarding

his/her perceived failures and then describes his/her failures to external responsibility. Thus individuals with external control would represent external control responses. This phenomenon may be seen in children's coping responses as well.

The first grade experience is often forcing the child to deal with the family or mothering figure for most of a new adult, the teacher; and develop relationships with peers. Companion to this, the developmental tasks: to develop academic motivation for learning, to continue the development of moral reasoning, to learn to deal appropriately with authority. The first grade is an academic situation frequently utilized and, to be successful, requires a great deal of attention to the teacher. This is consistent with Phares (1976) finding. Perhaps the external control is best for adaptive coping. This is not true. It may be that the child at first grade is a reality characteristic of internalization (Phares, 1976).

external individual often as-
ions and negates his/her own
middle range of internal/
als with the most adaptive re-
g in these first grade chil-

r adjustment in a child's life,
rate tasks: separation from the
day; establishing contact with
a meaningful relationship with
ld must accomplish 5 major de-
lls, to maintain a high level
re sex role identification, to
rds and conscience, and also, to
and conflict. It may be that
in which demonstration is fre-
he child must pay a great

ld lend support to the
re of internality and external-
d be interesting to investigate
is too young for the person-
a predominant trait (Brim,

Perhaps knowledge of a child's generalized perception of control is not very helpful in understanding a child's response to a specific complex situation such as first grade. The assumption was that children who view the school situation as a process which one controls may take a more active part in the learning activities, and thus experience greater task accomplishment and more satisfying inter-personal relationships, whereas children who see the first grade experience as controlled by chance probably will not engage as readily in learning activities, jeopardizing their social well being, by not accomplishing age-appropriate tasks. Clearly, the child's view of learning, along with those factors which determine such a view, would be essential data for those responsible for assisting children in their academic careers.

It was surprising to find that coping was related only slightly to any of the variables in this study. Predicted upon previous research findings, the expectation was that coping would be strongly and positively related to preschool day care, self-esteem and locus of control. In addition to the previously mentioned possible explanations of why relationships were lacking in strength is that of the instruments that were used. The instruments used to measure locus of control and self-esteem may not have exhibited the same degree of validity when utilized in this non-experimental study situation. The fact that the locus of control scores tended toward externality and the self-esteem scores toward high self-esteem, implying homogeneous performance, may have affected the magnitude of the correlation coefficients which were

obtained. Homogeneous performance on one measure reduces possible correlations between that measure and others (Kerlinger, 1973).

The weak relationship among the study variables was also surprising in that the expectation generally held is that when children are faced with demands for complex new behaviors, anxiety increases, and such feelings act to have the child become introspective and display withdrawal. Overall, this did not appear to be the case. Instead, tendency toward externality may have been seen as a mechanism to control anxiety by increased focus upon an external stimulus on the part of the children in the sample. The relationship between externality and adaptive coping of the children bears further investigation also.

The variables do have some interactive effect, however slight, upon coping. Perhaps an increased sample size (this sample's ratio was .06) would have yielded a stronger correlation. The optimal ratio is 30 individuals per variable; therefore, for this study which used 7 variables, a sample size of 210 individuals (.03) is preferred.

In summary, this study has shown that coping of first grade public school children in a midwestern urban school district was clearly adaptive or moderately adaptive, with few students lacking adaptive coping skills. The majority of the children had had some exposure to preschool day care experience, expressed high self-esteem, and held perceptions of middle to high degree of internal control.

Of demographic variables studied, the two which merit discussion are male/female and parental education level. Girls showed slightly

better coping skills than boys ($r = -.079$, where girls were categorized as 1 and boys as 2). Can social conditioning account for the correlation between coping and gender? Literature reveals that girls cope better than boys in the lower grades. The explanation given is that girls are reared to peruse the environment to find ways to please adults, whereas boys are taught to master and control the environment.

Of all the variables studied, the demographic variable of father's level of education is the strongest predictor of adaptive coping. This is difficult to rationalize. Perhaps it is related to general intelligence level; however, intelligence was not a variable investigated in this study.

Conclusions and Implications

The conclusions reached in this study are:

1) The usual expected findings of strong positive correlations between coping and preschool day care, self-esteem and locus of control were not found. What was found was that age and gender did not show correlations, and that father's educational level was the best predictor of first grade children's coping in the population of this study. Perhaps this was a very unique population sample.

2) A child's coping behavior in the first grade is such a complex phenomenon that since the variables utilized in this study did not explain much variance, other variables need to be explored.

Other factors that may influence the child's coping with entry into the first grade may be familial - e.g., the influence of a sibling, or

an unmet earlier developmental need. The child who has not had prior developmental needs met may not have the full amount of energy to pursue and accomplish age-appropriate developmental tasks.

External to family environmental influence, variables that may be important in coping include peer relationships and the personality of the teacher. Mussen, Conger, and Kagan (1969) summarized research on these factors. Constructive and rewarding interactions with peers tend to enhance self-esteem. In relation to teachers, most children do best under well-trained, democratic teachers who are competent, interested in their students, and not overly concerned with their own problems.

Because coping is a learned behavior and has such great import to future physical and mental health, it is critical that antecedent variables affecting the coping behavior of children be identified in relation to the contribution they make, so that this knowledge may be disseminated to families, health care professionals working with and caring for children and families, and alternate child care resources. Also, knowledge of these variables is important so that interventions may be designed to facilitate children's mastery over newness, whereby when successful, children achieve an increased level of coping skill. The multifaceted roles of nursing, which interface with families throughout the child's developmental years, require that such information be determined and utilized in nursing education programs to meet nursing's commitment to the health of individuals, groups, and communities. Lastly, because complexity of life has increased in all areas of living, the efforts of all professionals need to be committed to ferreting out those conditions

that enhance productivity and growth for all children on their journey to responsible maturity.

Recommendations for Further Study

This study sought to examine the coping behavior of first grade public school children by investigating the relationships between children's coping behavior and preschool day care, self-esteem, and locus of control. It also sought to answer the question of what effects age, gender, and parental educational level have on children's coping behavior. Previous studies have tended to treat coping as a unidimensional dependent variable. However, the findings of this investigation indicate that coping is a complex amalgam of thought and behavior having various antecedent variables that contribute to the pattern. Based upon the large amount of unexplained variance, it may not be possible to measure coping. Related areas of research that would be profitable to investigate include:

- (1) Determine what mechanisms are operating so that father's educational level enhances the child's coping behavior.
- (2) Determine the specific factors in the educational setting that limit or inhibit the child's coping behavior.
- (3) Conduct comparative naturalistic studies of children who have adaptive/maladaptive coping skills.
- (4) Design coping test situations to determine if coping is the same for all children.

APPENDIX A

The University of Iowa

Iowa City, Iowa 52242

College of Nursing

(319) 353-5385



1847

Dear Parents:

I am a doctoral student at Texas Woman's University and a professor at the College of Nursing, The University of Iowa. My minor area of study is child development and family life. My research interest is children's coping ability - specifically, coping with school entry.

I am writing to you today to ask you to participate in my study. The Iowa City School Board has reviewed my proposal and has granted permission to me to write to you. No names will be utilized in any part of the investigation. Data will be coded to insure confidentiality and anonymity. Your names will not be used. Participation in my study is voluntary; if you decide to participate, (and I hope that you do), you will need to: (1) answer the questions at the bottom of the form enclosed with this letter; (2) allow me to speak with your child in school for about 10 minutes at a time when his/her teacher deems appropriate, and (3) allow your child to participate in a short classroom group measurement session.

Please feel free to call me if you have any questions (353-4459 days, 683-2389 evenings, except Tuesday and Wednesday). The study results will be shared with the Iowa City schools upon completion. If interested, you may contact your child's teacher for the results.

Sincerely,

Rosemary J. McKeighen, F.A.A.N.
Professor, College of Nursing

Enclosure

PARENTAL CONSENT FORM

I grant permission for my child to be interviewed in school by R. J. McKeighen for about 10 minutes and to take part in a group classroom measurement session done at his/her teacher's discretion. I know these measures are short psychological tests measuring my child's unique self concept. I also know I can withdraw from participation at any time. Data is anonymous and confidential.

Signature_____ Date_____

Proposed Research Project
Cooperating Schools Program

Faculty Member Rosemary McKeighen

Department College of Nursing, University of Iowa

Type of Project Faculty Research M.A. Thesis Ph.D. Dissertation Other-Please Specify _____

Graduate Student (if degree research) The Effects of Preschool Day Care,

Project Title: Self Esteem, and Locus of Control on Children's Coping
Behavior in the First Grade

Months During Which Data to be Collected Fall 1983, Spring 1984

Samples Needed: Grade 1st N 120

Purpose of the Project: Examine coping behavior of first grade public school
children by investigating relationships between three predictor variables:
preschool day care, self-esteem, and locus of control and coping.

Description of Student or Staff Member Task (include number of sessions and duration of each):

1. Teachers will send informing letters and consent forms home with the
children for their parents. Parents will also indicate their own educational
level and whether the child attended preschool day care and for how long.
2. Teachers will facilitate the children's individual interviews with the
investigator for 5-10 minutes for each.
3. Teachers will find out a coping inventory on each of the participating
children - 10-15 minutes for each one.

Will the students be selected on any basis other than grade level? Yes _____ No X

If yes, please describe basis of selection: _____

What type of information, if any, will be needed from school records? None

Could the study be conducted in space provided with the schools? Yes X No _____

If yes, could the space assigned be used by school personnel in your
absence? Yes X No _____

TEXAS WOMAN'S UNIVERSITY
COLLEGE OF NURSING

AGENCY PERMISSION FOR CONDUCTING STUDY*

THE Iowa City School Board

GRANTS TO Rosemary J. McKeighen
a student enrolled in a program of nursing leading to a
Doctor's Degree at Texas Woman's University, the privilege
of its facilities in order to study the following problem.

Children's Coping Behavior

The conditions mutually agreed upon are as follows:

1. The agency (may) (may not) be identified in the final report.
2. The names of consultative or administrative personnel in the agency (may) (may not) be identified in the final report.
3. The agency (wants) (does not want) a conference with the student when the report is completed.
4. The agency is (willing) (unwilling) to allow the completed report to be circulated through interlibrary loan.
5. Other _____

Date: Oct 3 1983

Rosemary J. McKeighen
Signature of Student

Richard E. Taylor
Signature of Agency Personnel

Marion C. Brown
Signature of Faculty Advisor

*Fill out & sign three copies to be distributed as follows:
Original - Student; First copy - Agency; Second copy - TWU
College of Nursing.

TEXAS WOMAN'S UNIVERSITY
COLLEGE OF NURSING

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5. Other _____

Date: Oct 3 1983

Richard E. Taylor
Signature of Agency Personnel

Rosemary J. McKeighen
Signature of Student

Dr. Marion Anema
Signature of Faculty Advisor

*Fill out & sign three copies to be distributed as follows:
Original - Student; First copy - Agency; Second copy - TWU College of Nursing.

February, 1983

Research Exemption Form

Some research involving human subjects is now exempt from review by Committee D or the departmental human-subjects review committees. For research to qualify for exemption the only involvement of human subjects must be in one or more of the following categories, and adequate provision must be made for obtaining informed consent and guaranteeing confidentiality. Research involving more than minimal risk cannot be exempt from review. The components of informed consent and the definition of minimal risk are listed on the back of this page. This form must be submitted to and approved by the chair of Committee D or the chair of the appropriate departmental review committee. It is the investigator's responsibility to contact the appropriate chair to provide any information requested prior to approval.

Categories of Exempt Research

- (1) Research conducted in established or commonly accepted educational settings, involving normal educational practices, such as (i) research on regular and special education instructional strategies, or (ii) research on the effectiveness of or the comparison among instructional techniques, curricula, or classroom management methods.
- (2) Research involving the use of educational tests, (cognitive, diagnostic, aptitude, achievement), if information taken from these sources is recorded in such a manner that subjects cannot be identified, directly or through identifiers linked to subjects.
- (3) Research involving survey or interview procedures.
- (4) Research involving the observation (including observation by participants) of public behavior.
- (5) Research involving the collection or study of existing data, documents, records, pathological specimens, or diagnostic specimens, if these sources are publicly available or if the information is recorded by the investigator in such a manner that subjects cannot be identified, directly or through identifiers linked to the subjects.

Exemption from review is claimed on the basis of number(s) 5

Title of Proposal The Effects of Preschool Day Care, Self-Esteem, and Locus of Control on the Coping Behavior of Children in the First Grade

Principal Investigator [Signature] (name) [Signature] (signature)

Faculty Sponsor Dr. Marion Anema, R.N., Ph.D. (name) Marion Anema (signature)
(if applicable)

I have discussed this research with the above investigator and on the basis of this discussion I believe that this research falls into category(ies) 5 listed above. I see no problems with informed consent or confidentiality of data.

Marion L. Madison (Signature of Committee Chair) 2/24/84 (Date)

COMMITTEE APPROVAL FORM

Name of Principal Investigator: Rosemary McKeighen

Investigator's Address:
(Where the approval letter
is to be sent by the
committee chairman.) RR #2
Oxford, IA 52322

Chairman of Thesis Committee: Dr. Marion G. Anema, R.N., Ph.D.
Dr. Helen Bush, R.N., Ph.D.

Committee Members: Dr. Anne Gudmundsen, R.N., Ph.D.
Dr. Glen Jennings, Ed.D.
Dr. Rose Nieswiadomy, R.N., Ph.D.

Comments or changes to be made:

Dallas Center-Committee Co-Chairman

1. Brief description of the study (use additional pages or attachments, if desired, and include the approximate number and ages of participants, and where they will be obtained).

The purpose of the study is to explore the relationships of preschool day care experiences, select personality factors, and the coping behavior of children in the first grade of a public school system. The approximate number of children ages 6-7 who are participating in the study will be 108. The study sample will be derived from public school first grade enrollments of a midwestern city public school system.

2. What are the potential risks to the human subjects involved in this research or investigation? "Risk" includes the possibility of public embarrassment and improper release of data. Even seemingly nonsignificant risks should be stated and the protective procedures described in #3 below.

The use of first names for data collection purposes only may be viewed as an invasion of privacy. An interviewer and a questionnaire that assess personal perceptions also may be considered by some to be invasion and therefore as permitting minimal risk. Identification of individuals responses will not be possible. The teacher who has to know the child to score the coping inventory will not see the other completed data forms.

3. Outline the steps to be taken to protect the rights and welfare of the individuals involved.

School Board approval, agency approval, and parental consent will be obtained. The letter of consent clearly states that participation is voluntary and may be withdrawn at anytime. Also, data will be coded to insure confidentiality and anonymity. The teacher must know each child to score the coping scale, thus she will assign the numbers to all data forms. She also determines when the child can leave the classroom to be tested - no names appear except on the parental consent forms. The data will be destroyed. Names of schools participating in the study will not be identified in the report.

4. Outline the method for obtaining informed consent from the subjects or from the person legally responsible for the subjects. Attach documents, i.e., a specimen informed consent form. These may be properly executed through completion of either (a) the written description form, or (b) the oral description form. Specimen copies are available from departmental chairmen. Other forms which provide the same information may be acceptable. A written description of what is orally told to the subject must accompany the oral in the application.

The School Board will be approached for permission to conduct the study. The school board representative will follow board procedure for obtaining agency permission. In this instance, the school board representative will contact the principals of the three elementary schools for participation. The investigator and principal will meet with the list grade teachers for explanation of the study purpose, methodology and data collection. Letters (see enclosure) will then be sent to parents, along with the consent forms for them to sign. Children whose parents agree to sign and return the consent form will comprise the study sample. Teachers will determine the least disruptive time to send children into the quiet room for 10-minute individual testing and approximately 10-15 minute testing in groups of 2 or 3. The parents can inform the teacher at any time if they wish to withdraw their child's participation. Also, if during the interview session, the child states that they don't want to answer the question, they will be excused at that time.

5. If the proposed study includes the administration of personality tests, inventories, or questionnaires, indicate how the subjects are given the opportunity to express their willingness to participate. If the subjects are less than the age of legal consent, or mentally incapacitated, indicate how consent of parents, guardians, or other qualified representatives will be obtained.

Please see #4. Copies of all tests are attached. The coping inventory is teacher assessed, and the self-esteem inventory and locus of control scale are investigator administered and child scored. The benefits of participation are the increased social interaction that might be rewarding for the child. Also, that the teacher, upon assessing the child's coping behavior, has a firmer grasp of the child's strengths and weaknesses. A copy of the report will be given to the school system as requested, to be placed into their library. Any parent that wishes to read it may do so.

Signed Dr. M. Auerma
Program Director

Date 2-17-84

Signed [Signature]
Graduate Student

Date 30 Jan 84

Signed Dr. M. Auerma, Dept. Head
Dean, Department Head, Director

Date 2-17-84

Date received by committee chairman: E. Kurtz 2/10/84

Consent Form
TEXAS WOMAN'S UNIVERSITY
COLLEGE OF NURSING

(Form A -- Written presentation to subject)

Consent to Act as a Subject for Research and Investigation:

The following information is to be read to or read by the subject. One copy of this form, signed and witnessed, must be given to each subject. A second copy must be retained by the investigator for filing with the Chairman of the Human Subjects Review Committee. A third copy may be made for the investigator's files.

1. I hereby authorize Rosemary McKeighen
(Name of person(s) who will perform
procedure(s) or investigation(s))

to perform the following procedure(s) or investigation(s):
(Describe in detail)

- 1) Ask your child to answer 14 questions that are common experiences for children regarding the perception of control.
- 2) Ask your child (in a group setting) to mark yes/no on a 20 item scale that reflects a child's self concept.
- 3) Allow the teacher to assess your child's adaptation to the first grade situation at this time.

The teacher will determine the best time for this 10-15 minute interview to occur. Participation is voluntary, you may withdraw your child's participation at any time by contacting the teacher. If during the interview your child states he/she doesn't want to answer the questions, he/she will be excused. If you decide to volunteer your child's participation, please answer the following questions found on the parental questionnaire. Has your child attended preschool daycare? If yes, the length of experience. Also, the educational level attained of both parents.

2. The procedure or investigation listed in Paragraph 1
has been explained to me by Rosemary McKeighen
(Name)

3. (a) I understand that the procedures or investigations
described in Paragraph 1 involve the following
possible risks or discomforts: (Describe in
detail)

Your child may view a stranger using their first name and asking him/her questions as an invasion of privacy.

(Form A - Continuation)

3. (b) I understand that the procedures and investigations described in Paragraph 1 have the following potential benefits to myself and/or others:

Your child's teacher will have the opportunity to evaluate your child's adaptation to the first grade before the end of the semester. Your child's strengths and weak areas will become known to the teacher earlier.

- (c) I understand that - No medical service or compensation is provided to subjects by the university as a result of injury from participation in research.

4. An offer to answer all of my questions regarding the study has been made. If alternative procedures are more advantageous to me, they have been explained. I understand that I may terminate my participation in the study at any time.

Subject's Signature

Date

(If the subject is a minor, or otherwise unable to sign, complete the following:)

Subject is a minor (age___), or is unable to sign because:

Signatures (one required)

Father

Date

Mother

Date

Guardian

Date

Witness (one required)

Date

APPENDIX B

PARENTAL QUESTIONNAIRE

My child has had preschool day care. ____ Yes ____ No

If yes, how long? _____

Our levels of education are: _____ husband / _____ self

STANFORD PRESCHOOL INTERNAL EXTERNAL SCALEItems in SPIES

1. When you are happy, are you happy
1+ a. because you did something fun, or
b. because somebody was nice to you?
2. When somebody tells you that you are good, is that
1+ a. because you have been good today, or
b. because he is a nice person?
3. Do you think I brought you to the surprise room (the experimental room)
1+ a. because you have been good today, or
b. because I'm just a nice man (lady)?
4. When your mother gives you a cookie, is that
1+ a. because you need a cookie, or
b. because she has too many cookies?
5. When somebody brings you a present, is that
1+ a. because you are a good girl (boy), or
b. because they like to give people presents?
6. When you draw a whole picture without breaking your crayon, is that
1+ a. because you were very careful, or
b. because it was a good crayon?
7. If you had a shiny new penny and lost it, would that be
1- a. because you dropped it, or
b. because there was a hole in your pocket?
8. When you are sad and unhappy, are you sad and unhappy
1- a. because you did something sad, or
b. because somebody wasn't very nice to you?
9. When you play a game and lose, do you lose
1- a. because you just didn't play well, or
b. because the game was hard?
10. When somebody stops playing with you, is that
1- a. because he doesn't like the way you play, or
b. because he is tired?

11. When you get a hole in your pants, is that
1- a. because you tore them, or
b. because they wore out?
12. If you had a pet turtle and he ran away, do you think
that it would be
1- a. because you did something to make him leave, or
b. because there was a hole in his cage?
13. When you are drawing a picture and your crayon breaks, is that
1- a. because you pushed too hard, or
b. because it was a bad crayon?
14. When you can't find one of your toys, is that
1- a. because you lost it, or
b. because somebody took it?

Child's Name Date Completed
Date Of Birth Chron. Age
Observer Relationship To Child
Place(s) of Observation

COPING INVENTORY

A MEASURE OF ADAPTIVE BEHAVIOR

SHIRLEY ZEITLIN



Innovative Educational Materials
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COPING WITH SELF PRODUCTIVE

1. Child, when presented with a new or difficult situation finds a way of handling it.

X	1	2	3	4	5
---	---	---	---	---	---

2. Child responds to external control (for example, to rules set by adults or peers).

X	1	2	3	4	5
---	---	---	---	---	---

*no response or
response consist-
ently maladaptive.*

3. Child uses self protecting behaviors to control the impact of the environment (for example, limits or fends off too much stimulation, withdraws before the situation gets out of hand, stops and rests before getting over-tired).

X	1	2	3	4	5
---	---	---	---	---	---

4. Child compensates for things that he/she is unable to do because of a physical, mental or emotional problem(s), (child uses strengths from other areas to help manage a situation or learning).

X	1	2	3	4	5
---	---	---	---	---	---

5. Child applies what he/she has learned to new situations (both mental and emotional).

X	1	2	3	4	5
---	---	---	---	---	---

6. Child uses language to communicate needs (if prelanguage, uses sounds or behaviors).

X	1	2	3	4	5
---	---	---	---	---	---

7. Child generally demonstrates a happy feeling.

X	1	2	3	4	5
	<i>unhappy.</i>		<i>mood swings; varies with situation.</i>		<i>happy.</i>

8. Child does not frustrate easily.

X	1	2	3	4	5
	<i>frustrates easily.</i>				<i>high threshold for frustration.</i>

9. Child has a healthy pleasure in being him/herself (sense of self worth and well being reflected in pride and satisfaction with self).

X	1	2	3	4	5
---	---	---	---	---	---

10. Child is able to handle anxiety (for example, when the situation is anxiety producing child does not act out, become unusually tense or withdrawn).

X	1	2	3	4	5
---	---	---	---	---	---

11. Child demonstrates confidence in his/her ability to learn and do things.

X	1	2	3	4	5
---	---	---	---	---	---

12. Child uses mental abilities effectively (for example, if child is a slow learner he/she functions effectively at own level, if child is of superior intelligence, he/she effectively uses that ability).

X	1	2	3	4	5
---	---	---	---	---	---

SCORE	X	<table border="1" style="width: 100%; text-align: center;"> <tr> <td>1</td> <td>2</td> <td>3</td> <td>4</td> <td>5</td> </tr> <tr> <td>_____</td> <td>_____</td> <td>_____</td> <td>_____</td> <td>_____</td> </tr> </table>					1	2	3	4	5	_____	_____	_____	_____	_____	Number of Scoreable Items = _____
		1	2	3	4	5											
		_____	_____	_____	_____	_____											
_____ + _____ + _____ + _____ + _____																	

RAW SCORE

COPING WITH SELF ACTIVE

1. Child tells or shows others when he/she is angry or in disagreement.

X 1 2 3 4 5

2. Child asks for help when needed (either from adults or peers).

X 1 2 3 4 5

3. Child initiates action to get needs met (makes needs known and/or does something to get them met).

X 1 2 3 4 5

4. Child stays with a task until it is completed.

X 1 2 3 4 5

5. Child reacts to sensory stimulation (responds to changes in the level or type of stimulation: auditory, touch, temperature, visual).

X	1	2	3	4	5
	<i>does not react.</i>	<i>inconsistent, may overreact or underreact.</i>	<i>varies with sense and/or situation.</i>		<i>reacts effectively.</i>

6. Child controls his/her impulses so they do not interfere with learning or social interaction.

X	1	2	3	4	5
	<i>highly impul- sive.</i>				<i>effective impulse control.</i>

X	1 2 3 4 5 + + + +					Number of Scoreable Items RAW SCORE
	SCORE	=				

COPING WITH **SELF** *FLEXIBLE*

1. Child can be creative and original (sees relationships in varied ways, expresses ideas in novel or fresh terms, seeks out and develops new ideas or ways of handling things).

X	1	2	3	4	5
---	---	---	---	---	---

2. Child balances independence with sufficient dependence to be able to get and use help.

X	1	2	3	4	5
	<i>excessively dependent or independent.</i>				<i>good balance.</i>

3. Child can shift plans or change behavior to achieve a goal.

X	1	2	3	4	5
---	---	---	---	---	---

4. Child accepts substitutes when necessary (materials, ideas, activities, etc.).

X	1	2	3	4	5
---	---	---	---	---	---

5. Child can manage high stress situations (finds ways to reduce feelings of stress or finds a solution to the stress causing situation).

X	1	2	3	4	5
---	---	---	---	---	---

6. Child demonstrates independence and self reliance (acts on his/her own without seeking directions or reassurance).

X	1	2	3	4	5
---	---	---	---	---	---

<u> </u> X SCORE	<u> </u> 1 <u> </u>	<u> </u> 2 <u> </u>	<u> </u> 3 <u> </u>	<u> </u> 4 <u> </u>	<u> </u> 5 <u> </u>	Number of Scoreable Items RAW SCORE
	+	+	+	+		= <u> </u>

COPING WITH ENVIRONMENT **PRODUCTIVE**

1. Child plays with other children (does not avoid them).

X	1	2	3	4	5
---	---	---	---	---	---

2. Child uses behavior appropriate to the situation.

X	1	2	3	4	5
---	---	---	---	---	---

3. Child knows what is expected and behaves accordingly, understands the implications of his/her behavior in both task and people situations.

X	1	2	3	4	5
---	---	---	---	---	---

4. Child understands and responds to directions without external help or support.

X	1	2	3	4	5
---	---	---	---	---	---

5. Child reacts (verbally or with an action) to details and/or events in the environment (objects, sounds, people, changes).

X	1	2	3	4	5
---	---	---	---	---	---

6. Child is curious (eager to find out about people, objects, situations).

X	1	2	3	4	5
---	---	---	---	---	---

7. Child is liked and accepted by other children.

X	1	2	3	4	5
---	---	---	---	---	---

8. Child doesn't discourage easily (for example, does not refuse to try something because of fear of failure, doesn't become moody or act out when unsuccessful, stays with a task long enough to work it through or appropriately give up).

X	1	2	3	4	5
---	---	---	---	---	---

9. Child is aware of feelings of others, including angry feelings (for example, asks about other children, comments and/or reacts appropriately to demonstrations of feelings).

X	1	2	3	4	5
	<i>not aware.</i>		<i>aware of positive or negative feel- ings but not both, or varies with sit- uation.</i>		<i>aware of range of feelings.</i>

10. Child demonstrates a capacity for fun, zest, delight and pleasure.

X	1	2	3	4	5
---	---	---	---	---	---

11. Child functions with minimal amount of external structure (is self directed, can create own routine or structure).

X	1	2	3	4	5
---	---	---	---	---	---

12. Child is aware of and reacts to cues and moods of other people (for example, facial expressions, voice tones).

X	1	2	3	4	5
---	---	---	---	---	---

<u> </u> X SCORE	<u> </u> 1 <u> </u>	<u> </u> 2 <u> </u>	<u> </u> 3 <u> </u>	<u> </u> 4 <u> </u>	<u> </u> 5 <u> </u>	<u> </u> RAW SCORE
	+	+	+	+		=

COPING WITH ENVIRONMENT ACTIVE

1. Child uses gross and fine motor skills competently (for example, is well coordinated, does things easily with hands).

X	1	2	3	4	5
	<i>minimally competent.</i>		<i>some skills used competently, not others, e.g., good gross motor, poor fine motor, or var- ies with situation.</i>		<i>competent.</i>

2. Child is stimulating to others (gets others started, enthused, involved).

X	1	2	3	4	5
---	---	---	---	---	---

3. Child actively involves self in situations.

X	1	2	3	4	5
---	---	---	---	---	---

4. Child has an activity level that is appropriate to the situation and is helpful in getting the task accomplished.

X	1	2	3	4	5
	<i>hypoactive (too little activity) or hyperactive (too much activity).</i>				<i>effective activity level.</i>

5. Child has a positive orientation to life (expects that needs will be met, is optimistic, and sees the good side of things).

X	1	2	3	4	5
---	---	---	---	---	---

6. Child has an energy level that is forceful and vigorous.

X	1	2	3	4	5
	<i>low energy, easily fatigued.</i>				<i>effective energy level, good supply of energy.</i>

SCORE	X	1 2 3 4 5					=	RAW SCORE

Number of
Scoreable
Items

COPING WITH ENVIRONMENT FLEXIBLE

1. Child accepts warmth and support (for example, responds to affection and encouragement from others, likes to be held, kissed and/or praised).

X 1 2 3 4 5

2. Child gives warmth and support to others (for example, takes other child's side; demonstrates verbally or by gesture affection or encouragement).

X 1 2 3 4 5

3. Child tries new things or activities on own - shows excitement, interest and/or pleasure when he/she discovers new objects, insights or experiences.

X 1 2 3 4 5

4. Child bounces back after disappointment or defeat (tries again or becomes interested in something else rather than pouting, being moody or acting out).

X 1 2 3 4 5

5. Child, when necessary, uses a range of strategies to achieve a goal or solve a problem.

X 1 2 3 4 5

6. Child, when necessary, accepts new ideas or reformulates ideas already held (is not rigid in thinking).

X 1 2 3 4 5

<table border="0" style="width: 100%;"> <tr> <td style="text-align: center;">1</td> <td style="text-align: center;">2</td> <td style="text-align: center;">3</td> <td style="text-align: center;">4</td> <td style="text-align: center;">5</td> </tr> <tr> <td style="text-align: center;">_____</td> <td style="text-align: center;">_____</td> <td style="text-align: center;">_____</td> <td style="text-align: center;">_____</td> <td style="text-align: center;">_____</td> </tr> <tr> <td style="text-align: center;">+ _____</td> <td style="text-align: center;">+ _____</td> <td style="text-align: center;">+ _____</td> <td style="text-align: center;">+ _____</td> <td style="text-align: center;">+ _____</td> </tr> </table>	1	2	3	4	5	_____	_____	_____	_____	_____	+ _____	+ _____	+ _____	+ _____	+ _____	= _____	Number of Scoreable Items RAW SCORE
1	2	3	4	5													
_____	_____	_____	_____	_____													
+ _____	+ _____	+ _____	+ _____	+ _____													

OBSERVATION NOTES

ADAPTIVE BEHAVIOR SUMMARY

CHILD'S NAME DATE

COPING - SELF

	Raw Score	Number Scoreable Items	Converted Score
PRODUCTIVE	_____	_____	_____
ACTIVE	_____	_____	_____
FLEXIBLE	_____	_____	_____
TOTAL			_____

SELF SCORE _____

COPING - ENVIRONMENT

	Raw Score	Number Scoreable Items	Converted Score
PRODUCTIVE	_____	_____	_____
ACTIVE	_____	_____	_____
FLEXIBLE	_____	_____	_____
TOTAL			_____

ENVIRONMENT SCORE _____

Sum of SELF SCORE and ENVIRONMENT SCORE ____

ADAPTIVE BEHAVIOR INDEX _____

COPING PROFILE

	1	2	3	4	5	
Non-Productive						Productive
Passive						Active
Rigid						Flexible

Key: Self _____
Env. _____

THE CANADIAN SELF-ESTEEM INVENTORY FOR CHILDREN - FORM B

by

James Battle, Ph.D.

Directions: Please mark each statement in the following way. If the statement describes how you usually feel make a check mark (✓) under the "yes" column. If the statement does not describe how you usually feel make a check mark (✓) under the "no" column. Please check only one column (either "yes" or "no") for each of the 30 statements. This is not a test and there are no "right" or "wrong" answers.

	Yes	No
1. I wish I were younger _____		
2. Boys and girls like to play with me _____		
3. I usually quit when my school work is too hard _____		
4. I have lots of fun with my parents _____		
5. I am happy most of the time _____		
6. I have only a few friends _____		
7. I like being a boy/girl _____		
8. I am a failure at school _____		
9. I usually fail when I try to do important things _____		
10. My parents make me feel that I am not good enough _____		
11. I often feel ashamed of myself _____		
12. Most boys and girls play games better than I do _____		
13. I often feel that I am no good at all _____		
14. Most boys and girls are smarter than I am _____		
15. My parents dislike me because I am not good enough _____		
16. Most boys and girls are better than I am _____		
17. I like to play with children younger than I am _____		
18. I often feel like quitting school _____		
19. I would change many things about myself if I could _____		
20. There are many times when I would like to run away from home _____		
21. I am as happy as most boys and girls _____		
22. I can do things as well as other boys and girls _____		
23. My teacher feels that I am not good enough _____		
24. My parents think I am a failure _____		
25. I worry a lot _____		

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