

THE OTHER HALF OF THE KINDERGARTEN DAY:  
A CRITICAL APPRAISAL OF STRESS  
LEVELS IN KINDERGARTEN  
STUDENTS

By

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## CHAPTER I

### INTRODUCTION

#### Statement of the Problem

The last 40 years have been a period of great change for families and education. Society shifted from an agrarian to an industrial society, and now has shifted from an industrial to a technological society. These changes have created challenges and opportunities that were unimagined by previous generations.

The educational implications have been tremendous. Knowledge expands at a rate of 100 percent every five years, and faster in some areas. The family structure has changed from the 1940's where there was an average of three to four hours interaction within the extended family to today when we average less than a few minutes a day with a nuclear family (Glenn & Nelson, 1987). Oftentimes that nuclear family consists of one parent and children, unlike early generations that often included several generations either in one household or in the nearby community.

Fact sheets from the Committee on Working Women noted in 1984 that 80 percent of all mothers with children under 18 years of age worked outside the home. Today, 88 percent of all children return from schools to houses where everyone has been outside the home for most of the previous ten hours. According to the Carnegie Corporation Report,

the percentage of mothers in the labor force increased from 14 percent to 62 percent from 1950 to 1985 and is continuing to grow. Especially during the last 15 years, the educational community has been looking at and studying ways to better meet the needs of children who are affected by these dramatic changes.

Kindergarten should be an exciting start to a child's formal school career. For the child, this beginning should offer an educational challenge in a secure environment. Kindergartens that are two to three hours provide for only one-half of a child's day. The percentage of employed parents and single parent families give cause for concern as to what happens during the other one-half of the kindergarten day, and what the emotional cost may be to the children. The lack of care-givers puts young children at risk. These children exhibit more signs of depression, fear and loneliness than children who are usually supervised (Seligson, 1986). Alexander (1986) pointed out that school-age children left alone are subject to hazards and emergencies that may lead to social and emotional harm. Although some in the field of education advocate the half-day schedule for kindergarten, many educators see the expansion of the kindergartener's day as a major trend in education (Robinson, 1987). The full-day daily kindergarten program offers the educational advantage of more unhurried time for the student to develop interest. Terens (1984) pointed out the advantages of more time for individualized and small group teaching, the availability of time for indepth exploration of the environment, more socialization, and many more language experiences in full-day programs. In Glazer's (1985) study through surveys and research of full-day kindergarten programs she found more varied



curriculum with additional time for science, art and music, and more one-to-one experiences between the teacher and student. The lack of requirements by the public school for kindergarten attendance has allowed children of employed parents to simply stay in some other form of child care, if they so desire, or to attend child care, kindergarten, and perhaps have a different after-school arrangement. There are also kindergarten children who may have partial care from siblings, but have moments without any adult care. There are several different scenarios of child care arrangement for the other half of their school day, but a large number of kindergarteners are either in some form of day care or more problematic at home alone which is a startling possibility.

In response to these dramatic changes, in certain geographic areas, the public schools have taken the lead in expanding care for kindergarten children. These schools have improved their image in the communities. Public schools are perceived as having the best interest of both the school and the community in mind (Seligson, 1986). In many communities, public school enrollment has declined so there is adequate building space available to expand program offerings. Parents looking for quality programs for their kindergarteners will usually feel secure with public schools. If there is some type of programming for the full-day, they will be able to meet their needs for extended care and realize a reduced cost from private care.

Schools are built for children, so it seems a natural extension for child care, but can they meet the child care issue as well as educate? Do parents want the school to have this role, or should they rely on the private sector? If school programs do not make available

extended hours the private sector or the business community must offer child care. The kindergartener may again be faced with multiple care-givers. The Holmes and Rahe Stress scale for adults has been adapted for ranking stress levels that apply for children (See Appendix A for the test instrument). Out of the 43 items rated, new teacher, new school, or new classroom was rated number 17, with a value of 39 out of a possible 100 points. Although the child in several programs would not continuously encounter new teachers the daily shift of care-givers is stressful. Blank (1985, p. 53) pointed out:

. . . half-day kindergarten programs mean young children are shifted between two or three care givers in a single day. Continuity of care and stability could be increased with a longer kindergarten day in which children learn through play. An all day kindergarten operated by the schools, and a before and after school program to supplement it possibly operated by community child care organizations, is a logical extension of the schools' involvement with younger children.

Young children do not exhibit well developed coping skills which make several changes in their day another source of stress (Honig, 1986a). If the public school expands kindergarten, can the continuity of care and stability be proven to reduce stress in these childrens' lives?

Business and school partnerships are obvious in many schools today. School administrators have used business support as another attempt to offer extended programming to meet the needs of kindergarten children. Businesses may be willing to offer more to the schools in exchange for some relief from the 3:00 o'clock syndrome that affects their work places every day as mothers at work wait for their child to call as soon as they arrive home from school. Not only may stress be reduced for children who know that they have a safe, secure place to be after regular school hours, but parental concern and stress may also be

reduced. Distal supervision has not been very effective for children, and has cut into productivity in the workplace (Powell, 1987).

Schools are continually evolving and changing based on the needs of society. In all probability the public schools will be called upon to address child care needs in most communities. Full-day kindergarten is one of the leading trends in education today (Robinson, 1987). Along with this movement, many questions, problems, and challenges arise. The call for educators and advocates for young children is to design age appropriate programs that address cognitive and child care needs. Research needs to continue to document the best programming in regard to the needs of young children.

This paper will look at kindergarten programming that would best fit the needs of this age children in today's world. The thinking in education needs to seriously look at prevention and intervention programs. As Peskin (1987) pointed out we are now in the age of "prevention in education." Can a developmentally appropriate full-day program provide positive intervention? To study these needs, research should look at programming with a clear understanding that programs must continue to change in order to keep pace with the needs of society.

Early learning experiences should be good for young children. Safe, secure and happy environments that help a child develop a healthy self-concept are not determined by the length of the day, but the quality of programming. As Elkind (1986) pointed out, it is not out-of-home care that is potentially harmful, but the wrong kind of out-of-home care. Elkind (1986) further stated that early childhood education must be an extension of the home, and not of the school.

Extended day care, before and after school programs, and full-day kindergartens are all programs that can reduce young children's experiences with self-care. Neighborhood check-in homes and latchkey hotline phone programs have not been very successful, and are unrealistic for the kindergarten child (Alexander, 1987). Research must continue to look at the differences in these programs, and offer sound direction for the best way to meet needs socially, emotionally, physically, and academically for the young child and their families. Although a widely accepted theory by early childhood educators, research needs to continue to document that young children are prone to stress when they are pressured into formal academic instruction too early (Mills & Spooner, 1988; Hymes, 1981; Elkind, 1981).

Developmentally appropriate programs are not determined by the length of the day, but what quality goes into the program. There have been many demands to the educational systems of the 1980's, and the increase for academic programming has been felt all the way down to the kindergarten level. Kindergarten is a mandated program offered in most states, and is quickly becoming a requirement. In Georgia a prerequisite for entering first grade is the passing of the California Achievement Test (CAT). In a newspaper article (Tulsa World, May 28, 1988, p. 10A) discussing the results of the test, the question of too stressful for young children is raised and dismissed (See Appendix G). John Folks, Oklahoma State Superintendent of Schools, stated in a Tulsa World newspaper article (May 28, 1988, p. 6) that he believes full-day kindergarten should be compulsory as it will have an effect on performance and subsequent grades (See Appendix G).

Programs have changed in response to social, economical, and

political forces; however, these changes have not always taken into account the basic developmental needs of young children, which have remained constant. Young children learn through experiences with their environment. They learn not through specific teacher-directed learning tasks, but through self-directed exploration, experimentation, and evaluation. Piaget referred to mental development in young children as "reflective abstraction", when a child who engages in self-directed learning can reflectively abstract from those activities he/she thus encourages the growth of new mental abilities (Elkind, 1986, p. 636).

#### Assumption

The assumption in this study is that documentation for academic benefits from full-day kindergarten already exists. Jalongo (1986) pointed out that exact comparisons are not possible since the children must either be in full or half-day programs, and different teachers effect results. Research such as Anderson (1983) showed the advantage in acquisition of skills and knowledge using Stanford Early School Achievement Test (SESAT). Gittleman studies in 1983-84 showed full-day significantly higher in math skills on Comprehensive Test of Basic Skills; Adcock, et al. (1981) showed full-day daily kindergarteners scored higher in all areas using the Metropolitan Achievement Survey Battery (MASB); Gullo & Clements (1984) compared half-day daily, daily, full-day alternate, and full-day daily, and the full-day classes scored significantly higher achievement scores using the Metropolitan Readiness Test (Moncoda, 1986). These are but a few of the studies reinforcing academic benefits of full-day kindergarten.

Young children learn through direct encounters with their new

world and this must not be altered by academic programming in a regimented setting. Focusing on a specific learning task is not the mode of the young child, and pressure to conform is quite stressful (Elkind, 1986). Elkind continued by stating that rote learning and memorization, the stuff of much formal education, provide little opportunity for reflective abstraction, and this is essential for the full realization of a child's cognitive abilities. Formal academic instruction also encourages social dependency on adults, putting self-worth of the child at jeopardy. Play is a young child's natural way to seek and acquire knowledge, and play develops their cognitive skills. Stress from highly structured programs is detrimental to young children's development, whereas in a learning situation based on play, schools can meet the goal of academic excellence and preserve an exciting and fascinating childhood (Mills & Spooner, 1988).

#### Objectives of the Study

Would a kindergarten program that was a full-day daily program be an improvement other than academically? When children have full-day experiences with pre-kindergarten programs does that fact alter their needs in a kindergarten program? A great deal of the literature supports this position. Would reducing the number of care-givers a kindergarten child has every day reduce stress? Can good developmental programs both meet the academic needs of the kindergarten child, and provide a full-day program that does not add unnecessary stress to their lives?

Do programs meet the needs of children? This should be the paramount concern in evaluation. Society will continue to change and

evolve, so young children must be taught coping skills effective to face the pressures of the society in which they live. Problems of high stress levels in children's lives need to be addressed by the entire community and confronted by parents, educators and those interested in children's future welfare. Trying to fit the student to the program has been tried without great success; now the emphasis must be to try to shape the school to the child (Bredecamp, 1986). The aim of this study is to explore alternate program designs for benefits to kindergarten children in general, and more specifically, those who deal with multiple care-givers.

#### Hypothesis

Of primary importance to this study the following hypotheses are stated:

1. Children in a structured half-day kindergarten will exhibit higher levels of stress than in half-day developmentally appropriate program.
2. Children in a structured full-day kindergarten will exhibit higher levels of stress than in a full-day developmentally appropriate program.
3. Children in a full-day, developmentally appropriate kindergarten will exhibit less stress than either full or half-day programs that are highly academically structured.
4. Children in continuous daily programming that reduced the number of care-givers are less stressed than children in half-day kindergarten where they have experiences with a larger number of care-givers.

### Limitations of the Study

The scope of this study was meant to be only a beginning of examining stress in kindergarten children as it relates to programming and multiple care-givers. Although stress is certainly a part of children's lives, the research is very limited. Many variables that would affect stress in children were not included. Variables such as: socio-economic levels, parental attitudes, teaching methods, are but a few of the variables that could affect stress in children. This study is also limited by the size of samples.

### Definitions/Terms

To better understand the issues involved in this research project, the following terms will be used throughout the study and are defined as follows:

Academic Programs: Teacher-directed large group programs where children are expected to sit at desks or tables, be quiet, do mainly paper and pencil tasks in a somewhat rigid environment. Individual skills with emphasis on rote memorization are stressed with more curriculum based on workbooks than experimentation and self-directed activity.

Developmentally Appropriate: This term consists of two dimensions: age appropriateness and individual appropriateness. Teaching reflects a knowledge concerning development with curriculum and adult interaction responsive to individual differences. The developmentally appropriate program encourages hands on manipulative exploration of the environment, and self-directed learning that is encouraged by the climate of the classroom.



Childhood: Early years of life; a time to be protected from direct demands of economic, political and sexual forces.

Play: The basic activity and learning unit of childhood - it does not have as a goal a product. In play, children enjoy their activity. Play allows personal expression and intellectual growth as new avenues of learning open to them.

Self-Care: The same as latchkey when the child is unsupervised, but because of media influence and sway the term does not carry the negative connotation associated with latchkey.

Survival Skills: Skills necessary for children in self-care.

Latchkey: (Historical) term that described children who wore their house key and were to fend for themselves while their parents worked; first cited in literature in the United States around 1944.

Latchkey Children: Children for whom there is no formal adult supervision when school is out and parents are not available.

Latchkey Syndrome: Condition exhibited by former latchkey children in therapy for problems manifested by increased fear; resentment of parents; as children they acted as expected, but as adults they exhibit lower achievement, social and emotional problems, and are less willing to be giving.

Sibling Care: Child taken care of at home by older sister or brother.

Distal Supervision: Parental knowledge of children's whereabouts while parents are at work.

3:00 Syndrome: Quality of parent work suffers from negative aspect of long-distance supervision for children at home alone after school hours.

Day Care: Public or private care and protection for children when parents are not there; (historical) important and essential only for the poor.

Before and After School Care: Programs offered at the school site usually for a fee, that provides care outside of regular school hours.

Stress: Demands that exceed the body's ability to cope; or mental state in response to strain; or stimulus event of sufficient severity to produce disequilibrium in the homostatic physiological systems (Honig, 1986).

Types of Stress: Ordinary, interaction with environment  
- developmental, growth, change, maturity, skills gained at each level of development; unique life stress particular to one individual (for example: death of a parent, divorce of a parent, death or birth of a sibling, et cetera).

## CHAPTER II

### REVIEW OF LITERATURE

#### Scheduling and Curriculum Development

Kindergarten which until 1980 was not a part of the public schools, except in only a few states, is now part of the mandatory requirements in many states (Humphrey, 1986). From 1966, when only 60 percent of all children attended kindergarten, until 1978 when 82 percent attended kindergarten, there has been considerable growth. But, is kindergarten really an integral part of the school system?

We fool ourselves when we say that 82 percent of our five-year-olds go to school. Most of those children go only to a half-day school. We have talked that way for so long that we have come to believe that kindergarten, by divine law, means a class that meets only two and one half hours a day. We have forgotten that there was a time in the not too distant past when kindergartens were in operation for the regular school day. The change was shortly following World War II, during a baby boom when the emphasis turned more to the pursuits of wealth than education (Hymes, 1981, p. 7).

Because the mandate is only to offer kindergarten and not to require attendance, there has been less demand for a critical look at this level in the curriculum. It is judicious that as we evaluate different management systems for the kindergarten day, we not overlook the critical need for developmentally appropriate curriculum.

The developmentally appropriate kindergarten program reflects the understanding that children learn by doing. Knowledge cannot be given to them, but is acquired through their interaction with objects and

people. Developmentally appropriate programs are age appropriate and individually appropriate; they are designed for the age group with attention to individual needs and differences. The developmentally appropriate kindergarten programs can be evaluated in four main areas: curriculum, adult-child interactions, relations between home and program, and the developmental evaluation of children. The curriculum is based on teaching children to love to learn, not on the acquisition of rote facts. Cognitive learning encompassed seeing, hearing, touching, smelling, tasting, analyzing, synthesizing, and receiving feedback from the environment. The teacher must be able to design a curriculum that motivates students and facilitate learning with regard to individual differences of each child. Communication between parents and school are essential, and require interaction of teacher and parents, not just a report card. Evaluation is continuous, and based on the teacher's sound understanding of the physical and intellectual development of young children.

There is currently great interest in modifying kindergarten scheduling to such arrangements as full-day, extended-day, or other options. There is also interest in studying and examining the curriculum implications and consequences these various changes would impact. The literature lacks consensus as to support for one type of scheduling day compared to another, although there is considerable discussion and concern relevant to change in kindergarten scheduling. Because of educational pressure for more academics; the cost of programs and personnel; problems and cost of traditional transportation; and a general evaluation of curriculum; kindergarten scheduling has been studied in a variety of forms. Most of the studies

have looked at three major schedule designs: half-day/daily; full-day/alternate; and full-day/daily.

Alternate day programs were one attempt to meet the needs for kindergarten programming, but they also affected cost savings by spending the same classroom time on alternate full-day schedules, thus cutting the transportation cost (McConnell, 1986). Various schedules were utilized such as: Monday and Friday class and Tuesday and Thursday class with alternating Wednesday attendance (Robertson, 1984); or Monday and Thursday and Tuesday and Friday with Wednesday alternating weeks (Gullo & Clements, 1984). Both of these studies used the same instruments to compare differences in full and half day kindergarten programs. No significant differences were found on achievement variables using the Metropolitan Readiness Test (MRT). Using the Hahnemann Elementary School Behavior Rating Scale (HESB) both groups had scores that favored full-day programming. These scores were in the areas of originality and independent learning. It was not surprising that one of the most often heard complaints was the confusion created from these types of scheduling. It can be assumed that when cost savings are the priority for planning, programming can easily suffer. It is indeed regrettable that so many educational decisions are based on budget constraints, although it is certainly a major component of many decisions especially within public education.

Unfortunately, many of the studies that have replicable data have done their comparisons with schools that used the half-day/alternate day program. These results are often cited as validity that there is not significant statistical differences when compared to full-day/alternate-day programs. Some of the studies (Ulrey,

Alexander, Bender, & Gillis, 1982; and Roberson, 1984) showed no statistically significant differences in achievement when comparing half-day/daily and full-day/alternate rural kindergarten programs in matched control comparison designs. They did show difficulties for families and negative parental opinions created by the alternate day schedule. Using the Metropolitan Readiness Test, Gullo and Clements (1984) also compared data for the half-day/daily and full-day/alternate suburban kindergarten classes. They concurred with Ulrey, et al. (1982) that there were no differential effects on academic achievement, classroom social behavior, or time in school (absences). The differences that were defined were in social and emotional behavior. Full-day kindergarten students statistically exhibited higher self-concepts; there was significant difference in originality and independent learning which might be explained by the children having longer periods of time to engage in self-directed activities (Gullo & Clements, 1984). Tasks for the kindergarten student are better facilitated when the child had more time to complete activities in a more relaxed atmosphere. Leonard's (1983) documented social skills were more easily taught in full-day programs.

Some research indicated any addition of time to the traditional half-day/daily kindergarten schedule is not advantageous to the child, because the demands usually are emphasizing academic development [and could cause a cumulative deficit with too much too soon] (Peskin, 1986). Dr. Louise Bates Ames of the Gesell Institute, proposed that instead of lengthening the kindergarten day a shortened day for first graders is more appropriate (Ilg, 1978). The length of the school day is not their major concern, but the curriculum and the emphasis on

formal learning styles. Stress is reduced in the classroom when the emphasis on cooperation and competition is kept to a minimum (Honig, 1986b). In academic programs there is a greater emphasis on competition. Many of the concerns expressed in lengthening the school day for kindergarten center around the lack of developmentally appropriate curricula. The length of time a child spends in a program should not be the only basis for critical appraisal of the program. Programs for kindergarten should reflect a curriculum and length of program that addresses current needs of the children. Moncada (1986) cited one disadvantage of the half-day program is the intensity of the curriculum; whereas in an appropriate full-day kindergarten there is less pressure to hurry, more time for exploration and experiences, and more opportunities for reinforcement (Brandt, 1986).

Reviews of the literature also showed little difference in the testing of different lengths of a kindergarten day. Leonard and McIntire (1983), and Hatcher and Schmidt (1980) cited some evidence that there are statistical advantages to full-day/daily programs with the educationally disadvantaged. One of the difficulties in comparing and evaluating standardized test scores was the differences in curricula, and little attention was given to this or other differences in programming (Glazer, 1985).

One interesting side note from all of the studies cited previously was that in all cases when parents were surveyed for opinions about options in schedules, they were very happy with full-day, but did not like alternate-day. Several studies also supported overwhelming parental interest for full-day programming, even when they had originally opposed full-day kindergarten. When children had been in

full-day/daily, their parents expressed 91 to 98 percent support of the full-day/daily in surveys taken by Humphrey (1983), Anderson (1983), and Moncada (1986). A variety of reasons for full-day/daily programs was expressed which included: increased learning time, more time for individualization and enrichment, provided an easier transition to grade school, less hurried for parents and children, and of course, more convenient and less expensive (Leonard, 1983 and Naron, 1981).

In contrast to the studies that showed minimal differences in full or half-day programs are studies that do show significant improvement when comparing full-day/daily and half-day/daily. Probably one of the most interesting is the study in the Evansville-Vanderburgh School that compared four (4) full-day programs to a control group of four (4) half-day programs in their school system. Two follow-up studies have been conducted that have tracked students from kindergarten through the sixth grade and compared those who were in full-day daily programs with those in half-day daily programs (Humphrey, 1983; 1986). The California Achievement Test (CAT) compared full-day to half-day kindergarteners and full-day students scored higher in most readiness areas. The scores of full-day kindergarteners were significantly higher when compared to half-day students on the Gates-Mac-Ginite Reading Test (GMRT) in the first grade and again in the third grade. Children who had attended full-day kindergarten continued to have higher academic marks in school and scored higher on standardized achievement tests given in grades five and six. There was also a higher participation in extracurricular activities through middle school (sixth grade) from the full-day students (Humphrey, 1986).

To answer the question of which schedule is best depends on many



options. Variables such as: teaching style; socio-economic level of the students; or community attitudes, can not be controlled; but a study of quantitative and qualitative data from children, parents, teachers, and community members could provide answers to how best to meet needs in individual communities. The most important thing to guard against is a "shoved-down" curriculum simply because kindergarten children in full-day programs would be in school the same number of hours as other elementary students. Many educators in the field of early childhood education, warn of the risk inherent when there is too great an emphasis on an academic curricula for young children. Elkind (1986) has been a leader in focusing attention on this problem. He described the problems as follows:

A shoved-down curriculum is a watered-down first grade where there is too much emphasis on teacher-directed instruction in narrowly defined academic skills. The early symptoms of stress are those associated with clock energy: fatigue, loss of appetite, and decreased efficiency. When the excessive demands continue without adequate time for replenishment, an individual must draw on his or her calendar energy. When this happens, such psychosomatic stress symptoms as headaches and stomachaches that can injure the organism and shorten the life span begin to appear. In young children exposed to formal instruction, both types of stress symptoms are frequently seen (p. 635).

Elkind further stated that formal instruction is only one of the demands made by formal programs. The child is separated from his/her parents, he/she is in a new and unfamiliar place, he/she is required to adjust and learn new rules of conduct. All of which intensify the stress in his/her life. The formal instruction in itself may not be sufficient to overstrain his reservoir of clock energy, but the combination can produce symptoms in young children. Curriculum for all kindergarten programs needs to be developmentally appropriate, intellectually stimulating, and suited to their learning styles.

## The Child in Society

As the family structure changes, in particular the role of the woman in the family, research indicates that the young child's environment becomes less and less predictable (Arnold, 1985). Pre-twentieth century child rearing was a part of the woman's role. Father's work was often at home or nearby so he was easily available. These homes usually contained members of the extended family in the home or close enough so that young children were almost always cared for by family members (Glenn, 1987). Today, most parents of young children find it necessary or desirable to work out of the home. Mothers share their jobs as primary care-givers. Statistics show us that in the early 1980's over 50 percent of all children under six years of age had working mothers (Long & Long, 1983) and there is reason to think this percentage will increase. Educationally, we need to design programs that reflect this change in life styles as well as the physical, emotional and intellectual changing needs of the children in the 1990's.

As the need for child care increases educational development must be used cautiously so that the direction for change is as food for the child as it is for the parents. The environment where care is provided, and the experiences should in the very least not be socially or educationally detrimental to young children.

In full-day kindergarten, the teacher has the time to regularly assess each child's progress, to diagnose deficiencies, and to alter the instruction accordingly. As a result, each child can regularly encounter success, develop a positive attitude about school and learning, and require special education services less frequently. These benefits are immeasurable to the child's later success in school and in life (Naron, 1981, p. 308).

However, there is ample reason for caution unless programs are developmentally sound, planning has been organized around the needs of the five year old, and continuous evaluation takes place to monitor the program and its impact.

When balancing the developmental needs of children and child care needs of parents, the traditional half-day kindergarten does not meet the needs of many families. This type of program does not offer any help to the parent's need for child care, and often necessitates multiple care givers, sibling-care, or absence of care for the child. Full-day kindergarten programs that follow the school schedule are more convenient for families, and they lessen the amount of time young children may be without care. For families where both parents or a single parent are employed full time, there are still needs for before-and after-school care and the problem of care during the summer if no programming is offered. Programming geared to the work day would offer many advantages to families, but these types of programs are expensive when developmentally appropriate, and often hard to "sell" in the educational community.

There is a vast difference today in the function of kindergarten programs as compared to the last 10 years. In the past, it was the first school experience for most children, but today it is merely a continuation of school for most children, many of whom are in full-day child care programs. To provide the functions of continuous programs to meet individualized needs, kindergarten programs must become more relevant to parent's and children's needs. Whether or not both parents are working, the number of children enrolled in pre-kindergarten programs indicate parents are interested in some type of program for

their child.

There is also a vast difference in the world children live in today. Kroll (1986, p. 191) stated:

Unfortunately, today's child is faced with threats of nuclear war, environmental decay, increased competition, jobs being lost, and the list goes on. Whereas a stable home with parents to support and comfort the child was available yesterday, today it is the day care doors that a child enters at the end of a school day or even an empty house. Working couples and single parent households are dominating the home front, and our children are caught in the crossfire. Not only does our child have to react to the stressors of school peers and those phenomena he encounters in his developmental growth, but often this individual must act as a second parent to his younger brother or as a sounding board for his recently divorced mother. How a child copes with this is often a mystery.

If schools can help children cope either through better skills in dealing with stress, or programming that meets needs for security and safety, schools can then become a part of the solution instead of compounding the problem.

Continuity between early education and elementary programs is needed to narrow the gap. There is considerable difference of opinion as to curriculum needs at the kindergarten level ranging from highly structured and academic to developmental programs, so curriculum differences as well as length of programming serves only to widen the differences. Cruikshank (1986) offers options for change that help make the transition from half-day to full-day kindergarten a cooperative effort of the school, the parents, and the children. The basis for this transition is sound planning and preparation. Programs that meet the needs of children developmentally are of critical importance, and have long-range implications.

Early intervention and prevention instead of remediation are key concepts that must be considered in looking at the length of a school

day. What types of programs are available (or lack of programming) should be of interest to every community. Because there are limited financial resources available, and no national policy on education, there are differences as to how to approach educational reforms, and address the questions of remediation. The two major opinions seem to be "top-down" approach where the secondary school programs receive the major attention for remediation, or the "bottom-up" attitude with its focus on intervention through preschool and kindergarten changes (Glazer, 1985, p. 17). Schweinhart, et al. (1987) strongly felt that early intervention may greatly reduce school failure, although most supportive research has been done only with the economically disadvantaged. Naron (1981) pointed out that Lazar's (1977) studies showed early childhood programs have reduced the need for special education classes, and Winter and Klein's (1970) study revealed high positive effects from the full-day kindergarten. All kindergarten programs need to be weighed in respect to cost of remediation, the emotional and social needs of young children, and the safety and security they offer children and their parents. Simply looking at cognitive gains must not be the only yardstick for measuring full-day kindergarten programs (Jalonga, 1986). Other controls to variables affecting outcomes could include: different programming, age, class size, socioeconomic status, and educational levels of parents. Qualifications, characteristics, and methods employed by the teacher must also be taken into account when evaluating programs.

Many children need a safe secure environment, and the full-day kindergarten could help to provide this type of a program. One such program is the Kramer Model School in Little Rock, Arkansas. Their

program was geared to meeting the needs of children and their family in the best educational setting. They have developed a year round school program with daily hours from 6:45 a.m. to 6:00 p.m. thus including kindergarten children who in this lower socio-economic area were usually not in school because of the historically shortened hours for kindergarten (Caldwell, 1986). Although this program is the exception, it offers many goals to look toward when trying to meet the needs of young children in today's complex society. Are there components of this design we should heed when evaluating the best way to answer some of the questions pertaining to the other half of the kindergarten day? Perhaps closer scrutiny of work day compatible programs for young children is needed. The complexities of society in the 1980's looking to the 1990's invades the world of children. If the ideal family ever existed outside of television, where mom sent her kindergarten child to school for two to three hours and waited at home baking cookies, it is no longer. Clinging to the concept of half-day programming does not reflect an understanding of society. There are several options for extending school programs that meet needs for kindergarten.

#### Self-Care Experiences

The questions concerning full-day or half-day kindergarten scheduling take new dimensions in light of the issue of self-care. When the differences between multiple care-givers, sibling care, or self-care are also considered, new issues are raised. The solutions will vary and no one model will meet the needs of all families or all children in all communities (Long & Long, 1983).

Studying better ways to meet needs of young children allows an appraisal of how these young children are viewed in today's society. Garbarino (1986), in his article "Can American Families Afford the Luxury of Childhood?" pointed out that young children's lives should be shielded from economic, political and sexual forces. Childhood should be a time for optimal human development; a time to develop competencies, to plan and practice learning about life. Is society depriving children of childhood by prematurely granting them responsibility for self-care? Do full-day kindergarten classes place too much academic pressure on the young child? Is there a better solution between these two extremes?

When young children are in self-care arrangements they face problems different from older children. Studies by Long (1983) show that the chief complaint of latchkey children is that of loneliness and boredom followed by high levels of fear. Statistics show that 51 percent of the children in latchkey situations under third grade level showed extreme levels of fear (Long, 1982; Powell, 1987; Rowland, Robinson & Coleman, 1986). Unfortunately the media seems to have made self-care a desirable trait to work for, and once a child knows emergency phone numbers, many parents feel their children are ready to deal with self-care. Many times self-care grows out of an emergency situation. A young child is left alone in an emergency. The experience is successful, nothing bad happens to the child. He may even be rewarded for his ability to cope with the situation. Although the parents had felt the child was too young for self-care, this success often launches premature self-care. When Long (1983) interviewed parents and children in latchkey situations, both expressed

a belief that latchkey was more appropriate for children who were older than those children who were actually experiencing latchkey situations in their families. Children characteristically trust parents and want to help them, so they often do not express their anxiety over self-care. If young children are rewarded, or feel they are helping to contribute to their family, they are hesitant to discuss their problems and fears of self-care. We are only beginning to see long-term effects as psychologists are undertaking to deal with adults who grew up as latchkey children and now suffer from latchkey syndrome (Long, 1983; Garbarino, 1986).

"Early independence has been recognized for years as a trademark of low income children" (Long, 1983, p. 8). These children forced into early self-care and premature responsibility show signs of stress, more developmental problems, more delinquency, higher rate of abuse, and more experimentation with dangerous items (Honig, 1986a; 1986b). These symptoms are now showing up in all levels of society when self-care is abused. All self-care experiences are not negative, but it is felt that certain guidelines should be followed: a warm close parent-child relationship; adults nearby in the neighborhood available for emergencies; parents at work close by or easily reached by phone; no latchkey experiences younger than 12 years of age; child not left longer than approximately two hours a day; and not given too many added responsibilities (Long & Long, 1983; Fossarelli, 1985; Reynolds, 1985). The child care problem comes more into focus when statistics predict 10 million children under six years of age with working mothers by the year 1990. Two-thirds of these mothers will be single heads of households.



The latchkey child encounters many stress situations without the benefit of adult reassurance or guidance. This child may encounter: medical emergencies, crime or the fear of crime, storms or other natural disasters. Other less dramatic but also stressful situations for the latchkey child may be: isolation from friends if parents forbid entertainment without adults, child care for younger siblings, or excessive household chores.

The public schools are beginning to see the effects of the latchkey problem. Although latchkey has been a problem since the 1940's, public school administrators have not felt they could or should address the problem. Research has now indicated a direct correlation between latchkey and school success. A 1987 Louis Harris/Metropolitan Life Survey of American teachers cited latchkey to be a more detrimental problem to students learning than poverty or single-parent families (Warren, 1987). Schools have become concerned since these children are less well prepared for school, they show signs of depression, and are less able to socialize among their peers at school. Test results and teacher's evaluation indicate children who spend many hours unsupervised are less well prepared for school. Studies have established a connection between lack of supervision, poor school work and poor self-esteem.

Is a full-day/daily kindergarten an answer to the problems created by self-care? If kindergarteners were in school the entire regular schedule, would the benefits of a consistent program, and a reduction in the number of care-givers be enough to outweigh the concerns predicted by many professionals? Concerns such as: inability of young children to attend for long periods, maturity levels of social,

emotional, fine-motor and visual-motor skills not developed enough to meet school demands.

Fatigue, which is often raised as a problem for young children, has been found not to be a significant point in studies by Moncada (1986) and Anderson (1983) when researching full-day/daily kindergarten schedules. Of course, fatigue is one of the stressors that requires attention from all types of programming. Change in school hours rates 23 points on the Holmes and Rahe Stress Scale (Number 32 out of 43 items) indicating there are stressors from length of program (Reed, 1984) as shown in Appendix A. Since many children will benefit from child care situations instead of self-care, the importance of developmentally appropriate programs again becomes apparent.

Parents with latchkey children are apparently managing a stressful family situation in the best way possible for their families (Rowland, Robinson, & Coleman, 1986). Meeting both family and child needs require that the programs be easily available or transportation provided; a variety of programs offered appropriate to the child's level; programming available varying hours, summers and for emergency care; and programming cost within reason. Research has not answered all of the questions raised, and the child care issue presents demands that may override some of these concerns.

Quality care for children is an issue that is not confined to the educational arena. Almost weekly there are newspaper articles reminding us that the national child care issue figures into this year's national election. Many facets of society realize that self-care is inappropriate for children; it increases stress in their lives, and allows children to be in vulnerable situations. Control

will rest with educators and those concerned with the welfare of young children to be in vulnerable situations. Control will rest with educators and those concerned with the welfare of young children to design appropriate programs unless they ignore the issue, and force care by legislation.

### Stress and Children

Stress for kindergarteners is generated from three major sources: (1) family instability, (2) child care or lack of care, and (3) academic pressures. Stress is to be expected as part of normal human development. From birth, through the first years of socializing, stress marks the achievement of developmental milestones (Honig, 1986a). Without stress, mature behavior would not be achieved, but there are conditions which exist that place children in highly negative stressful situations? How can circumstances that will be the most stressful be reduced in a young child's life? Stress is sometimes defined as the "nonspecific response of the body to any demand that exceeds the person's ability to cope" (Honig, 1986, p. 51). Stress can be internal as well as external, acute or chronic. Children not only react differently to stressful situations, but they perceive stressful conditions individually. Very young children need to be protected from stress. As they grow and develop they should be taught coping skills, but they need many experiences and appropriate models for coping or there is a greater risk of increasing the stress in their lives.

Brown (1986) in his study of stress in elementary children's lives found differences among groups in how they reacted to stress. They reacted differently as a function of their developmental levels and

sociodemographic backgrounds. Girls judged stressful events to be more upsetting than boys; low-income children encounter more change and stressors than other children, and thus experience more stress. Urban children experience more stressful events than suburban children. Papay (1985) concluded by comparing STAIC T anxiety scores and academic achievement, that high anxiety was associated with poorer achievement. Papay showed the negative aspects of stress digress and influence even the child in primary school.

Program development for young children has not offered any one right way to have a positive effect on reducing stress. The historical justification for half-day kindergarten was the assumption that a full-day class would be physically much too taxing and stressful. Research with kindergarten students has proven this is not the case when there is a well-planned curriculum, and teachers are trained to understand and reflect the needs of this age group (Brandt, 1986 & Anderson, 1983). Employed parents have increased the need for day care for the very young child. The early fears that young children in day care would experience more problems have not materialized when children had high quality care givers (Blank, 1985). Unfortunately, there are many stressors that have become a part of young children's lives. The uncertainty and instability of family life such as: lack of family nearby, more mobility, divorce and single parents, and even the economy in the 1980's contributes to a different environment than previous generations have known. More single parent families and employed parents have created changes that may induce stress in family member's lives.

Childhood depression has become a mental health crisis that was

almost nonexistent 15 years ago. Because of the extreme changes in the way children are dealt with in today's society, stress in their lives has become a major concern. It should be important to care givers to be able to recognize signs of stress, and help in offering young children acceptable models of coping with stress. Some signs of stress exhibited by young children were compiled by Honig (1986b) as follows:

- Doesn't respond to friendly caregiver overtures
- Daydreams frequently
- Has grave, solemn face; rarely smiles or laughs (check first for iron deficiency; see Honig & Oski, 1984)
- Has frequent prolonged temper tantrums
- Cries a great deal for months after entry into group care (even though caregivers have been gentle and responsive)
- Acts sullen, defiant (says 'I don't care' frequently when caregiver explains how misbehavior has hurt another)
- Punishes self through slapping, head banging, or calling self bad names ('bad boy')
- Is overly sensitive to mild criticism
- Flinches if teacher or visiting adult approaches with caressing or reassuring gesture of outstretched arms
- Reports proudly to teacher that he or she has hurt another child
- Is overly vigilant about others' misdeeds, tattles, or jeers
- Is highly demanding of adults although usually fairly self-sufficient
- Bullies or scapegoats and may get other children to join in
- Carries out repetitive, stereotyped play that may have destructive aspects
- Clings to, shadows caregiver, although in group for months
- Is unable to carry out sustained play with preschool peers
- Has constant need to sleep although physically well
- Is preoccupied with frightening images of monsters or other violent, threatening figures
- Has dull, vacant expression, as if trying to ward off thinking about stressful trauma or tries to deny stressful feelings
- Is hyperactive or restless, wanders around room, touches and disturbs toys and games, cannot settle into constructive play
- Displays disturbed bodily functions, has trouble with feeding, constipation, or diarrhea, soils self frequently months after toilet training is completed
- Has trembling of hands or facial twitches although apparently well
- Talks compulsively about physical dangers and threats
- Grinds teeth during naptime
- Has rigid facial expressions from taut muscles

Displays loss of perceptual acuity  
 Displays reduced attentional capacity; even though caregiver is very clear in communicating, the child cannot focus well on activity or request  
 Stimulates self constantly (by prolonged thumb-sucking, masturbation, rocking body back and forth, or other such behaviors), which children normally do occasionally for self-comfort  
 Feels jittery  
 Stutters, uses disfluent speech, or refuses to talk in group (older preschooler)  
 Is clumsy on easy manual tasks due to muscular tensions  
 Frequently acts aggressively against others, even adults  
 Has nightmares (See Appendix E).

Honig continued by giving 20 suggestions for caregivers of young young children that will help the child learn to cope with stress (See Appendix F). These suggestions are summarized as follows:

1. Recognize when a child is stressed
2. Demonstrate self-control and coping skills yourself
3. Enhance children's self-esteem
4. Encourage each child to develop a special interest or skill that can serve as an inner source of pride and self-esteem
5. Use proactive intervention to avoid unnecessary stress
6. Help young children improve skills in consequential thinking
7. Acknowledge children's feelings and encourage verbal mediation
8. Help children distinguish reality from fantasy
9. Use gentle humor when possible to help children reframe their negative thoughts and feelings
10. If the stressor on a child is peer aggression, focus directly on the stressor
11. Help children view their situation more positively
12. Structure classroom activities to enhance cooperation rather than competition
13. Modify classroom situations and rules
14. Find individual talk time with troubled children [to] find out how [they] perceive threats or stresses
15. Mobilize other children to help
16. Use bibliotherapy
17. Have regular classroom talks, in a safe calm atmosphere, about different stressors
18. Use art
19. Encourage children to act out coping skills with . . . dramatic play
20. Involve parents (pp. 55-57).

High levels of stress have been identified in children who have

been left unsupervised for long periods of time. Studies indicate there is more depression, more fear of their environment, poor self-esteem, and a high stress level for young children left alone (Long, 1983; Seligson, 1986). The most serious of these problems are usually psychological, as these children do not have effective coping skills. For the kindergarten child, who easily confuses fantasy and reality, the fear of being alone can quickly become overwhelming. Research is showing that children with continuous adult supervision do not have as many developmental problems as those in self-care (Reynolds, 1985). Good quality care can provide good role models for coping skills. Teachers and parents can effectively act as protectors to keep environments low in stress for children and also help facilitate positive self-esteem in children.

When evaluating quality developmentally appropriate programming for the kindergarten there must be a balance between the child-care needs and the academic needs in a way that does not add undue stress. Kindergarten children are emotionally vulnerable. They need specific information, time to try new ideas in a protected environment, and a curriculum that first meets their emotional and social development. If they are prematurely granted adult responsibilities, there is a risk of jeopardizing future educational and social attainments (Anderson, 1986). High expectations and pressure for academic achievement also can compound the risk of stress (Mills & Spooner, 1988). Academic skills need to be secondary to the development of healthy, well-adjusted young children. Elkind (1982) stated his feeling that the premature granting of responsibility produces undue stress. Coping with premature responsibility increases the chances of later social and

emotional problems. It is clear that stress can become an overwhelming part of a young child's life.

All children will at sometime or another exhibit some behavior as described on the previously listed signs of stress. Concerns arise when these behaviors continue and grow to include a large number of these traits until they encompass the symptoms of an over-stressed child. It then falls to educators and those who design programs for children to create environments where stress can be reduced. Strategies for teaching coping skills to children are essential in a climate that does not promote but reduces stress. There are indications from the literature that the kindergarten program and the length of that program can influence or diminish stress for children.



## CHAPTER III

### METHODOLOGY

The aim of this study was to explore alternate program designs for benefits to kindergarten children in general, and more specifically those who daily cope with multiple care-givers. Hypotheses are stated as follows:

H<sub>1</sub>: Stress scores from the half-day academic kindergarten program (Ka/2) will be greater than stress scores from the half-day developmentally appropriate kindergarten program (Kd/2) [Ka/2 > Kd/2].

H<sub>2</sub>: Stress scores from the full-day academic kindergarten programs (Ka) will be greater than stress scores from the full-day developmentally appropriate kindergarten programs (Kd) [Ka > Kd].

H<sub>3</sub>: Stress scores from the half-day academic kindergarten program (Ka/2) will be greater than stress scores from the full-day developmentally appropriate kindergarten program (Kd) [Ka/2 > Kd].

H<sub>4</sub>: Stress scores from the half-day kindergarten program (Ka & Kd/2) will be greater than scores from the full-day kindergarten programs (Ka & Kd) [Ka & d/2 > Ka & Kd].

To discern differences in stress levels among children in full-day and half-day structured and developmentally appropriate kindergarten programs, the Stait-Trait Anxiety Inventory for Children (STAIC) by Spielberger (1973) in collaboration with C. Drew Edwards, Robert Lushene, Joseph Montuori, and Denna Platzek was selected and used.

This test was developed in 1969 and followed Dr. Spielberger's State-Trait Anxiety Inventory (STAI) used in studying levels of stress and anxiety in the adult and adolescent. The formats of the STAI and STAIC are similar with the major difference being a reduction of response categories from four to three in the latter and adding the three response categories to the Test Form for each item to make the required response more concrete. The STAIC was initially developed as a research tool for the study of anxiety in elementary school children. There are two report scales to measure different anxiety concepts: state anxiety (A-State) and trait anxiety (A-Trait). In a discussion about the STAIC, it should always be referred to as: "How-I-Feel-Questionnaire" the printed title of the form (Spielberger, et al., 1973).

The A-State scale is designed to measure transitory anxiety such as perceived feelings of apprehension, tension, and worry that vary in intensity and fluctuate over time. The A-Trait scale measure relatively stable individual differences in anxiety proneness, or how children differ in experiencing anxiety states. State anxiety is an empirical process or reaction which is taking place now at a given level of intensity. Trait anxiety indicates a latent disposition for a reaction of a certain type to occur if it is triggered by appropriate stimuli. Elevation in A-State is normally evoked in children exposed to stressful situations. Usually, children higher in A-Trait experience A-State elevations more frequently and with greater intensity than low A-Trait children because they perceive their environment as threatening.

Since the validity of the STAIC rests upon the assumption that a child has a clear understanding of the state and

trait instructions, the child's attention should be directed to the fact that the instructions are different for the two parts of the inventory. It should be emphasized that the child must report how he feels at a particular moment in time when he responds to the A-State scale (C-1), and how he generally feels when he responds to the A-Trait scale (C-1). (Spielberger, et al., 1973).

To administer the STAIC test to kindergarten children requires reading the instrument to them, so with this age the test is given individually although it is usually group administered to the older students who can read. The test should take less than 10 minutes to give, and the children should be able to orally identify their choice of answer as the tester marks the instrument. Words should not be defined, but the child should be encouraged to choose the word they think best fits how they feel.

Research from use of the adult instrument has demonstrated scores on the A-Trait are not easily affected by environment, but A-State scores are (by design) influenced by the immediate environment.

Papay, Constello, Hedl, and Spielberger (1975) used the STAIC in comparison with Individualized Multi-age Program (IMP) testing first and second graders to determine if self-paced educational environment enhanced personal growth. The tests were administered to 267 first and second graders from a large metropolitan area. There were approximately equal numbers of children assigned to traditional and individualized multiage programs who were tested. The students were individually tested using the STAIC A-State and Trait instrument. The children were given a mathematical task to complete, and were then retested on the STAIC A-State scale. The relationship obtained from the test results was shown to be consistent with results obtained for college students. "The results of the present study provide evidence

that the STAIC can be used in the measurement of anxiety in primary grade children (Papay, et al., 1975, p. 846).

Papay and Spielberger (1986) in continued studies of the relationship of STAIC T and standardized measures of achievement with young children, used the STAIC and found this to be a highly reliable instrument to assess stress with kindergarten, first and second graders. This reliability was based on the provision that the questionnaire was presented on an individual basis. The test sample consisted of 948 kindergarten, first and second grade children randomly selected from 30 elementary schools in a large metropolitan area. The test scores were evaluated by gender, grade level, and type of test administration. All children participated in the STAIC State and Trait Anxiety scale. Kindergarten and first graders were tested with the Metropolitan Readiness Test (MRT) and STAIC State-Trait scale. The California Achievement Test (CAT) was given to second grade students. The CAT and MRT were administered by the classroom teacher during homeroom. STAIC testing was done individually for all kindergarten students, and individually or in small groups of first and second graders. Findings included T-anxiety lower in kindergarten than first and second grade. Small but significant negative correlations were found between STAIC T-Anxiety scores and measures of school achievement. Individual testing resulted in higher internal consistency.

The finding that higher anxiety was associated with poorer achievement in children was consistent with results previously reported by Finch, Pezzute, Montgomery, and Kemp (1974) who found that emotionally disturbed children were characterized by poorer academic performance (Papay, et al., 1986, p. 285).

The findings of these studies support the flexibility and effective

range of the STAIC from kindergarten to the sixth-grade level.

In pilot testing the "How-I-Feel-Questionnaire", kindergarten children were selected from similar programs to be used in the study. The questionnaire was easily understandable to five and six year old kindergarteners. Prior to actually asking the questions the concept of "How I feel right now" was discussed, and the answers "hardly ever", "sometimes", and "often" and in each case these terms seemed to be comprehended by the student. In preparing for the trait section a discussion of "hardly ever", "sometimes", and "often" were compared to "a little bit of the time", "some of the time", and " a lot of the time", and this was a sufficient explanation for their grasp. Characteristically, this age child is open to asking questions and responding with straight forward answers so they talked easily with the experimenter and responded to the instrument in an appropriate manner.

Each STAIC item is a three-point rating scale which values of 1, 2 or 3 are assigned choices. The range of scores can be from a minimum of 20 to a maximum of 60. Each question on the A-State test begins with "I feel . . ." and is followed with three adjective terms for all 20 questions. Half of the terms indicate anxiety (nervous, worried) and the other 10 reflect lack of anxiety (calm, pleasant). For items in which the key terms indicate the presence of anxiety, "very" and "not" are assigned values of 3 and 1, respectively. The order of weighting is reversed for items in which the key terms indicate the absence of anxiety, for example, "very" = 1, "not very" = 3. A value of 2 is assigned to all responses where the child circles only the adjective. For example, "very nervous" = 3; "calm" = 2; and "not calm" = 3. Items indicative of the absence of anxiety, which are

scored 1, 2, and 3, are: 1, 3, 6, 8, 10, 12, 13, 14, 17, and 20. For the remaining items, "very" is scored 3 and "not" is scored 1 (Spielberger, et al., 1973). The A-Trait scale requires responses that reflect frequency of occurrence of behavior. The scores are assigned: "hardly ever", 1; "sometimes", 2; and "often", 3; for all items on the A-Trait test. The "How-I-Feel-Questionnaire" is included in Appendix A.

In developing the STAIC, the STAI was redesigned and simplified based on interviews with pilot groups of children. Each child was also given the Children's Manifest Anxiety Scale [CMAS] (Castaneda, McCandles, & Palermo, 1956) and the General Anxiety Scale for Children [GASC] (Sarason, Davidson, Lighthall, Waite, & Ruebust, 1960). There is substantial support for test-retest reliability. Concurrent validity is based on correlation with previously mentioned test and is documented in Static Preliminary Manual provided with the testing instrument. Spielberger also documented the STAIC test accuracy when the test is properly administered individually to pre-reading students (See Appendix C).

This test has several features which made it suitable for this research. There was no training required for administration. Virtually any adult in the field of education could correctly supervise or administer the questionnaire. It is designed to not be affected by various conditions or environments. The instrument can be used either in groups or individually without significant difference in results. Scoring is relatively simple to complete as templates are available if a large group is tested there is an accompanying IBM 1230 computer answer sheet. As a research instrument, "this scale is probably the

best scale available for assessing anxiety in children" (Keyser & Sweetland, 1984, p. 638).

This study used subjects in the following classroom designs:

1. A full-day academic kindergarten class.
2. A full-day developmentally appropriate kindergarten class.
3. A half-day academic kindergarten class.
4. A half-day developmentally appropriate kindergarten class.

Both of the half-day programs were public school classes, and the full-day programs were in private schools. Parental permission was obtained in this project (See Appendix B). The private full-day developmentally appropriate program is accredited by the National Association for the Education of Young Children, a designation given only after their developmentally appropriate criteria have been met. The developmentally appropriate public school class has been assessed as such by several experts in the early childhood field including Dr. Beth Lamb, retired Head of Holland Hall Primary School, and former Supervisor of Kindergarten, Tulsa Public Schools. Observation of classrooms revealed activities such as: learning centers, small group interaction, and an abundance of child-centered activities. The academic full-day program appeared to be structured so that each child took their turn for each activity, lessons were teacher directed, and children's displayed work was all alike. In the academic full-day program it was noticeable that there was frequent cry by the children. The more academic public school program had interest centers that were assigned by the teacher, workbooks used for reading, and the activities teacher-directed and assisted. The socio-economic level of the students in all programs were within the range of lower middle-class to

middleclass. The classes were assigned by administrators in each school. All classes consisted of approximately 20 students. Table I describes the sample results while Table II illustrates the range of ages of the students tested.

With the exception of the full-day academic school, all teachers were open and receptive to the project and were interested in results when obtained. The more academic program was very hesitant to participate, they allowed the testing only at the end of the day after the day's work was over as the children were busy preparing for graduation. The children did not seem bothered by the questions or in participating with someone new, but a teacher sat with each child as the questions were asked, and occasionally explained words to the children. In the other three classrooms the situation was more relaxed and the children were anxious for their turn, often asking to be next. All of the students were friendly, unafraid, and cooperative while participating. The students would ask for clarification of some words occasionally, but usually just answered the questions. With the testing during the spring semester, the children were older and had been in class long enough to be comfortable and secure in that setting.

Test results to answer questions in this study will be drawn from the STAIC State scores as those scores are influenced by environment. "A-State vary in intensity and fluctuate over time as a function of situational stress" (Papay, et al., 1975, p. 840). State scores reflect transitory emotional conditions of tension, nervousness and worry, whereas Trait scores are not affected by the environment; State scores reflect stress from the situation (Papay & Spielberger, 1986). Results from this study may only serve to create additional questions



TABLE I  
SAMPLE RESULTS OF STAIC TEST

Category	Number of Students	Percentage	Male	Female
<u>School</u>				
Ka/2	22	30.6	13	9
Kd/2	17	23.6	12	5
Ka	15	20.8	6	9
Kd	<u>18</u>	<u>25.0</u>	<u>7</u>	<u>11</u>
Total	72	100.0	38	34

TABLE II  
RANGE OF STUDENTS' AGES

Age	Frequency	Percentage
5	20	27.8
6	51	70.8
7	1	1.4

for educators to consider, but within that limitation some direction may become evident.

## CHAPTER IV

### RESULTS

Results from this study were analyzed following a General Linear Model (GLM) procedure of a SAS computer program with attention given to Type 1 analysis. Table III gives the Means and Standard Deviation for the sample programs. Table IV is a summary of Analysis of Variance (AOV). The standard analysis of variance (ANOVA) procedure is not appropriate since ANOVA assumes equal cell sizes in any multi-way analysis, and the samples used were of unequal size. Interaction between Day\*Program is the first effect to be tested from the AOV table, and there is a significant interaction ( $p = 0.0441$ ). Then levels of Day must be compared within each level of Program and levels of Program must be compared within each level of Day. Table V compares the levels of Program within each level of Day. There is significant difference between half-day and full-day schools for academic programs, but no difference for developmentally appropriate programs. There is also significant difference between academic and developmentally appropriate programs for half-day schools, but not for full-day schools.

Comparison of STATE scores in regard to specific hypothesis show:

1. Stress scores were significantly greater from the half-day academic program when compared with scores from the half-day developmentally appropriate program ( $Ka/2 > Kd/2$ ).

TABLE III  
MEANS AND STANDARD DEVIATION OF SAMPLE PROGRAMS

Level of Day	Level of Program	$\bar{N}$	STATE	
			Mean	SD
Full	Academic	15	32.33	4.08
Full	Developmental	18	32.55	2.87
Half	Academic	22	35.18	4.24
Half	Developmental	17	31.94	2.53

TABLE IV  
SUMMARY OF ANALYSIS OF VARIANCE (AOV)

Source	df	SS	F	PR	F
Total	71	988.00			
Day	1	30.90	2.45		
Program	1	48.17	3.83		
Day*Program	1	52.94	4.21	0.0441	
Error	68	855.99			

TABLE V  
COMPARISON OF STATE ANXIETY SCORES

School Comparison	Difference Between Mean	DAY and PROGRAM Comparison
Ka/2 - Ka	2.848*	Half vs Full day for acad prog
Kd/2 - Kd	-0.614	Half vs Full day for dev appr prog
Kd/2 - Kd/2	3.241*	Acad vs Dev appr prog for half day
Ka - Kd	-0.221	Acad vs Dev appr prog for full day

\*Denotes significant at 0.05 level of significance

2. There were no significant differences between stress scores from the full-day academic program and the full-day developmental program ( $K_a = K_d$ ).

3. Stress scores were significantly greater from the half-day academic program when compared with scores from the full-day developmentally appropriate programs ( $K_{a/2} > K_d$ ).

4. Stress scores were significantly greater from the half-day academic program when compared with scores from the full-day academic program ( $K_{a/2} > K_a$ ).

5. There is no significant difference between stress scores from the full-day and half-day developmental programs ( $K_d = K_{d/2}$ ). There is significant difference between stress scores with half-day academic programs more stressful than the full-day academic program ( $K_{a/2} > K_a$ ).

## CHAPTER V

### CONCLUSIONS

Full day kindergarten is a double question, because there are implications both for education and child care. Within these two areas there are differing philosophies; educationally there is a conflict between academic and developmentally appropriate programs. Parents and professionals differ on the best way to meet child care needs, and often the options are so limited that this is really no good solution. The move to full day kindergarten is one of the leading trends in education today and it is important that research document the best alternatives for children.

In this research the question of stress was the pivotal issue in comparing full to half-day programs. Stress was found to be greater in the half-day academic program than the half of full-day developmentally appropriate program. Developmentally appropriate programs are important regardless of the length of the program. Oftentimes professionals are hesitant to offer support for full day kindergarten because of the concerns of inappropriate curriculum (Elkind, 1987). From this study we can conclude that pressure for more academics does increase stress. Stress was not significantly different from either of the full day programs as a reduction in stress. Interestingly there is significant difference with stress greater in half-day academic programs as compared to full day academic programs. Conceivably having

more time to assimilate the task with less pressure to hurry had an impact. In the full day academic program used for this study there is time for activity and free play, which may explain part of the difference. Even in an academic full-day there is more time for teacher-child interaction, more language experiences between the children and between children and adults, and more time for socialization. All of these are factors that are positive in evaluation of full-day programs.

Significant differences in scores indicate differences in stress levels in some of these classrooms, but there is a need for more research and testing before conclusions can be reached. There is also the question of teacher interaction and effect, so more research with a variety of teachers will serve to substantiate the results. There are many conditions that increase stress in children's lives such as: academic pressure, family stability, and peer pressure to name a few. Some areas of research needed would include: more information on the level of stress from other sources in the children's lives, correlation to socio-economic levels, the number of care givers in the child's day, whether the children are involved in latchkey experiences or sibling care.

From this study we concluded one primary advantage of the full-day kindergarten was for children spending more time in a full-day program the pressure was diffused. The intensity of the academic and developmentally appropriate full-day kindergarten could follow-up and give even more information for understanding quality programs for young children. More research comparing full and half-day kindergarten programs is needed to document academic differences, and the



differences in stress levels. More comparison between academic and developmental programs also will give corroboration to quality programming for young children regardless of the length of the program day.

Many different experiences can produce stress in kindergarten children and research needs to continue before conclusion become fact. Clinging to the concept of half-day programming does not reflect an understanding of today's society and the needs of children growing up in the 1980's. There are several options for extending school programs that meet needs for kindergarten which could be tailored to fit into individual communities. The lack of programming for the half-day of school when kindergarteners do not attend only sets them up for the possibility of self-care, an unacceptable solution. A better resolution is the understanding of the developmental stages of children's physical and emotional growth that will lead to support of sound, safe, and secure learning environments where stress is reduced.

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## APPENDIXES

APPENDIX A

TEST INSTRUMENT



**HOW-I-FEEL QUESTIONNAIRE**

Developed by C. D. Spielberger, C. D. Edwards, J. Montuori and R. Lushene  
STAIC FORM C-1

NAME \_\_\_\_\_ AGE \_\_\_\_\_ DATE \_\_\_\_\_

**DIRECTIONS:** A number of statements which boys and girls use to describe themselves are given below. Read each statement carefully and decide how you feel *right now*. Then put an X in the box in front of the word or phrase which best describes how you feel. There are no right or wrong answers. Do not spend too much time on any one statement. Remember, find the word or phrase which best describes how you feel right now, *at this very moment*.

- |     |                  |                          |                 |                          |            |                          |                |
|-----|------------------|--------------------------|-----------------|--------------------------|------------|--------------------------|----------------|
| 1.  | I feel . . . . . | <input type="checkbox"/> | very calm       | <input type="checkbox"/> | calm       | <input type="checkbox"/> | not calm       |
| 2.  | I feel . . . . . | <input type="checkbox"/> | very upset      | <input type="checkbox"/> | upset      | <input type="checkbox"/> | not upset      |
| 3.  | I feel . . . . . | <input type="checkbox"/> | very pleasant   | <input type="checkbox"/> | pleasant   | <input type="checkbox"/> | not pleasant   |
| 4.  | I feel . . . . . | <input type="checkbox"/> | very nervous    | <input type="checkbox"/> | nervous    | <input type="checkbox"/> | not nervous    |
| 5.  | I feel . . . . . | <input type="checkbox"/> | very jittery    | <input type="checkbox"/> | jittery    | <input type="checkbox"/> | not jittery    |
| 6.  | I feel . . . . . | <input type="checkbox"/> | very rested     | <input type="checkbox"/> | rested     | <input type="checkbox"/> | not rested     |
| 7.  | I feel . . . . . | <input type="checkbox"/> | very scared     | <input type="checkbox"/> | scared     | <input type="checkbox"/> | not scared     |
| 8.  | I feel . . . . . | <input type="checkbox"/> | very relaxed    | <input type="checkbox"/> | relaxed    | <input type="checkbox"/> | not relaxed    |
| 9.  | I feel . . . . . | <input type="checkbox"/> | very worried    | <input type="checkbox"/> | worried    | <input type="checkbox"/> | not worried    |
| 10. | I feel . . . . . | <input type="checkbox"/> | very satisfied  | <input type="checkbox"/> | satisfied  | <input type="checkbox"/> | not satisfied  |
| 11. | I feel . . . . . | <input type="checkbox"/> | very frightened | <input type="checkbox"/> | frightened | <input type="checkbox"/> | not frightened |
| 12. | I feel . . . . . | <input type="checkbox"/> | very happy      | <input type="checkbox"/> | happy      | <input type="checkbox"/> | not happy      |
| 13. | I feel . . . . . | <input type="checkbox"/> | very sure       | <input type="checkbox"/> | sure       | <input type="checkbox"/> | not sure       |
| 14. | I feel . . . . . | <input type="checkbox"/> | very good       | <input type="checkbox"/> | good       | <input type="checkbox"/> | not good       |
| 15. | I feel . . . . . | <input type="checkbox"/> | very troubled   | <input type="checkbox"/> | troubled   | <input type="checkbox"/> | not troubled   |
| 16. | I feel . . . . . | <input type="checkbox"/> | very bothered   | <input type="checkbox"/> | bothered   | <input type="checkbox"/> | not bothered   |
| 17. | I feel . . . . . | <input type="checkbox"/> | very nice       | <input type="checkbox"/> | nice       | <input type="checkbox"/> | not nice       |
| 18. | I feel . . . . . | <input type="checkbox"/> | very terrified  | <input type="checkbox"/> | terrified  | <input type="checkbox"/> | not terrified  |
| 19. | I feel . . . . . | <input type="checkbox"/> | very mixed-up   | <input type="checkbox"/> | mixed-up   | <input type="checkbox"/> | not mixed-up   |
| 20. | I feel . . . . . | <input type="checkbox"/> | very cheerful   | <input type="checkbox"/> | cheerful   | <input type="checkbox"/> | not cheerful   |



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## HOW-I-FEEL QUESTIONNAIRE

## STAIC FORM C-2

NAME \_\_\_\_\_ AGE \_\_\_\_\_ DATE \_\_\_\_\_

DIRECTIONS: A number of statements which boys and girls use to describe themselves are given below. Read each statement and decide if it is *hardly-ever*, or *sometimes*, or *often* true for you. Then for each statement, put an X in the box in front of the word that seems to describe you best. There are no right or wrong answers. Do not spend too much time on any one statement. Remember, choose the word which seems to describe how you usually feel.

- |     |  |                          |             |                          |           |                          |       |
|-----|--|--------------------------|-------------|--------------------------|-----------|--------------------------|-------|
| 1.  | I worry about making mistakes . . . . .                          | <input type="checkbox"/> | hardly-ever | <input type="checkbox"/> | sometimes | <input type="checkbox"/> | often |
| 2.  | I feel like crying . . . . .                                     | <input type="checkbox"/> | hardly-ever | <input type="checkbox"/> | sometimes | <input type="checkbox"/> | often |
| 3.  | I feel unhappy . . . . .   | <input type="checkbox"/> | hardly-ever | <input type="checkbox"/> | sometimes | <input type="checkbox"/> | often |
| 4.  | I have trouble making up my mind . . . . .                       | <input type="checkbox"/> | hardly-ever | <input type="checkbox"/> | sometimes | <input type="checkbox"/> | often |
| 5.  | It is difficult for me to face my problems . . . . .             | <input type="checkbox"/> | hardly-ever | <input type="checkbox"/> | sometimes | <input type="checkbox"/> | often |
| 6.  | I worry too much . . . . .                                       | <input type="checkbox"/> | hardly-ever | <input type="checkbox"/> | sometimes | <input type="checkbox"/> | often |
| 7.  | I get upset at home . . . . .                                    | <input type="checkbox"/> | hardly-ever | <input type="checkbox"/> | sometimes | <input type="checkbox"/> | often |
| 8.  | I am shy . . . . .   | <input type="checkbox"/> | hardly-ever | <input type="checkbox"/> | sometimes | <input type="checkbox"/> | often |
| 9.  | I feel troubled . . . . .  | <input type="checkbox"/> | hardly-ever | <input type="checkbox"/> | sometimes | <input type="checkbox"/> | often |
| 10. | Unimportant thoughts run through my mind and bother me . . . . . | <input type="checkbox"/> | hardly-ever | <input type="checkbox"/> | sometimes | <input type="checkbox"/> | often |
| 11. | I worry about school . . . . .                                   | <input type="checkbox"/> | hardly-ever | <input type="checkbox"/> | sometimes | <input type="checkbox"/> | often |
| 12. | I have trouble deciding what to do . . . . .                     | <input type="checkbox"/> | hardly-ever | <input type="checkbox"/> | sometimes | <input type="checkbox"/> | often |
| 13. | I notice my heart beats fast . . . . .                           | <input type="checkbox"/> | hardly-ever | <input type="checkbox"/> | sometimes | <input type="checkbox"/> | often |
| 14. | I am secretly afraid . . . . .                                   | <input type="checkbox"/> | hardly-ever | <input type="checkbox"/> | sometimes | <input type="checkbox"/> | often |
| 15. | I worry about my parents . . . . .                               | <input type="checkbox"/> | hardly-ever | <input type="checkbox"/> | sometimes | <input type="checkbox"/> | often |
| 16. | My hands get sweaty . . . . .                                    | <input type="checkbox"/> | hardly-ever | <input type="checkbox"/> | sometimes | <input type="checkbox"/> | often |
| 17. | I worry about things that may happen . . . . .                   | <input type="checkbox"/> | hardly-ever | <input type="checkbox"/> | sometimes | <input type="checkbox"/> | often |
| 18. | It is hard for me to fall asleep at night . . . . .              | <input type="checkbox"/> | hardly-ever | <input type="checkbox"/> | sometimes | <input type="checkbox"/> | often |
| 19. | I get a funny feeling in my stomach . . . . .                    | <input type="checkbox"/> | hardly-ever | <input type="checkbox"/> | sometimes | <input type="checkbox"/> | often |
| 20. | I worry about what others think of me . . . . .                  | <input type="checkbox"/> | hardly-ever | <input type="checkbox"/> | sometimes | <input type="checkbox"/> | often |

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APPENDIX B

PERMISSION LETTER TO PARENTS

## OKLAHOMA STATE UNIVERSITY

## Consent to Participate in a Research Project

I \_\_\_\_\_, voluntarily agree to allow my child to participate in the study, "The Other Half of the Kindergarten Day-A Critical Appraisal of Stress Levels in Kindergarten Students", being conducted by Sharon Bentley, graduate student, Oklahoma State University, college of Home Economics.

I understand:

This study will be carried out by Sharon Bentley as part of her masters thesis research, under the supervision of Dr. Elaine Wilson, Parenting Specialist and Assistant Professor, Family Relations and Child Development Department, Oklahoma State University.

Participants will be asked to answer questions from a questionnaire "How-I-Feel" which will take about 5-10 minutes individually with the tester asking the questions to the students. Classes were randomly selected by school principal. The purpose of this study is to see if the stress level differs in half-day or full-day kindergartens.

Names of participants will not be taken, and any child or their parents may decline to participate. Data will be analyzed comparing groups.

By signing this consent form, I acknowledge that my participation in this study is voluntary. I also acknowledge that I have not waived any of my legal rights or released this institution from liability for negligence.

If I have any questions about the research procedures, I may contact the principal investigator, Sharon Bentley at 918-252-7276 or Dr. Wilson at 405-624-7186 during working hours.

\_\_\_\_\_

date

\_\_\_\_\_

signature

APPENDIX C

SPIELBERGER LETTER

CHARLES D. SPIELBERGER, PH.D.  
GRADUATE RESEARCH PROFESSOR OF PSYCHOLOGY AND DIRECTOR  
CENTER FOR RESEARCH IN BEHAVIORAL MEDICINE & HEALTH PSYCHOLOGY  
UNIVERSITY OF SOUTH FLORIDA, HMS 482  
TAMPA, FLORIDA 33620-8100  
PHONE: 813/974-2342 OR 2340

---

10

Ms. Sharon Bentley  
8422 East 64th Place  
Tulsa, OK 74133

DATE April 6, 1988

SUBJECT

Dear Ms. Bentley:

I was pleased to learn that you are using the State-Trait Anxiety Inventory for Children (STAIC) in your M.A. thesis research at Oklahoma State University.

Although the STAIC was developed for use with 4th, 5th and 6th grade children, we have found that it works quite well with much younger children including those in kindergarten. The scale must be, of course, administered individually and read to kindergarten and first grade children, but it can be given in small groups if read to second graders. A reprint of a study in which we used the STAIC with young children and a bibliography of research with this scale are enclosed.

Best personal regards and best wishes in your thesis research.

Sincerely,



APPENDIX D

STRESS SCALE FOR CHILDREN

You may have seen the Holmes and Rahe Stress Scale for adults. The scale below, based on that scale, ranks the life events that cause stress in children.

Life Event	Value
Death of a parent	100
Parent's new relationship (new siblings involved)	90
Divorce of parents	73
Parent's new relationship	70
Separation of parents	65
Parent's jail term	63
Death of a close family member (i.e., grandparent)	63
Personal injury or illness	53
Parent's remarriage	50
Suspension or expulsion from school	47
Parents' reconciliation	45
Summer vacation	45
Parent or sibling illness	44
Mother's pregnancy	40
Anxiety over sex	39
Birth of a new baby (or adoption)	39
New school or new classroom or new teacher	39
Money problems at home	38
Death (or moving away) of a close friend	37
Death of valued pet	37
Change in school work	36
More quarrels with parents (or parents quarreling more)	35
Change in school responsibilities	29
Sibling going away to school	29
Family arguments with grandparents	29
Winning school or community awards	28

Mother going to work or stopping work	26
School beginning or ending	26
Family's living standard changing	25
Change in personal habits—(bedtime, homework)	24
Trouble with parents—lack of communication, hostility	23
Change in school hours, schedule of courses	23
Family's moving	20
A new school—high school	20
New sports, hobbies, family recreation activities	20
Change in church activities—more involvement or less	19
Change in social activities—new friends, loss of old ones, peer pressures, teasing	18
Change in sleeping habits (giving up naps)	16
Change in number of family get-togethers	15
Change in eating habits—going on or off diet, new way of family cooking	15
Vacation, other than summer	13
Christmas	12
Breaking home, school, or community rules	11

Mark the items that happened in the last 12 months and add up the points. If the score exceeds 300 points, the child may be (but not necessarily is) more vulnerable to stress-related problems.

Source: Sally Reed. "Stress, What Makes Kids Vulnerable?" Instructor, XCIII, (May, 1984).



APPENDIX E

HONIG'S LIST OF TELLTALE SIGNS OF STRESS  
IN YOUNG CHILDREN

### TELLTALE SIGNS OF STRESS IN YOUNG CHILDREN

- Doesn't respond to friendly caregiver overtures
- Daydreams frequently
- Has grave, solemn face; rarely smiles or laughs (check first for iron deficiency; see Honig & Oski, 1984)
- Cries a great deal for months after entry into group care (even though caregivers have been gentle and responsive)
- Acts sullen, defiant (says "I don't care" frequently when caregiver explains how misbehavior has hurt another)
- Punishes self through slapping, head banging, or calling self bad names ("bad boy")
- Is overly sensitive to mild criticism
- Flinches if teacher or visiting adult approaches with caressing or reassuring gesture of outstretched arm
- Reports proudly to teacher that he or she has hurt another child
- Is overly vigilant about others' misdeeds, tattles, or jeers.
- Is highly demanding of adults although usually fairly self-sufficient
- Bullies or scapegoats and may get other children to join in
- Carries out repetitive, stereotyped play that may have destructive aspects
- Clings to, shadows caregiver, although in group for months
- Is unable to carry out sustained play with preschool peers
- Has constant need to sleep although physically well
- Is preoccupied with frightening images of monsters or other violent, threatening figures
- Has dull, vacant expression, as if trying to ward off thinking about stressful trauma or tries to deny stressful feelings
- Is hyperactive or restless, wanders around room, touches and disturbs toys and games, cannot settle into constructive play
- Displays disturbed bodily functions, has trouble with feeding, constipation, or diarrhea, soils self frequently months after toilet training is completed
- Has trembling of hands or facial twitches although apparently well
- Talks compulsively about physical dangers and threats
- Grinds teeth during naptime
- Has rigid facial expressions from taut muscles
- Displays loss of perceptual acuity
- Displays reduced attentional capacity; even though caregiver is very clear in communicating, the child cannot focus well on activity or request
- Stimulates self constantly (by prolonged thumb-sucking, masturbation, rocking body back and forth, or other such behaviors), which children normally do occasionally for self-comfort
- Feels jittery
- Stutters, uses disfluent speech, or refuses to talk in group (older preschooler)
- Is clumsy on easy manual tasks due to muscular tensions
- Frequently acts aggressively against others, even adults
- Has nightmares

Source: Alice Honig. "Stress and Coping in Children". In *Reducing Stress in Young Children's Lives*. NAEYC. 1986.

APPENDIX F

HONIG'S 20 SUGGESTIONS FOR HELPING  
CHILDREN COPE WITH STRESS

## ***How teachers can help children cope with stress***

Considering the large number and variety of stressors that children's lives entail, and considering the fragility of coping skills and the scarcity of buffering supports in some children's lives, what can parents and teachers do to help children cope with stress? Most of the suggestions given here focus on preschoolers and school-aged children rather than infants. Some will be useful for caregivers of children of all ages. Adults who care for children in stressful life situations need to have a *wide* variety of techniques and ideas to help young children adjust better in classrooms, at home, and in stressful situations such as temporary foster care or hospitalization.

1. **Fundamental to helping children cope with stress is the development of well-honed adult noticing skills.** Recognize when a child is stressed. Be alert to changes in behavior (more quarrels with playmates, bedwetting, poor concentration) that signal stress. Parents and teachers who are sensitive to telltale signs of stress can tune in more effectively. Learn the signs of stress (see Table 1).

2. **Demonstrate self-control and coping skills yourself.** Be fair and sensitive to differences and problems. Demonstrate brave behaviors: Keep calm even when classroom problems arise and stresses (such as crying, diarrhea, acting-out) seem to be especially prevalent or aggravating on a particular day. If a teacher's voice is exasperated, whiny, disappointed, aggrieved, or angry fairly often, then young children learn that these are acceptable models of coping with stress.

As a parent or teacher, **find social supports in your own life** so that you are energized for adaptive coping with problems that arise with young children. Your "feeling of confidence or faith that things will work out as well as can be reasonably expected and that the odds can be surmounted" contributes to children's effective coping (Werner, 1986, p. 192).

3. **Enhance children's self-esteem** wherever and whenever possible through encouragement, caring, focused attention, and warm personal regard. You are the mirror that reflects the personal worth of each child (Briggs, 1970).

4. Encourage each child to develop a special interest or skill that can serve as an **inner source of pride and self-esteem** (Werner, 1986).

5. **Use proactive intervention to avoid unnecessary stress.** Give children plenty of time before a transition. For example, use verbal, musical, or light-dimming signals so children can gradually put away toys and get ready for lunch. Anticipate stressful occasions.

*Preventative actions* lessen the possibility and impact of stressful events. Frequent fire drills make children less terrified of loud alarms or sudden commotions. Children who have experienced drills and other such procedures become used to their occurrence and the rules to be followed, so that a fire drill does not become an occasion for panic.

6. Help children understand the consequences and implications of negative, acting-out behaviors on others and on themselves. Shure and Spivack (1978) provide daily activities to help young children improve **skills in consequential thinking**.

7. **Acknowledge children's feelings and encourage verbal mediation.** Help children learn that they are not alone in having uncomfortable feelings. Give them permission to feel scared, lonely, or angry (as when a peer squashes their sandpie). Help them *decenter*—become able to see how others also feel upset if their play or rights are interfered with. Give children *words* to express their negative feelings so that they will not have to be aggressive or disorganized when stressed. "I" statements help a child communicate personal upset and strong wishes rather than accusing, hurting, or threatening others (Gordon, 1970).

Impulsive behavior often causes peer troubles. Help children think about the situation and their impatient feelings so they can avoid a fuss with

friends. Use Gordon's (1970) active listening: "You wish you could have the new trike all morning, but other children want to ride too, so we need to take turns." "You are trying so hard to sit still until the crackers are passed to you. You are wiggling and *waiting*. Good for you."

The "Think Aloud" lessons (Camp & Bash, 1981) teach children to deal with cognitive and interpersonal problems through verbal mediation. Children learn to talk to themselves in effective and skillful ways to identify their problem, to make plans for coping, and to weigh the merits of different solutions.

**8. Help children distinguish reality from fantasy.** Having strong angry wishes about a brother did not cause that brother to become ill. Papa did not leave home because you were a sloppy eater or were mad at him for not buying you two ice cream cones.

**9. Use gentle humor** when possible to *help children reframe* their negative thoughts and feelings. Then they can perceive mild stressors as possible opportunities or challenges. For example, if Jonathan accidentally knocked down his own block tower, you could comment matter-of-factly with a smile, "Jonathan, your elbow sure was a giant tower-smasher. Now you have a chance to design your next tower even fancier and taller."

**10. If the stressor on a child is peer aggression, focus directly on the stressor.** If a class bully gets others to tease or jeer at a child, *you must stop the bullying*. Talk to the children in your class about attitudes and values that permit bullying or threatening. Speak with the children and their parents separately. Aggression that is not addressed does not go away (Caldwell, 1977). Teachers need to be brave and direct in handling hurting. Children cannot be allowed to hurt others. A child who scapegoats needs to have other ways to feel good about herself or himself.

**11. Help children view their situation more positively.** Some stressors make a child feel ashamed as well as hurt. *Shame eats at a child's self-esteem*. Having a single parent can be such a stressor. As Blom, Cheney, and Snoddy (1986) have noted in their excellent resource for teachers: "A child can be helped to view the single-parent status of his mother as acceptable, not uncommon, and preferable to having both parents together and quarreling. [The child's] perception can be altered and the impact of the stress thereby reduced" (p. 82).

**12. Structure classroom activities to enhance cooperation** rather than competition. A cooperative climate in the classroom can help reduce stress: Children will flourish where they can grow and achieve at a pace comfortable for each. Required helpfulness has been found to increase children's sense of effectiveness and coping. Devise cooperative games to play (Honig, 1985b; Honig, 1985c; Honig, Wittmer, & Gibraltar, in press; Sobel, 1982).

If a child is unpopular with peers, arrange for *cooperative activities* that require children to work together. When you provide friendly younger peers as companions in mixed-age classes, unpopular children increase their social skills (Roopnarine & Honig, 1985).

**13. Modify classroom situations and rules.** Make choices and expectations easier to understand and to meet. *Rearrange environments to decrease stress*. Quiet reading corners should not be set up adjacent to tricycle riding or block building areas. Define activity areas with clear rules so that fewer tensions will arise in play.

**14. Find individual talk time** with troubled children. Find out how children perceive threats or stresses. A child may feel picked on or that nobody likes her or him. Help children think of a variety of possible solutions for their problems. *Generating alternatives* will increase a child's coping resources.

**15. Mobilize other children to help.** For example, if a handicapped child is entering a preschool class, talk with the children about strengths and troubles every child, and particularly the handicapped child, might have in Source: Alice Honig. "Stress and Coping in Children." In Reducing Stress in Young Children's Lives. NAEYC, 1986.

APPENDIX G

NEWSPAPER ARTICLE REPORTS ON STRESS  
FOR YOUNG CHILDREN AND COMPULSORY  
FULL-DAY KINDERGARTEN

## Funding Called Key To Early Education

**OKLAHOMA CITY (AP) —** A state education leader said Friday she agrees with state officials that early education is beneficial for children, but she said that funding will be of prime importance in such a policy.

During a state education board meeting Thursday, state school Superintendent John Folks said Oklahoma could fall behind states that provide early education programs for 4-year-olds and full-day kindergarten if it does not follow suit.

Oklahoma now provides half-day kindergarten.

Oklahoma Education Association president Kyle Dahlem said if a policy of early education is adopted, then kindergarten attendance should be mandatory.

"The laws say it is mandatory to provide kindergarten, but it is not mandatory to attend," Ms. Dahlem said. "We must make certain that if it is that important to have early education, then the children should attend."

Folks and a state board member said schools should offer early childhood education and full-day kindergarten classes on an elective rather than a compulsory basis.

Ray Potts, a state school board member, urged state Education Department researchers to look at other states that have full-day kindergarten classes.

The decision on the length and number of days would be made more appropriately on the local level, Ms. Dahlem said.

Source: "Funding Called Key to Early Education," Tulsa World (1988b), p. 6A.

## 92% of Tots Pass Test, Go To First Grade

ATLANTA (AP) — Results of a controversial first-grade readiness test administered to 90,434 Georgia kindergartners last month show that 92 percent passed, education officials said Friday.

The test, criticized by some as being too stressful for 5-year-olds and 6-year-olds, is required under the Quality Basic Education Act, enacted in 1985.

This year, for the first time, passing the test is generally a prerequisite for entering the first grade. The rules give districts the opportunity to make exceptions for children who fail if the teacher believes they should be promoted.

"The passing rate on this test is pretty much what we anticipated," said Stan Bernknopf, director of assessment for the state Department of Education. State officials had estimated that 90 percent would pass the test.

The test instrument was the California Achievement Test. Possible scores ranged from 187 to 602, with the pass-fail cutoff set at 443 and the average for Georgia students at about 532.

State School Superintendent Werner Rogers said Georgia kindergartners scored above the national average in all three areas of the test, with 79 percent exceeding the national average for math, 75 percent for visual recognition and 73 percent in sound recognition.

Children are asked such things as to count the number of items in a picture and tell what item in a picture doesn't fit in with the others.

While 7,396 students did not meet the cutoff score, that doesn't necessarily mean they won't be promoted to first grade, Rogers said.

If a child's teacher believes he or she is ready for first-grade work but the test score falls below the cutoff point, the child will be reassessed, he said.

Georgia is the only state to administer a paper-and-pencil test to kindergartners as a condition for promotion, and some early childhood experts have argued that standardized tests are too stressful for young children.

But Bernknopf said that he "never thought it was stressful at all."

"When kids are taking a test and they know it's for real, they do a little better," he said.

John Vaughn, director of guidance counseling and testing for Fulton County, said the test may not be a good diagnostic tool if so many pupils earned a passing score.

"I'd like to have all them pass, but the nature of testing is, if it is valid ..., there would be a higher percent not passing," he said.

Source: "Ninety-Two Percent of Tots Pass Test--Go to First Grade," Tulsa World (1988a), p. 10A.



## Schooling for 4-year-olds urged

**OKLAHOMA CITY (AP) —** State education officials say Oklahoma should start educating its children when they are younger.

State school Superintendent John Folks said Thursday Oklahoma could fall behind states that provide early education programs for 4-year-olds and full-day kindergarten if it does not follow suit. Oklahoma now provides half-day kindergarten.

"Those early childhood programs really make an educational impact" on performance in subsequent grades, Folks said during a meeting of the state education board.

Ray Potts, a state school board member, urged state Department of Education researchers to look at other states that have full-day kindergarten classes.

Carolyn S. Hughes, Oklahoma City's assistant school superintendent, told the board Oklahoma City has full-day kindergarten at three elementary schools. She said the full-day pupils attend three days a week rather than five half-days.

Hughes said pupils attending full-day kindergarten scored higher on reading and math tests than students attending the usual half-day kindergarten.

Source: "Schooling for 4-Year-Olds Urged," Tulsa Tribune (1988).

VITA <sup>2</sup>

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Master of Science

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