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CHILDREN'S STRESS BEHAVIORS AND DEVELOPMENTALLY APPROPRIATE
PRACTICE IN FAMILY CHILD CARE HOMES

by

Chih-Ying Chang

A thesis submitted in partial fulfillment
of the requirements for the degree

of

MASTER OF SCIENCE

in

Family and Human Development

Approved:

UTAH STATE UNIVERSITY
Logan, Utah

2000

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ABSTRACT

Children's Stress Behaviors and Developmentally Appropriate Practice
in Family Child Care Homes

by

Chih-Ying Chang, Master of Science

Utah State University, 2000

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Department: Family and Human Development

This study investigated and qualitatively compared differences in children's stress reactions across two levels of developmentally appropriate practice in family child care homes. Data were collected through observations.

Six children, five boys and one girl from six different family child care homes, between the ages of 36 and 60 months, were observed for the type and frequency of stress behaviors. The six family child care homes were divided into two groups based on more or less use of appropriate practices, and they were observed for the use of appropriate practices. Three one-hour observations were held in each family child care home. The Classroom Child Stress Behavior Instrument was used to identify stress behaviors in children. The Rating Scale for Measuring the Degree of Developmentally Appropriate Practice in Early Childhood Classrooms and the Guidelines of Developmentally

Appropriate Practice were used to identify developmentally appropriate/inappropriate practices.

Results indicated that children in the homes where developmentally appropriate practices were used tended to display fewer stress behaviors than the children in the homes that used developmentally appropriate practices less frequently. Children in the homes that used developmentally appropriate practices frequently exhibited primarily passive stress behaviors or active self-to-self stress behaviors. Children in homes that used inappropriate practices displayed more active stress behaviors toward other children or objects. The child care providers from the homes that used more appropriate practices spent time with children, motivated children involved in play, and applied teaching strategies. In developmentally inappropriate homes, the environment there tended to be a less positive climate and children were less motivated.

(93 pages)

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CHAPTER I
STATEMENT OF THE PROBLEM

Children as well as adults experience stress. Since it is difficult to quantify the impact of stress on children and many people feel that children do not have stress, children's stress and its consequence have been overlooked. Because the early years are the time for rapid development, the problems resulting from stress can have permanent effects on children's lives. When stress in childhood is examined, it is apparent that extreme or prolonged stress has severe, negative consequences for children's socio-emotional and cognitive development (Bur et al., 1992). Children in severe stress no longer believe in their own worth, nor do they believe in the worth of others; therefore, violence and pain are accepted as daily occurrences (Brenner, 1984). However, child care providers can be an excellent source of information and support in helping children to cope with stress.

Family child care is one of the influential environments in a young child's life since it is usually the first caring environment they go to besides their own home. Children of working parents, on average, spend 8 to 10 hours a day in daycare (Bredekamp & Copple, 1997). According to the National Association for the Education of Young Children (NAEYC), "family child care has become an increasingly visible sector of the child care community" (Bredekamp & Copple, 1997, p. 4), acknowledging its important effect on children. Logically, family child care environments have the ability to increase or decrease the amount of stress children experience.

In order to enhance the quality of early childhood programs and thereby their

positive impact on children, the NAEYC has created guidelines called developmentally appropriate practice (DAP). Among other things, DAP prescribes practices that may decrease stress in the classroom. Although research has indicated that children show more stress behaviors in classrooms with more developmentally inappropriate practices (DIP), we do not know if there are particular DAPs that are more linked to relieving stress than others. Addressing these issues will help practitioners create classrooms even more friendly to the needs of young children.

Purpose of the Study

The purpose of this study was to investigate and qualitatively compare differences in children's stress reactions across three levels of DAP in family child care homes. The assumption was that the higher the level of DAP in the family child care setting, the less often children will display stress behaviors.

Previous studies have linked levels of DAP in preschool and kindergarten with children's stress behaviors. Findings indicate that the more often the early childhood program uses DAP, the less children in the program exhibit stress behavior (Burtset al., 1992; Hart et al., 1998). However, researchers have not yet attempted to link DAP in the child care home with stress behaviors. This study extends the literature by addressing this issue. In addition, we suggest that the child care home is an appropriate and necessary context within which to study stress because it more closely approximates the family context, usually the most dominant context in a young child's life.

Research Questions

The specific research questions were as follows:

Question One: Is there a relationship between DAP and children's stress behavior?

Question Two: Do certain aspects of DAP show a stronger relationship with stress behaviors than others? What aspects of DAP seem to be especially helpful in minimizing children's stress behaviors? Are there some opportunities for DAP which, when missed, seem more likely to result in child stress?

CHAPTER II

REVIEW OF LITERATURE

A Contextual Perspective on Children's Stress Adaptation

Vygotsky believed that what first appears as an external mediator of social behavior, later becomes an internal psychological process (Vygotsky, 1986). Similarly, Piaget also believed that external events become interiorized/internalized ideas through the process of assimilation and accommodation. He also wrote that affectivity is the force driving mental processes. Piaget suggested four factors related to cognitive development: maturation, active experience, social interaction, and a general progression of equilibrium. Each of these factors and their interaction are essential for cognitive development (Wadsworth, 1996). This viewpoint emphasizes the importance of the environment as the child attempts to construct knowledge.

For children in the preschool years, major sources of stress are the family, peer group, non-family adults, the neighborhood, and school. The potential stressors may be events or situations with negative or positive characteristics. For example, negative stressors can be pain, loss, failure, humiliation, and threat; positive stressors can be success, high achievement, and accomplishment (Blom, Cheney, & Snoddy, 1986).

Forman (1993) introduced the transactional definition of stress. The theory refers to a stimulus or stressor, a response, and intervening variables as terms for the study of stress. Contact with the stimulus (or stressor) causes an individual to make adjustments and this adjustment is called a response. Blom et al. (1986) explained the relationships

among stressor, response, and stress, "when both a stressor and a response occur, stress is present" (p. 3).

In all three theories, the impact of the environment on child development is clear. Regardless of the theoretical interpretation of process the child goes through to gain knowledge (e.g., Piaget or Vygotsky) the environment can also be a source of stress (Forman, 1993) and stress can rebound to impact the acquisition of knowledge. However, Forman's theory also suggests a positive side to stress; that is, children can be stressed by circumstance, but also empowered to deal with life more productively.

Effects of Children's Stress

In accordance with Blom et al. (1986), there are two signs of children in stress, atypical behavior and a change in a child's behavior. Atypical behavior comprises abnormal or unusual behaviors according to age, sex, or situational context. A change in behavior means "a deviation from what is usual or typical for a specific individual child" (p. 15). Responses to stress can be clustered into several categories, such as feeling, thinking, action, and body response. The range of behavioral reactions or indicators is also wide with regard to the different domains of expression.

Children may experience the following symptoms when they are stressed: crying, depression, poor concentration, sweating palms, racing heart, dry throat, headaches, and ulcers. Stress can also be the cause of sleep disturbances, increased irritability, outbursts of anger, and aggressive behavior (Blom et al., 1986). According to Jewett (1997), chronic stress can affect a child's health seriously, even lowering the child's resistance to

disease. Obviously, any of the above can interrupt a child's learning. By the same token, for a child experiencing any of the negative stress reactions, learning will probably not be a pleasant experience.

Quality of Early Childhood Environments as Defined by
Developmentally Appropriate Practice

The debate regarding "what constitutes a quality early childhood program" has gone on for decades. The NAEYC stresses that "a high quality early childhood program provides a safe and nurturing environment that promotes the physical, social, emotional, and cognitive development of young children while responding to the needs of families" (Bredekamp, 1986, p. 1). In 1987 the NAEYC published its first professional consensus document, Developmental Appropriate Practice in Early Childhood Programs Serving Children from Birth Through Age 8 (Bredekamp, 1987). According to Bredekamp (1986), developmental appropriateness refers to four components of early childhood programs, including curriculum, adult-child interactions, relations between the home and program, and developmental evaluation of children. Research studies strongly support the positive social and academic outcomes for children engaged in DAP programs (Hoot, Parmar, Hujala-Huttunen, Cao, & Chacon, 1996).

In 1997, the NAEYC published the revised edition, Developmentally Appropriate Practice in Early Childhood Programs (Bredekamp & Copple, 1997). This document supports theoretical perspectives which emphasize learning as a sociocultural process and children's developing metacognition. It also draws attention to multiculturalism

(Neuman, 1997). One of the major changes of this edition was to give “developmentally appropriate” a more clear definition regarding the relationship among age, culture, and individual determinants of development (Hart, Burts, & Charlesworth, 1997).

More Versus Less DAP

According to Charlesworth, Hart, Burts, and Hernandez (1991), and Charlesworth, Mosley, Burts, and Hart (1994), teachers in early childhood programs report that the more they believe in developmentally appropriate instructional practices, the more overall control they have in planning and implementing instruction. DAP thus allows the teacher a lot of freedom to develop curriculum. Teachers using DAP appear to feel more empowered in making their own instructional decisions than teachers using more DIP. Furthermore, attending DAP kindergarten appears to have positive effects on children’s achievement in the primary grades.

Environments and Childhood Stress

Children have the need to feel safe, exercise autonomy and have control over time (Jewett, 1997). Hardy, Power, and Jaedicke (1993) stressed the importance of providing supportive environmental structures and adult-child interactions that allowed children the autonomy to solve their own problems and thereby also helped them to learn a wider variety of coping strategies. Studies in both kindergarten and preschool indicated that the more developmentally appropriate the classroom environment was, the less children exhibited stress behavior. Children in less developmentally appropriate

classrooms exhibited significantly more observed stress behaviors than those children in H-DAP classrooms (Burts, Hart, Charlesworth, & Kirk, 1990; Burts et al., 1992; Durland, DeWolf, Charlesworth, Hart, & Burts, 1992; Hart et al., 1997). Burts et al. (1990, 1992) compared the differences in the frequency of stress behaviors exhibited by children in developmentally appropriate and developmentally inappropriate kindergarten classrooms. Results indicated that children exhibited significantly more stress behaviors in a developmentally inappropriate classroom than a developmentally appropriate classroom. Hart et al. (1998) examined the effect of classroom type (more developmentally appropriate--DAP; and less developmentally appropriate--DIP) on the stress behavior of preschool children. Results showed that twice the level of overall stress behavior was observed in DIP versus DAP preschool classrooms. This relationship, however, has not been explored in family child care homes.

CHAPTER III

METHODS

Rationale for Research Method

Several studies have examined the relationship between DAP and stress behavior in preschool and kindergarten. Results indicate that the more developmentally appropriate the classroom is, the less children exhibit stress behaviors (Burts et al., 1992; Hart et al., 1997).

While these studies have examined the link between developmental appropriateness and stress behaviors quantitatively, the present study will explore that link qualitatively. Goodwin and Goodwin (1996) identified the differences between quantitative and qualitative research. Regarding the data-collection strategies, the quantitative researcher is independent from the process, while the qualitative researcher is part of the measurements, data-collection and analysis experience. In this study, the researcher collected data qualitatively by conducting in-depth observations and interviews, and thereafter by participating directly in data analysis.

One further difference between the two methods is that quantitative researchers analyze data inductively, while qualitative researchers employ both deductive and inductive processes (Strauss & Corbin, 1990). By using qualitative methods of analysis, this study intended to further explore the link between DAP and stress behavior. Specifically, the goal was to determine the linkage between DAP and children's stress behaviors in the family child care homes.

Observation was used as the main method of data-collection. According to Bakeman and Gottman (1986), observation has served as an important strategy in studying humans in the social and natural world." Goodwin and Goodwin (1996) stressed that observation is an appropriate and helpful technique in early childhood research. They explain the benefits of observation this way: "by taking part in the activities of the individuals being studied, the researcher learns of their perceptions of reality--termed 'constructed realities' -- as expressed by their actions. . . ." (pp. 131-2).

The researcher in this study served the role as "observer as participant." The description "observer as participant" means "the researcher has some interaction with participants but is primarily an observer from the outside" (Goodwin & Goodwin, 1996). Goodwin and Goodwin (1996) remarked that the observer has the advantages of detachment, objectivity, and little personal risk if he or she has only minimal interaction with participants.

Description of Sample

Six children, five boys and one girl, between the ages of 36 and 60 months were participants in this study. The children were enrolled in six different family child care homes. The original plan was to involve equal numbers of boys and girls, but based on sample availability, five boys and one girl were selected. The six licensed family child care homes were all in Cache County and were selected through purposive sampling, meaning the samples were selected to fit the purpose of this study. In order to qualify for the sampling group, each home had to include a minimum of three children in the child

care clientele, in addition to the provider's own children. At least one child in each home, the potential participant, was required to be a typically developing English-speaking child between the ages of 36 and 60 months.

After this initial sampling group was established the homes were sorted into one of three groups based on the level of implementing DAP as determined by two child care professionals who had made periodic visits to each home. Group one consisted of programs utilizing DAP most of the time. Group two consisted of programs judged to utilize DAP about half the time. Group three included programs judged as not utilizing DAP at all or using it very rarely. The categorizations were constructed jointly by two child care professionals who were well versed in DAP, and who made at least four visits per year to each child care home. The child care homes in the sampling group had all been visited within four weeks previous to the beginning of the study.

Providers in each of the child care homes were contacted by phone to determine if the facility fit the criteria and to assess the providers' willingness to cooperate with the research team. Providers were told that one child between age 3 and 5 would be selected from their family child care program as the target child for participation in the study. When there was more than one child that fit the criteria, one of them was randomly chosen at the first observation. Providers were asked to inform the parents about the study. Since there was no intervention involved with the children and families, parents were informed by providers as a courtesy, but informed consent from parents was not necessary or required by the university's human subjects board. Family background variables such as socioeconomic status (SES), parent education, and family size were not

taken into account in choosing the target children. After written consent was obtained from the providers, observations were scheduled based on the time the target child attended the child care home. All observations took place during self-selected activities.

Procedures

Each child was enrolled in one of six separate child care homes. The six homes were divided into three groups, as stated in the sample description. Initially, four boys and two girls were selected as target children. One target girl later dropped out of the child care for unknown reasons. Since no other girl who fit the established criteria could be identified, another boy in the same child care home was selected to replace the girl who left. The children and the providers were observed for one hour per observation session by two trained observers. One was the graduate student who coordinated this study. The other was also a graduate student who worked as a supervising teacher in the lab school of the university. Each target child was observed three times, for a total of 18 visits. One observer focused on the behavior of the child care provider and the activities in the home as a measure of the developmental appropriateness of the setting. The other observer focused on the behavior of the target child.

Observations took place during self-selected activities during the time the target child regularly attended child care at the home. Eleven of the observations took place in the morning and seven in the afternoon with the morning and afternoon times fairly evenly distributed among participants. Data were collected over a 13-week period. Child care providers were asked to talk to the children about the observation and to stress that

the observers' job was to take notes without interacting with anyone in the setting. The providers were also instructed to explain to the children that the observers needed to do their work and so could not play or interact with them. Due to the curiosity of the children attending the child care homes, the observers occasionally found it difficult to avoid responding to the children, but the observers were able to minimize the interaction as much as possible with providers' assistance.

One observer recorded the lesson plan and daily schedule when they were available. If no lesson plan or schedule were offered at the child care facility, the provider was asked to provide it. In two homes no daily schedule or lesson plan was ever available throughout the duration of this study.

The observations were scheduled with providers by telephone. Following each observation period the providers were asked to complete a Provider Survey consisting of three forced choice questions (see Appendix A) to determine their feelings about the day and to assess whether or not it was a typical day. In all but one of the 18 cases providers responded that the day was typical. Space on the checklist was also available for the provider to list some of her specific questions. However, none of the providers listed questions.

Instruments

Field Notes

Both observers kept handwritten field notes on a description form (Sample Field Note, see Appendix B) that was created specifically for this study. The form consisted of

numbered lines and was divided into six 10-minute blocks. Both observers wore watches with timers that beeped every ten minutes. The observers synchronized their watches at the beginning of each session, and the timer allowed them to move on to the next 10-minute session at the same time. The beep was audible only to the researchers and did not disrupt the activities of the provider or the children.

The handwritten field notes consisted of two sections. The first was a running description of activities designed to capture the setting, actions, and conversations observed. It was completed during the data gathering session and was the major data gathering instrument for the study. The other was reflective, and was completed after the observation, and came from the observers' impressions, ideas, and concerns (Bogdan & Biklen, 1992).

Research Journal

The observers recorded their impressions of each session in a research journal after every observation (see Appendix C). They also recorded in this journal any questions they had about the data gathering session. This helped the observers understand their own point of view regarding the observation they had just completed and it helped them sharpen their focus for the next observation of the same child.

Coding Instrumentation

Goodwin and Goodwin (1996) stated that "the major data analysis activity that occurs after data collection is completed in coding," which was done in this study by breaking down, conceptualizing, and reassembling the data in new forms. According to

Miles and Huberman (1994), coding involves not only the researcher's differentiating and combining of the data, but also the researcher's analysis of reflections made after the experience and summary comments on the contact sheet. Classroom Child Stress Behavior Instrument (Burts et al., 1988) was used as a guideline in identifying stress in children (see Table 1).

Rating Scale for Measuring the Degree of Developmentally Appropriate Practice in Early Childhood Classrooms (Charlesworth et al., 1994), and Guidelines of Developmentally Appropriate Practice (Bredenkamp & Copple, 1997) were used to identify developmentally appropriate and inappropriate practices in the setting outlined in Tables 2 and 3. All three instruments were used as tools to code data from the observations, but coding was not limited to these sources. The knowledge of the two observers, in child development and early childhood education, was also the source in determining the appropriateness of the practice. Therefore, some new categories were added after the data were transferred.

Construct Validity

The definitions for observation codes were derived from a well-established work on DAP Rating Scale for Measuring the Degree of Developmentally Appropriate Practice in Early Childhood Classrooms (Charlesworth et al., 1993), and stress indicators of children's stress behavior Classroom Child Stress Behavior Instrument (Burts et al., 1988). All three instruments were listed in Appendices D, E, and F.

Table 1

Classroom Child Stress Behavior Instrument

Type of stress	Area	Description
Passive	1. Physically	<ul style="list-style-type: none"> a. Withdrawn (physically removing self from group activity, appears to be doing nothing) b. Excessive fatigue (e.g., dozes, complains of tiredness) c. Head on desk, slumping, lying down d. Sitting inappropriately in chair e. Standing at inappropriate times f. Yawning and/or stretching
	2. Facially	<ul style="list-style-type: none"> a. Frowning, scowling, pouting, sulking, worried look b. Has blank dull vacant expression daydreaming c. Gazing/looking around the room
	3. Nonresponsive/negative	<ul style="list-style-type: none"> a. Refuses to do work, gives up b. Ignores friendly overtures from others
	4. On looking (alone, stepping back from activity, watching others' activity)	
Active	Self with self	
	5. Automanipulation	<ul style="list-style-type: none"> a. Hand/hand manipulation b. Nose picking c. Mouth manipulation d. Plays with/sucks hair e. Masturbation/playing with self/exposing self f. Ear pulling g. Clothing manipulation (twisting, biting) h. Scratching i. Rubbing/picking body parts
	6. Repetitive/restricted movement	<ul style="list-style-type: none"> a. Rocking b. Repetitive leg and arm movement c. Shuffling (repetitive foot movement while standing) d. Facial twitches e. Hand tremors
	7. Wiggles/squirms	
	8. Self-destructive (head banging, slapping self, biting self, self name-calling)	

(table continues)

Type of stress	Area	Description
	f. Remove self from mainstream	a. Runs away, hiding, sneaking b. Slump of fetal position as a means of removal
	g. Physiological reactions	a. Temper tantrums b. Wets or soils clothes c. Throws up d. Cries, near tears e. Complains of felling sick (stomach ache)
	h. Unusual noises, heavy sighing	
	Self with others	
	i. Hostile/aggressive	a. Sassy/back talk b. Verbal hostility, disruptive c. Bullying or threatening children d. Physical hostility, fights, pushes e. Argues f. Instigating others to gang up on other children g. Making fun of other children
	j. Dependency	a. Stretches and leans in order to see other students' work during specified independent work b. Whines or asks for mother c. Teacher attention seeking
	k. Verbal dysfunctions	a. Refuses to talk in group b. Talking at inappropriate time c. Nervous inappropriate laughter d. Talks fast e. Compulsive talking f. Stutters
	l. Touching others at inappropriate times/ways	
	Self with object	
	m. Destructive	a. Destroy toys and games b. Destroy worksheet or workbook c. Doodling on desk
	n. Nondestructive	a. Playing with toy/object at inappropriate time and inappropriate ways b. Doodling on paper c. Pencil tapping d. Clumsy or fumbling behavior e. Sucking, biting object

Note. From Burts et al., 1988

Table 2

Rating Scale for Measuring the Degree of DAP in Early Childhood Classrooms

Area	Description
Curriculum goals	Range of curriculum areas covered by program; does program have specific goals for children's self-esteem, sense of competence, and positive feelings toward learning; the philosophy of growth and development.
Teaching strategies	The emphasis in the curriculum; organization of the curriculum; teacher preparation and organization for instruction; instructional activities; learning materials and activities.
Integrated curriculum	Language and literacy; math; social studies; science; health and safety; art, music, movement, woodworking, drama, and dance; multicultural education; outdoor activity.
Guidance of social-emotional development	Prosocial behavior, perseverance, and industry; helping, cooperating, negotiating, and solving social problems; guidance techniques; facilitation of self esteem by expressing respect, acceptance, and comfort for children regardless of their behavior.
Motivation	Internal vs external sources of motivation and rewards for achievement; teacher as a model for motivation.
Transitions	Transitions within the school; transitions within the classroom.

Note. Charlesworth, Mosley, Burts, and Hart, 1994. Copyright 1994 by National Association of Early Childhood Teacher Educators.

Table 3

Guidelines of DAP

Area	Description
Creating a caring community of learners	Promoting a positive climate for learning; fostering a cohesive group and meeting individual needs.
Teaching to enhance development and learning	Environment and schedule; learning experiences; language and communication; teaching strategies; motivation and guidance
Constructing appropriate curriculum	Integrated curriculum; the continuum of development and learning; coherent, effective curriculum; curriculum content and approaches.
Assessing children's learning and development	--
Reciprocal relationship with parents	--
Program polices	--

Note. Bredekamp and Copple, 1997. Copyright 1997 by the National Association for the Education of Young Children. Adapted with permission of the authors.

Transcription of Field Notes

According to Miles and Huberman (1994), raw field notes can be fairly illegible and contain private abbreviations. Therefore, field notes needed to be converted into "write-ups" which could be typed so they are intelligible to anyone. Lofland and Lofland (1994) suggested that full field notes should be written right after observation. The contents should include the description of events, people, conversation, and physical setting. As the field notes were typed up, any analysis, inferences, impressions, and feelings about the observation were also included.

Contact Summary

The observers filled out the contact summary form (Appendix G) after they transcribed their field notes. Lofland and Lofland (1994) have stressed the importance of recording observations promptly so that observers may keep track of the main concepts, themes, issues, and questions during each contact. This is especially true for projects with more than one observer. Since the observers filled out the contact summary form after transcribing the field notes, they used their impressions developed during the field note write-up to summarize the main points in the contact summary (Bogdan & Biklen, 1992; Lofland & Lofland, 1994).

Pilot Study

A pilot study was conducted to test method and instruments. It was comprised of two observations. The first observation took place in a university child development lab classroom with one observer. The second observation took place in a family child care home with two observers. As with the full study, one observed the caregiver and incidents of DAP while the other observed the target child.

Data analysis indicated that the child in the university lab school displayed passive stress behaviors only while the child in family child care exhibited both passive and active stress behavior, which included attention seeking and physical hostility. Children seemed to be especially stressed in the absence of DAP. For example, the target child in the university lab school withdrew himself from an activity because he had a hard time putting a puzzle together. He did not have teacher's assistance or guidance during this incident. The child tried the puzzle several times but was not successful. The teacher,

meanwhile, failed to recognize the child's problem and did not give appropriate assistance. The child lost interest in the puzzle and started wandering around the room. This episode suggested to the researchers that children might show passive stress behavior in the absence of DAP.

From the pilot study, the researchers experimented with and refined instruments, such as the form for field notes, and practiced research procedures. For example, during the pilot study, it was discovered that a clearer indication of each 10-minute interval needed to be made because the researcher lost track of time easily while taking field notes. Watches with countdown timers were then piloted during data collection and found to be adequate. During the pilot study the researchers also developed better observation strategies, such as learning to position themselves in such a way that they got a clear view of interactions without interrupting activities. The researchers also learned ways of declining child-initiated interactions, such as smiling and looking away while the child started to notice that he or she was being observed, or telling the child who wanted to start a conversation that the researcher had to work on her notes.

The pilot study also guided the focus of future observations when it was found that stress behavior occurred not only during overt inappropriate practice but also in the absence of appropriate practice. This significant finding helped to shape and refine observations during the actual study.

CHAPTER IV

RESULTS

Data Analysis

As suggested by researchers trained in qualitative methods, data analysis started after the first observation by reviewing the field notes of that observation. The purpose of this early analysis was to help to focus the observation on certain items of DAP or particular child stress behaviors. Bogdan and Biklen (1992) suggested that analyzing data during data collection in the field can aid in conceptualization of the study's purpose, and boundaries, and aid the development of additional analytic questions.

Qualitative Methods and a Kaleidoscope of Meaning

Dye, Schatz, Rosenberg, and Coleman (2000) illustrated the use of a kaleidoscope metaphor as a template for the organization and analysis of qualitative research data. First, the transcriptions were noted with various remarks as raw data bits. Secondly, the data bits were refined into separate categories and formed an initial category set with some sub-categories developed. Then, after the ongoing processes of refinement throughout the data analysis, the relationships start to form among categories and most of the data bits fit into the categories. The kaleidoscope pattern starts to show. Finally, a well-defined kaleidoscope pattern emerges through linkages between categories and the emergence of an overall integrated pattern of relationships (see Figure 1).

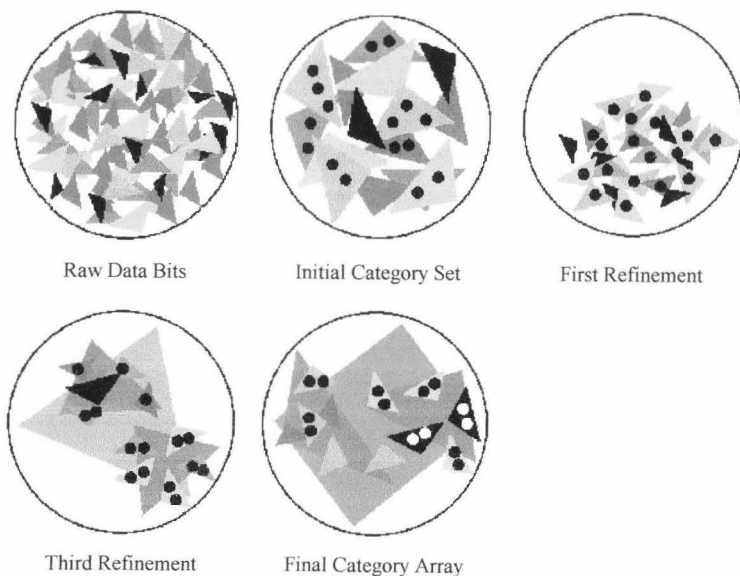


Figure 1. Kaleidoscope metaphor from Dye, Schatz, Rosenberg, & Coleman (2000).

Validity and Reliability

Internal validity. Because the researchers of this study acted as nonparticipant observers, they did not interact with either the providers or children; therefore, the chance that the observers influenced the environment was reduced. It was, however, a possibility that we believe was minimized because children and providers understood that the researchers were there in a non-interactive role. Interactions were minimal and when they did occur they were dealt with in a standard, pre-agreed fashion. Internal validity was enhanced because each visit to the child care home was fairly long (one

hour) and multiple visits took place across time, maximizing the chance that providers and children acclimated to researchers' presence.

Criterion-related validity. Criterion-related validity was demonstrated for the DAP measures. Anastasi and Urbina (1997) and Walsh and Betz (1995) described criterion-related validity using a group differences approach as "the extent to which test scores can differentiate between groups of people" (Walsh & Betz, 1995, p. 63). Generally this involves the comparison of mean test scores for the groups. In this study, the DAP instrument discriminated consistently between homes utilizing DAP predominantly and those utilizing it much less often. In addition, ratings of DAP using the Rating Scale for Measuring the Degree of Developmentally Appropriate Practice in Early Childhood Classrooms (Charlesworth et al., 1993), and Guidelines of Developmentally Appropriate Practice (Bredekamp & Copple, 1997) were related to prior professional classification of the homes. Homes that had previously been classified as H-DAP received higher ratings using the observation scale, and homes previously classified as L-DAP received lower ratings using the observation scale. Because of the small sample size, calculation and comparison of group means is not appropriate. Rather, professional judgment was used to qualitatively compare groups.

Construct validity. According to Anastasi and Urbina (1997), construct validity refers to "the extent to which a test measures a theoretical construct or trait" (p. 126). One way of measuring construct validity is to examine the theoretical relations among constructs. Consistent with previous work and developmental theory, children in this study with the lowest stress behaviors were found in the homes scoring highest on DAP.

Thus, in line with the theoretical framework proposed in this study, DAP was related to fewer stress behaviors exhibited by children in the family child care settings.

External validity. Since our sample was small and qualitative exploratory methods were used, it is not possible to generalize the results to a larger population.

Reliability. The same subjects were observed three times each with the same instruments. In all cases the instruments were adequate to cover all categories of observations. Using the selected instruments, child and provider behaviors demonstrated theory-based consistency across time. Further, a built-in check of reliability occurred when the codes on the transcription were verified and transferred to the contact summary sheet.

The two observers always discussed concerns and issues after each observation and came to an agreement regarding the coding of data.

Data Treatment

Transcription. The field notes were transcribed by participant (i.e. Audrey, Bonnie, Claire, Dora, Eve, and Flora), and by observation number (three observations per home). Each transcription was divided into six 10-minute intervals and the 10-minute intervals were numbered consecutively.

First, the researcher went through the transcripts, underlining the incidents that matched the items from the coding system, the DAP or stress behaviors. In the margin, the specific coding category for each underlined incident was noted.

Contact summary and spreadsheet. All codes were transferred to a Contact

Summary Sheet (Appendix G) under item number two. A Contact Summary Sheet was completed for each observation. As the transfer took place the researcher recorded impressions regarding the main issues and special interests of the observation under item number three. Finally, the researcher also coded new or remaining questions to guide future observations (see item four).

Then, codes for stress behaviors of the target child and DAP of the provider were transferred onto spreadsheets according to their co-occurrence and sequence of occurrence across the observation (see Appendix H). Diagrams were developed to express the flow of behavior across time and to assist the researcher in determining concurrent and preceding behaviors. A sample diagram is available at Appendix I.

Provider data. After all the DAP ratings from each setting were processed, the researcher found that the homes grouped more clearly into two rather than three categories. Thus, there were no homes in the middle DAP category. According to the data, one of the homes originally assigned to middle group better fit in the “high DAP” category, while the second fit better in the “less DAP” category. Therefore, the child care homes were grouped as follows: High DAP (H-DAP, $n = 3$) and Low DAP (L-DAP, $n = 3$).

Child data. The child data were summarized for frequency of occurrence of stress behavior in each category by participating child and by observation. The data were also summarized for each participant across observations.

Research Questions and Results

Question One

Is there a relationship between DAP and children's stress behavior? Tables 4 and 5 summarize children's stress behaviors by individual stress items and by subcategories, respectively. Pseudonyms were given for each participating child and provider. Several behaviors, assumed to be stress behaviors but not part of the initial coding sheet, were noted and recorded on Table 4 as "new."

Overall, children in H-DAP homes were coded as displaying less stress behavior than the children in L-DAP homes. The type of stress behavior coded in H-DAP homes was primarily passive behavior or active self-to-self behavior. Children in L-DAP homes exhibited more active stress behavior toward other children or objects. Many of these behaviors were coded as hostile/aggressive.

Closer look at child behavior. Angus, a four-and-half-year-old boy in a H-DAP home, moved his body constantly, displaying passive stress behaviors. He talked to himself and providers a lot, but not much to the other children. He did not play in a group and never moved at the same pace as the rest of the children. For all three of the observations he was the last one to finish at snack time. Usually, he finished the snack 10 to 15 minutes after the other children had and by then they were already playing outside. He also had a hard time finishing up his outdoor activities and returning inside with the other children when called. He often needed to be reminded to follow the routine. However, he generally seemed comfortable in the child care setting.

Ben, age three and a half (H-DAP), seemed to be a very motivated boy. He was always involved in every activity. He got frustrated sometimes because the tasks appeared to be slightly beyond his level and showed this frustration by withdrawing himself from the activity. With his provider's direction and encouragement, he was always able to move on with the rest of the group at the same time. He was curious and displayed good listening skills. He sometimes got picked on by another boy who was a little older and attended the child care at the same time of day, but he seemed not to be distressed by this too much. With the provider's help, he played and worked with the other boy cooperatively and a friendship was beginning between the two of them.

Cassie (H-DAP), who was barely 3 years old, was very quiet. She did not talk to or play with other children. Her favorite toy was a dressing table and she liked to play dress up. During free play time, she always sat by the dressing table with dolls or dressed herself up. With the provider's challenge, she began to work on increasingly complex tasks. She was very patient in figuring out how things worked. She had a hard time joining other children's play, and therefore she spent most of the time by herself. The stress behaviors she showed included mainly on-looking behaviors and on-and-off engagement in an activity. The on-and-off engagement is a new stress behavior added to the coding system because the researcher felt the child was uncomfortable, because she lost interest in the activity or because she was experiencing difficulty engaging in another one. But, with the provider's assistance, by the last observation, she played and talked with other children, and even made up stories for their play.

Dave (L-DAP), a 4 year old, seemed eager for adult attention and approval. The

stress behaviors he showed were mainly physically passive or hostile and aggressive behaviors. He worked hard and was the provider's little helper. There were always more than 10 children attending this child care and at least half of them were infants and toddlers. He followed the requests of the provider with great skill. He participated in activities but also wandered a lot in between, showing passive stress behaviors. It seemed that he required someone to tell him what to do. Throughout the observations, he became increasingly rougher with objects and with the other children, even to the point of becoming hostile and aggressive. One time he put his arms around a toddler's neck in an aggressive way, and on another occasion he lifted up a table in an aggressive, hostile manner.

Ernest (L-DAP), 4 years old, was a very complacent child even though one conversation with his playmate involved some violent imaginations. He showed mainly physically passive and on-looking behaviors. He liked to play with action figures. He had a baby sister who attended the same child care and he sometimes tried to interact with the two baby girls (his sister and the provider's daughter). During the times when he and his sister were the only daycare children present (excluding the children of the provider), he played by himself, primarily because the provider's two boys dominated the environment and received the provider's nearly undivided attention. Ernest could not join them even though he attempted to. It appeared that he lost most of his energy and motivation when he and his baby sister were the only "outside" children in the environment and at these times he seemed lonely and helpless.

Frank (L-DAP) was 4 years old at the time of the observations. He had a younger

Table 4

Children's Stress Behavior in Each Child Care Home

Type of behavior	H-DAP			L-DAP		
	Angus	Ben	Cassie	Dave	Ernest ^a	Frank
Passive						
1. Physically	3	5	3	10	12	--
2. Facially	--	--	--	--	2	--
3. Non-responsive/negative	5	3	--	4	--	--
4. On-looking	5	2	9	1	9	7
New - on-and-off activity ^b	1	--	5	--	--	5
Active						
Self with self						
5. Automanipulation	6	1	2	5	1	5
6. Repetitive/restricted movement	12	--	--	1	--	--
7. Wiggles/squirms	10	--	--	--	--	--
8. Self destructive	--	--	--	3	--	--
9. Removes self from mainstream	--	3	2	1	--	--
10. Physiological reactions	3	--	--	--	--	--
11. Unusual noises, heavy sighing	2	2	--	--	2	--
Self with others						
12. Hostile/aggressive	--	--	1	10	--	26
13. Dependency	2	5	--	--	--	2
14. Verbal dysfunctions	1	--	--	--	--	1
15. Touching others at inappropriate times	--	2	--	--	--	2
New - no empathy toward upset children ^b	--	--	--	1	--	--
Self with object						
16. Destructive	2	--	--	7	--	--
17. Nondestructive	7	--	--	8	3	16
New - doodling ^b	1	--	--	--	--	--
New - jumping ^b	--	--	--	1	--	--
Subtotal	60	23	22	52	29 ^a	64
Grand total		105			145 ^a	

^a Ernest became ill during the second observation so it lasted only 40 minutes.

^b Stress behaviors added to the coding system in the course of observation.

Table 5

Children's Stress Behavior Coding Summary

Type of behavior	H-DAP			L-DAP		
	Angus	Ben	Cassie	Dave	Ernest ^a	Frank
Passive	14	10	17	15	23	12
Subtotal		41			49	
Active						
Self with self	33	6	4	10	3	5
Self with others	3	7	1	11	0	31
Self with object	10	0	0	16	3	16
Subtotal		64			88	
Total stress behavior	60	23	22	52	29 ^a	64
Grand total		105			145 ^a	

^a Ernest became ill during the second observation so it lasted only 40 minutes.

brother who attended the child care as well. His interactions with the other children and objects were often aggressive. He became physically aggressive with little provocation, especially towards his younger brother. The provider had three preschool girls of her own attending the child care. Frank had an especially difficult time getting along with one of the provider's daughters, but all three daughters constantly received the provider's attention regardless of their activities. He was never physically hostile with the provider's children, but they picked on him constantly. He became verbally hostile when he seemed frustrated by the situation. He especially displayed agitated behaviors when he complained to the provider about one daughter's verbal and physical aggression, and the provider did not intervene on his behalf.

Children's stress behavior. Overall, in the H-DAP child care homes, the observers witnessed 41 passive stress behaviors and 64 active stress behaviors. For L-DAP child care homes, 49 passive stress behaviors and 88 active stress behaviors were recorded. The specific patterns and relevant anecdotal data within the two DAP categories will now be discussed.

However, Angus, who attended the H-DAP child care home, had the second highest number of stress behaviors (60) coded among the six target children. According to Table 4, the stress behavior that Angus had exhibited the most was active self-with-self behavior, which included automanipulation (6), repetitive/restricted movement (12), and wiggles/squirms (10); and active self-with-object behavior which was nondestructive (7). In comparison with the two target children from L-DAP child care homes, Frank, who had the highest number of stress behaviors coded (64), displayed 26 counts of hostile/aggressive, active self-with-other stress behaviors which was the highest number among all six children in this category. Dave displayed 52 counts of stress behavior, the third highest number in all six children. Dave displayed 10 counts of hostile/aggressive, active self-with-other stress behavior, 8 counts of nondestructive self-with-object active stress behavior, and 10 counts of physical withdraw passive stress behavior. In general, Angus never had unpleasant conversation or negative comment found during the observations. He could play with other children nicely even though he rarely played with a group. On the other hand, Frank did not have a good relationship with other children, especially the children of the provider. He had constantly complained to the provider (Flora) about the other children. Also, he had frequently fought with other children

verbally and physically. Dave had difficulty playing with other children. He was not willing to share toys with others. He frequently displayed hostile or aggressive behavior toward other children, both verbally and physically.

Closer look at providers' behavior and the setting. Table 6 indicates the overall demographics for of the six child care homes participating in this study.

Audrey's day care (H-DAP) was a group child care home. Across our three observations, 82% of the providers' behaviors in Audrey's child care were developmentally appropriate. During the three observations there were always three adults who supervised nine or fewer children. They positioned themselves around the room, in such a manner that all the children were supervised. When one adult had to leave the room, she made sure the other two could cover for her so that the children had continuous supervision. Reading activities occurred frequently at this facility. The schedule was set and clear for all the children. The environment was well organized, and hence all of the children knew where to get what they wanted and had also been trained to put things away when it was time to clean up. Children in this child care home were busy and talkative. Providers made sure each child was getting equal attention, including the babies. They held the babies while reading to older children and got down to talk to or play with the ones who were crawling on the floor. One observation at Audrey's child care occurred in the morning and the other two in the afternoon.

Bonnie's child care (H-DAP) was a more home-like setting mainly because it was not a group child care home. She had fewer children in her care, and she was the only provider. Bonnie's own children were all grown. In her day care she had two boys and

Table 6

Overall Demographics of Child Care Homes

Name of child care provider	H-DAP			L-DAP		
	Audrey	Bonnie	Claire	Dora	Eve	Flora
Number of children for which home is licensed	16	6	8	12	8	8
Number of provider's own children present	0	0	2	1	3	3
Number of years in child care	9	8	4	4	1	4
Provider's education level	B.S.	A.A.	CDA	H.S.	H.S.	B.S.
Cost per month	\$450	\$315	\$400	\$315	\$320	\$360

Note: Audrey has a B.S. in Family & Human Development; Flora has a B.S. in Psychology.

one girl in the mornings and some school-age children in the afternoon. All the observations done at her site were in the mornings with three children present, two 4-year-old boys and a baby girl approximately 1 year of age. Bonnie planned activities that she did along with the children, such as making cookies and playing games. Even when the children were completing art projects, she had them work in the kitchen while she prepared a snack. While the boys were doing age appropriate activities, Bonnie would always make sure the baby girl had toys to play with or was sitting on her lap. When they made cookies on the kitchen counter, Bonnie would either hold the baby or seat her on a highchair so the child could watch. Bonnie let the children work by themselves as much as possible. She gave instruction whenever needed and was always patient and had the

children work on tasks geared toward their individual skill level. There was conversation going on at all times and the 4-year-olds talked to each other frequently. The children acted as though they felt at home.

Claire's child care (H-DAP) home had toys spread out over the room. Claire's program has three boys and four girls. She was the only provider in this child care. Children in this care were always busy doing things. Claire had two children of her own in the home. Her two girls were 4 and 5 years old. During the free play time, the provider went to each child in the room, talked with him/her, asked questions about their play, gave new ideas, or challenged with harder tasks. For example, when the target child (Cassie) was playing at the dressing table, Claire would ask about what she was doing. Later, she would challenge Cassie to comb the hair of the doll or encourage her to braid the doll's hair and then put a rubber band around it. Claire would then celebrate Cassie's accomplishment by giving her specific verbal encouragement. Claire's younger daughter sometimes had difficulty sharing things with the other children, because the child care was in her home and Claire was her mother. Both of Claire's daughters sometimes seemed to feel like they could get away with misbehaving because Claire had to watch other children. When that happened, Claire would investigate the incident and determine her daughter's role in the event. Claire checked on each child, considered their interests and abilities, and constantly challenged them with more complex tasks. All observations at Claire's took place in the morning.

Dora's child care home (L-DAP), a group home, was licensed for 16 children. She had one assistant. Usually 12 children, including two infants, five toddlers, and five

preschoolers, attended the facility. The child care home was located in the basement of her home. Dora had to get lunch and snack ready by going to the kitchen upstairs. Children in this child care were quiet and often wandered around the room. Dora talked mainly to her assistant and only spoke to the children to give them basic instructions. She announced her instructions while walking across the room or cleaning. She seldom used children's names or got down to their level and looked at them. Both providers were always busy, mainly setting out or picking things up. They never seemed to have time for an individual child. Dora's assistant sometimes became impatient. She would put toys away because the baby knocked them down, or stop an activity because she felt the children were not participating. The babies spent a lot of time in the cribs or high chairs with nothing to do, and, therefore, they cried a lot, especially when sitting in the high chairs. Dora would talk to a crying child from across the room while she was busy getting things ready. All of the observations at Dora's child care took place in the morning.

Eve (L-DAP) had three children of her own in her child care. Her daughter was 1 year old, and her sons were 4 and 5 years old. She did not have planned activities. She spent most of her time watching the children play on their own. She got the toys out and helped the children set them up, but she did not play with them. Eve talked to her own children quite often but ignored the other children. Her children had their own set of toys that the other children had no access to. Sharing was not encouraged in this child care home. Eve's children knew that they did not have to follow whatever their mother said -- at least the first few times she said it. Eve could not tell when the children she cared for

acted differently or were in distress. For example, the target child complained to the provider that he was sick and did not seem interested in doing anything. Eve said, "No, you're not sick." Eve did not believe he was ill until he vomited. One observation took place in the morning; two took place in the afternoon.

Flora (L-DAP) had four daughters. They were 3, 4, 5, and 6 years old. The three younger children attended the child care full-time. Flora usually had four more boys besides her own children. Apart from the meal and snack time, she did not have a fixed schedule for the day. During free play time, there were very few toys for the children and some of them did not function well. Flora talked to the children quite often but, because her own children frequently demanded her attention, she concentrated more time and effort on her own children. Flora's children and the target child Ernest did not get along. They were constantly mean to each other. For example, Flora's girls pushed and hit Ernest while he tried to climb up from the slide. There was no intervention about the issue at all, even though Ernest told the girls "no" and complained to Flora many times. Flora did not talk about things the children should or should not do, and many physically and verbally hostile/aggressive behaviors occurred. All the observations took place in the afternoon.

According to Table 7 and Figure 2, the majority of interactions/instances recorded from the three child care homes in H-DAP group were developmentally appropriate practice. On average, 92.6% of the total interactions or instances (249) in H-DAP group are appropriate practice. On the other hand, only a very small portion, 11.97% of the total interactions/instances (207) in the L-DAP group, were coded as appropriate practice.

Table 7

Overall Information of Child Care Homes

Practices (Interaction or instances)	H-DAP			L-DAP		
	Audrey	Bonnie	Claire	Dora	Eve	Flora
Frequent practices						
DAP	75	94	60	4	7	13
DIP	17	2	1	76	46	61
Percent DAP						
DAP	81.52	97.92	98.36	5.00	13.21	17.57
Average		92.6			11.97	

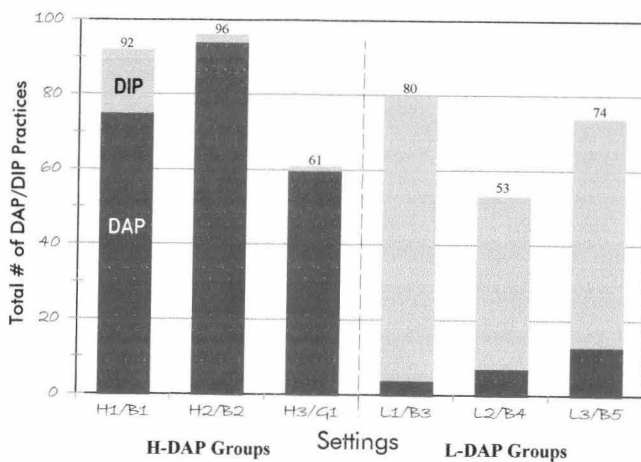


Figure 2. DAP/DIP across settings: comparison among six settings.

The providers' attitudes toward their own children were very different in the H-DAP group and the L-DAP group. Among six child care homes, all three L-DAP homes had providers' own children present in their child cares. There was only one child care home in the H-DAP group where the provider's own children attended the child care. The providers from the L-DAP group paid more attention to their own children than to the daycare children. The rules of the child care did not apply to their own children. In comparison, Claire, the H-DAP provider, who also had her own children in her child care, always worked on spending an equal amount of time with each child in her child care and did not discriminate between her own and client children. When Claire's children tried to stretch the limits by not doing the same thing that the client children were requested to do, she always made sure her own children understood that was not acceptable.

Relating child and provider behaviors. Based on the field notes, the interactions in each child care home were coded under the appropriate DAP/DIP category. Table 8 categorizes the developmentally appropriate practices that were found from the observations. In the same format, Table 9 presents the developmentally inappropriate practices recorded over the visits.

According to Table 8, the H-DAP child care homes had not only the majority of interactions coded as appropriate practice, but there was also a greater variety of DAP interactions. As an example, Audrey's, Bonnie's, and Claire's child cares had 31, 39, and 32 different categories of DAP, respectively. The L-DAP group, Dora's, Eve's, and Flora's child cares, had 4, 5, and 10 different categories of DAP, respectively. On the

Table 8

DAP Across Child Care Groups

DAP items	H-DAP			L-DAP		
	Audrey	Bonnie	Clare	Dora	Eve	Flora
Assessing children's learning & development	--	--	1	--	--	--
Constructing appropriate curriculum	--	--	--	--	--	--
Math-game	--	2	1	--	--	--
various approaches to develop language & literacy skills	--	1	--	--	--	--
Environment & schedule	--	--	--	--	--	--
Organized environment & routine	--	3	--	--	--	--
Transition	2	--	3	--	--	1
Maintain a safe, health environment	6	--	3	--	--	1
Foster children's initiative	1	1	--	--	--	--
Health & safety	--	--	--	--	--	--
Integrate facts into daily habits	--	3	1	--	--	1
Nutrition	1	--	--	--	--	--
Fostering a cohesive group & meet individual needs	--	2	--	--	--	1
Help to build a sense of the group	2	--	--	--	--	--
Respect, value, & accept children	2	1	--	--	--	--
Flexible working area	--	1	--	--	--	--
Be aware of stress in children	1	--	1	--	--	--
Work is individualized;	2	1	--	--	--	--
Social relationships	1	--	--	--	--	--
Instructional activity-peer conversation, work and play cooperatively in groups	--	3	2	--	--	--
Language & literacy	--	--	--	--	--	--
Read to children	5	--	--	--	--	--
Generous amounts of time	--	--	1	--	--	--
Literacy thru science & social study	--	--	1	--	--	--
Subskills are taught	--	--	1	--	--	1
Technical skills are target as needed	--	--	1	--	--	--
Language & communication	--	--	--	--	--	--
Engage conversations about real experiences, respond attentively	3	2	--	--	--	--
Develop language & communication skills	2	5	--	--	--	--
Enhance active listen & observe	1	1	--	--	--	--
Children talk to ea. other/provider	--	--	1	1	--	--
Respond attentively to children's verbal initiatives	--	4	3	--	--	1
Learning experience	--	--	--	--	--	--
Learning relevant to children's life	1	--	--	--	--	--
Based on children's interest & ability	--	1	2	--	--	--
Materials & activity relevant to children's lives	--	2	1	--	--	--

(table continues)

DAP items	H-DAP			L-DAP		
	Audrey	Bonnie	Clair	Dora	Eve	Flora
Motivation & guidance	--	--	--	--	--	--
Pos. guidance techniques are used	4	1	2	1	--	--
Pos. guidance - problem solving; logical consequences	--	1	--	--	--	--
Pos. guidance - modeling & encouraging expected behavior	--	--	1	--	--	--
Pos. guidance - self control	2	1	--	--	--	--
Pos. guidance - specific direction	3	--	2	--	--	1
Stimulate & support children's engagement in play	4	1	--	--	--	--
Foster children's initiative	2	--	--	--	--	--
Verbal encouragement - specific comment	3	5	4	1	2	2
Motivate children to become involved in interesting learning	4	9	4	--	2	--
Patient	--	6	--	--	--	--
Redirecting children to more acceptable activities	--	4	--	--	--	2
Set clear limits	1	1	--	--	--	--
Social skill, self regulation	--	1	--	--	1	--
Positive feeling toward learning environment	--	--	--	--	--	--
Concern	4	1	--	--	--	--
Self-regulation/consistency	1	--	--	--	--	--
Develop self-confidences	3	--	--	--	--	--
Positive climate for learning	--	--	--	--	--	--
Gain trust relationship	2	--	2	--	--	--
Individual choices are encouraged	2	--	1	--	--	--
Positive adult-child relationships	6	--	--	--	--	--
Enough time is allowed to complete work	--	--	1	--	--	--
Equal amount of attention	--	7	5	--	--	--
Generous amount of time with children	--	1	2	--	--	--
Program Policy: ratio-adult/child	1	1	--	--	--	--
Reciprocal relationships w/ family	2	--	--	--	--	--
Teaching Strategy	--	--	--	--	--	--
Help children acquire new skills or understandings	1	2	1	--	--	--
Group problem solving	--	1	--	--	--	--
Adding complexity to tasks, providing materials, & assistance as	--	12	8	--	1	2
Reinforce positive behavior	--	--	1	1	--	--
Children learn to work collaboratively	--	1	--	--	--	--
Child's ideas are extended, questions are encouraged	--	1	1	--	1	--
Develop social skill & prob solving thru modeling, coaching	--	1	2	--	--	--
Maximize children's ability	--	3	--	--	--	--
Total	75	94	60	4	7	13

Note: The number of different DAP items was coded for each child care provider: Audrey, 31; Bonnie, 36; Clair, 30; Dora, 4; Eve, 5; Flora, 10.

Table 9

DIP Across Child Care Groups

DIP items	H-DAP			L-DAP		
	Audrey	Bonnie	Claire	Dora	Eve	Flora
Environment & schedule	--	--	--	--	--	--
Without daily schedule/routine	3	--	--	--	--	3
No transition	--	--	--	4	1	1
Discourage children's initiative	--	--	--	--	--	2
Health & safety	--	--	--	--	--	--
Lack of adult supervision	--	--	1	2	1	20
Fail to maintain a safe, health environment (cleanliness)	2	--	--	4	11	1
Fostering a cohesive group & meet individual needs	--	--	--	--	--	--
Don't know children well (name, boy or girl)	--	--	--	3	--	--
Neglect/unrecognized child's needs	--	--	--	4	7	2
Work is not individualized	--	--	--	5	--	--
Discourage children initiating in social relationships	1	--	--	--	--	--
Language & literacy	--	--	--	--	--	--
Read to children in a inappropriate way	1	--	--	--	--	--
Learning materials & activity - inappropriate	--	2	--	--	3	--
Language & communication	--	--	--	--	--	--
Do not respond attentively to children's verbal initiatives	1	--	--	1	--	1
Missing the chance to develop language & communication skills	--	--	--	--	--	3
Learning experience	--	--	--	--	--	--
Learning relevant to children's life	--	--	--	--	--	1
Based on children's interest & ability	--	--	--	1	--	--
Motivation & guidance	--	--	--	--	--	--
Pos. guidance technique was not used	1	--	--	2	--	5
Pos. guidance - fail to teach problem solving/logical consequences	--	--	--	2	1	--
Pos. guidance - fail to help the child learn the expected behavior	--	--	--	--	1	--
Pos. guidance - self control was not encouraged	--	--	--	--	--	1
Pos. guidance - no specific direction	5	--	--	1	--	--
Fail to stimulate & support children's engagement in play	--	--	--	1	--	--
Fail to foster children's initiative	--	--	--	2	--	--
Being demanding	--	--	--	13	3	--
Fail to motivate to be children involved	--	--	--	1	--	--
Being critical/sarcastic	--	--	--	8	--	1
No patient	--	--	--	2	--	--
Fail to redirect children to more acceptable activities	--	--	--	--	2	2
No clear limits	--	--	--	--	--	3
Positive feeling toward learning environment	--	--	--	--	--	--
Not showing concern	--	--	--	2	--	4
Self-regulation/consistency	--	--	--	--	7	--

(table continues)

DIP items	H-DAP			L-DAP		
	Audrey	Bonnie	Clair	Dora	Eve	Flora
Positive climate for learning	--	--	--	--	--	--
Fail to build up trust relationship	1	--	--	--	2	--
Inappropriate physical environment (no seat)	--	--	--	1	--	--
Not allowing extra time to complete work	--	--	--	1	--	1
Attention paid to provider's own child or the one who confronts	--	--	--	4	6	9
Little time spent with children	2	--	--	7	--	--
Program policy: ratio-adult/child	--	--	--	2	--	1
Teaching Strategy	--	--	--	--	--	--
Fail to reinforce positive behavior	--	--	--	--	1	--
Discourage children to be independent	--	--	--	3	--	--
Total	17	2	1	76	46	61

Note: The number of different DIP items was coded for each child care provider: Audrey, 9; Bonnie, 1; Clair, 1; Dora, 24; Eve, 13; Flora, 18.

other hand, based on Table 9, few developmentally inappropriate practices were observed in the H-DAP homes as opposed to the L-DAP homes where a greater frequency of DIP behaviors was coded as occurring across a greater number of categories.

Question Two

Do certain aspects of DAP show a stronger relationship with stress behaviors than others? Question two was answered through two subquestions: What aspects of DAP seem to be especially helpful in minimizing children's stress behaviors? Are there some opportunities for DAP which, when missed seemed more likely to result in child stress?

We will answer the first subquestion by examining DAP behaviors, which when present, seem never to co-occur with children's stress behaviors or, when such DAP behaviors do occur simultaneously with children's stress behavior, the child's stress

behavior is subsequently minimized. This, to us, was an indication that the targeted DAP behaviors were especially salient in reducing or minimizing the simultaneous occurrence of children's stress behaviors. Since the target children in the H-DAP child care homes showed few active stress behaviors, especially with regard to hostile and aggressive behaviors, we will begin to answer this research question by looking at provider/child interaction in H-DAP homes. We will discuss cases from each child care home when children began showing stress behaviors and then those behaviors were lessened or minimized during a newly initiated DAP behavior by the provider. We will give particular attention to the DAP behaviors of spending time with children, motivating children involved in play, and applying teaching strategies. When these provider behaviors occurred, children's stress behaviors were eased.

Cassie in Clair's child care home (H-DAP) stayed by herself most of the time, but seemed to have a hard time involving herself in play. Most often she watched other children play. Clair, the provider, spent a large amount of her time with the children and she began to talk to Cassie about what Cassie was doing. When Clair discovered that Cassie liked to play with dolls, Clair gave her some matching clips for Cassie to put in the doll's hair. Cassie started to focus on playing with the doll by changing her clothes and putting hair clips on her. While Clair worked with the other children, she also checked on Cassie and told her the doll looked good. When Clair noticed that Cassie was bored with the doll, and she had started watching other children again, Clair suggested that Cassie braid the doll's hair. Clair showed Cassie how to braid and with Clair's help, Cassie was interested in the doll again.

During Clair's intervention, stress behaviors were not noted. When Clair's attention shifted and stress behaviors (onlooker behavior) were noted, Clair quickly minimized child stress through her personal attention to Cassie and her assistance in helping the child restructure the play routine. Clair also taught Cassie a new skill; that is, she taught her how to braid the doll's hair, a strategy which reduced child stress while redirecting the child's behavior.

Clair got the child involved in play by finding her interest, adding more complex tasks to the child's play routine, providing assistance when needed, and asking questions to encourage the child to talk about what she did. She used the child's interests as a way to teach new skills and she motivated the child by acknowledging and expanding on her play. Finally, Clair checked back with the child frequently to determine the child's readiness in moving to more complex skill and knowledge development.

Through the whole observation, Cassie started from onlooker behavior to getting involved in playing with a doll, to learning and practicing more complex skills. When Cassie was focusing on her play, there was no stress behavior noted. A similar pattern was also found in the other two observations in Clair's child care.

In Bonnie's child care (H-DAP) a similar situation took place. The target child, Ben, showed onlooker stress behaviors when the listening bingo game appeared too difficult for him to follow. Ben seemed to have a hard time recognizing the phrases announced over the audio tape. He also seemed to have difficulty making the connection between the term and the picture on the bingo cards. Bonnie intervened to reinvolve the child in the activity by providing specific verbal recognition of his accomplishments, and

giving assistance when Ben had problems matching the term to the corresponding Bingo card. Through Bonnie's continuous efforts, Ben stayed involved in the game for more than 40 minutes.

Angus in Audrey's child care (H-DAP) displayed onlooker behavior across three observations. Angus displayed a significantly large number of onlooker behaviors specifically during the third observation. Even though the interactions observed between the providers were not all directed toward Angus with the purpose of minimizing his onlooker behavior, the providers in Audrey's child care showed concern to all the children. They were aware of children's needs, they gave individual attention, and they talked to children a lot. The adult/children ratio was high so the providers were relaxed, and there was adult supervision at all times.

However, during the third observation of Audrey's child care home, one of the providers talked to the other two constantly, which removed attention and the chance of providing guidance away from the children. Angus exhibited onlooker behavior throughout the third observation.

On the other hand, when onlooker behaviors were observed in Dora's child care (L-DAP), the caregiver response was less developmentally appropriate, and the child's stress behavior continued. Several incidents are discussed as follows.

During the first time Dave exhibited onlooker behavior, Dora was talking to her assistant or was on the phone. There was little conversation between the caregivers and children in Dora's child care. When Dave started looking around the room, Dora did not notice his onlooker behavior because she was on the phone while folding laundry. Dave

then leaned against the table and stared while both Dora and her assistant were talking to a parent.

During the second observation, Dave had developed constant active stress behavior, especially aggressive behaviors. He grabbed younger children in the child care by their neck, pushed them, or verbally threatened them. By the third observation, he frequently removed himself from the activity. Dave wandered around the room, leaned on the table, or put his face on the floor. During circle time, Dave tried to sing loud but his efforts were not acknowledged by the provider. Instead, she felt most of the children were not singing. She became impatient. She put the puppet away and discontinued the activity. Dave then seemed frustrated and lay on his back.

Instead of working with children when interest lagged or adjusting the activity to the children's needs and interests, Dora's assistant seemed to be impatient that the children could not adjust to her plans and enjoy the activity she had prepared.

Both Ernest and Frank from Eve and Flora's child cares (L-DAP) were observed displaying onlooker behavior continuously, but neither Eve nor Flora was aware of the behavior. Ernest ended showing more passive behavior such as wandering around, lying down on the floor, and putting his head on his hands. Frank, on the other hand, exhibited lots of aggressive behavior such as rocking a chair into another child, not letting other children play with toys, kicking his brother, and verbally threatening other children.

In regard to the second subquestion, several opportunities missed for DAP in this study may have resulted in observed stress behaviors. In each of the following instances DIP came about not because of what the provider did but because of what the provider

did not do. In each case the provider missed the opportunity to redirect behavior, offer comfort and support, or to establish and maintain a fair and positive climate for all children. As the provider missed these opportunities, children's stress behaviors increased. The DIP behaviors discussed below included instances of inappropriate supervision, lack of planned activities and positive guidance, and lack of effort to establish a positive climate and to motivate children.

Lack of adult supervision. Dora (L-DAP) spent lots of time away from the children. She talked to her assistant a lot, talked on the phone, and did chores around the house such as doing laundry, getting a snack, lunch, or an activity ready. Dave was noted exhibiting many active stress behaviors. When Dave refused to share a cash register with another girl, he took it away from her whenever she tried to use it. Dave also played with cut-out pictures roughly such as ripping, bending, and throwing them around. He used the cut-outs to hit other children and put them into his mouth. While Dave wandered around the room, he gave a toddler a rough hug, and when she cried, he ran away. Dave was also verbally disruptive. When a child wanted to play with the toy Dave was playing with, he told her to find something else to do. Dora had not noticed any of those behaviors. Because she was not available to the children most of the time, lots of opportunities for reasoning, teaching, and providing guidance were missed. Dave's stress behaviors continued as Dora's lack of supervision continued.

Lack of planned activity and positive guidance. Eve (L-DAP) told children that they were going outside while she was helping children to get ready by putting their coats and shoes on. She went back and forth from the bedroom to living room. Because

everyone was not ready for about 20 minutes, the children waited in the living room with no activity available. During this time, Ernest was noted with frowning stress behaviors. He looked frustrated.

When Eve and the children went outside and played, there was no planned activity. There were some tricycles out and a baseball bat and ball, and a dilapidated playhouse where children were not allowed to play. During outside play, Ernest was screaming. He played in inappropriate ways, such as throwing toys away, hitting a tree stump with a stick in an aggressive manner, and throwing the wood pieces found on the ground into the air. During several incidents, Eve failed to use positive guidance, and there was no direction of how to play appropriately. She told a child that he was not supposed to be in a certain place instead of telling him where the appropriate place was to be.

Attention paid only to provider's own children or the child who is disrupting. Eve (L-DAP) had a sick child of her own during the second observation. Her attention was pretty much centered on him. Ernest, the target child, complained of being sick many times, but Eve either ignored him or told him that he was not sick. For almost 40 minutes of the observation, Ernest was noted staring, on-looking, doing nothing, yawning, and rubbing his eyes. Eve was not aware that Ernest was sick until he vomited.

The target child, Frank, in Flora's child care (L-DAP) had an extremely large number of hostile/aggressive behaviors coded over the three observations (see Table 4). He was hostile to the children in the child care. For example, he rocked a chair into a girl, and would not let other children play with the toy he was playing with. He roughly

grabbed his brother's arm and kicked him. He was also verbally aggressive; he threatened other children because they got in his way. He also told them he would hurt them. None of those behaviors listed above had been observed by Flora. Flora was occupied by her daughters much of the time. She had three of her own four children attending the child care full time. Her youngest one cried a lot. Flora had to spend a lot of time with her. Her other daughter did not get along with Frank. They fought verbally and physically frequently. For example, this incident happened during outside play. Flora's youngest daughter was crying while sitting in the swing. Flora stood by her and pushed her. Frank was on the other swing and asked for a push at least three times, but Flora did not respond to his requests. In the mean time, one child tried to crash his swing into him. Frank kept yelling to him not to do it, but the child never stopped and Flora did not intervene. Later, Flora's other daughter wanted Frank to stop playing on the slide. She kept hitting and pushing him. Frank tried to complain to Flora but she ignored him, so he started to yell at the child and hit her back. During the whole observation, Frank acted aggressively when upset, withdrew when frustrated, and finally ended up not playing anymore. The emotional and physical unavailability of Flora definitely seemed to stress Frank.

Lack of provider effort in establishing a positive climate and motivating children.

During the third observation with Eve (L-DAP), Eve's children played with toys of their own that the child care children had no access to. They also played with some day care toys. Ernest wanted to play with one of the toy cars but Eve's children did not let him.

Eve did not encourage her boys to share. Ernest was noted on-looking, head on hands, and lying down throughout the whole observation.

CHAPTER V

DISCUSSION

Two questions guided this study. First, is there a relationship between stress behaviors in family child care homes and DAP? Second, do certain aspects of DAP show a stronger relationship with stress behaviors than others?

Question One

Overall, the children in child care homes where DAP was applied more often demonstrated less active stress behavior towards other individuals and to the objects around them. The children from the L-DAP child care homes exhibited more active stress behavior toward other children and objects, including aggressive or hostile behavior. These findings correspond to previous studies that indicate that the more developmentally appropriate the early childhood setting is, the less children exhibit stress behavior. The less developmentally appropriate the early childhood environment is, the more often children displayed stress behavior (Burts et al., 1990; 1992; Durland et al., 1992; Hart et al., 1998).

DAP that was observed in this study included: The assessment of children's learning and development using observation of children's abilities and interests, and the adaptation of activities to meet the individual child's needs. This process helped children enhance their knowledge and skills in various disciplines without causing any pressure or

frustration. Furthermore, DAP promoted the construction of an appropriate curriculum (Bredekamp & Copple, 1997).

Hardy et al. (1993) emphasized the importance of supportive environmental structures. The child care homes with a well-organized environment and daily schedule appeared to facilitate children's adaptability, motivate children to learn, and enriched their development. In well-organized environments, the children had access to materials they were interested in and appeared to learn more effectively with the toys or activities that fit their interests. A daily schedule and routine helped the children make smooth transitions throughout the day and may have played a role in minimizing stress and misbehavior. The provider's conscious facilitation of a healthy and safe environment may have had a similar effect, as Jewett (1997) has noted, that safe environment facilitates children's autonomy and self-control.

Some other aspects of DAP implicated in minimizing children's stress included making children comfortable in their environment, and motivating them to learn. In the category of fostering a cohesive group and meeting individual needs (Bredekamp & Copple, 1997), the providers helped children build a sense of group and social relationships. They did this by encouraging children to work as a group; inviting children to join the group despite their reluctance; respecting, valuing, and accepting the children; preparing activities for the children that could be individualized; providing flexible working areas; and being aware of each child's stress level. Those who provided top quality care helped the children to work with others and develop social skills.

The development of language and communication skills was encouraged in many

ways in developmentally appropriate child care homes. Vygotsky (1978) stressed the importance of social interaction to the learning of language. Also, the conceptualization of learning in a social context facilitates children's active learning. Providers used many strategies, such as engaging them in conversations about real experiences and responding attentively to children's verbal initiatives, carrying on conversations, enhancing children's skills in listening and observing, facilitating children's abilities to express themselves and to make their needs known, and facilitating an awareness of other children's needs and feelings.

Jewett (1997) suggested that children have the need to feel safe in order to exercise autonomy and have control over time. The following observations may have contributed to helping children feel comfortable in the child care environment and feeling good about their learning experiences. By fostering positive feelings toward the learning environment, the providers showed their concern for the children, and enhanced the children's ability to self-regulate. In promoting a positive climate for learning, the providers also participated in nurturing adult-child relationships based on trust. They encouraged children to make their own choices and gave them enough time to complete their work. Perhaps, more importantly, they made sure that all the children received an equal amount of attention.

According to Hardy et al. (1993), adult-child interactions allow children the autonomy to solve their own problems and thereby also help them to learn a wider variety of coping strategies. It was found that providers who utilized appropriate motivation, guidance, and teaching strategy enhanced children's ability to think through

problems and regulate their behaviors. By demonstrating the understanding of logical consequences, and modeling and encouraging expected behaviors, early childhood educators can help children extended their self-appeared better able to self-regulate behavior. Applying positive guidance also helped children to make better choices, get along with peers, and be ready to acquire knowledge and skills. By motivating children to become involved in play, fostering initiative, being patient, and setting up clear limits to promote the children's engagement in the learning environment, the quality of their learning experiences was increased. The implementation of age-appropriate teaching strategies is an important way to approach effective teaching. Early childhood educators can also help children obtain new skills and understanding, and maximize their knowledge and ability by posing problems, asking questions, making suggestions, adding complexity to tasks, and providing information, materials, and assistance as needed. They can also foster children's social development and group problem solving through modeling, coaching, and grouping children.

Question Two

Question two was answered through two subquestions: What aspects of DAP seem to be especially helpful in minimizing children's stress behaviors? Are there some opportunities for DAP which, when missed seemed more likely to result in child stress?

Subquestion One

In general, the children from this study displayed less stress when their child care

providers spent time interacting with them. Through spending time with the children, the child care provider was able to discover the children's feelings towards the environment and get to know their interests, in order to motivate them when they lost interest in a certain activity or were too shy to join the play. Getting children involved in a certain activity or play requires the implementation of all sorts of positive guidance and teaching strategies. For instance, by providing specific direction when the child encounters difficulty in continuing a task, giving a child verbal encouragement with specific comments to encourage him/her to keep on the project, using teaching strategies such as posing problems, adding complexity to tasks, and providing materials and assistance as needed, children can be reintroduced to the task and will thus gain confidence in working with difficult tasks.

According to this study, the child care providers who spent time observing children's behavior were able to find children's interests in certain activities and also their discomforts in dealing with certain situations. By spending time observing, assessing, and interacting with the children, the child care provider was able to stop the onlooker behavior and apply guidance and teaching strategies effectively in motivating the children to engage in learning experiences.

On the other hand, when the child care provider was not able to spend time with the children under her care, they had a hard time keeping themselves on task. The children eventually displayed frustration and lost their motivation for participating in learning experiences.

When the child care provider failed to recognize children's behavior because she

was unavailable to the children the majority of the time, one child exhibited more passive behavior, and the other one displayed many aggressive behaviors. Children under these circumstances not only lost their motivation in learning, but also felt incapable of being in a group.

Subquestion Two

The children in the environment which lacked adult supervision displayed many active stress behaviors. They were incapable of group play. They were not willing to share toys with other children. When things did not go their way, they displayed aggressive behavior.

When the child care environment was lacking planned activity and positive guidance, children displayed passive stress behavior such as frowning and they looked frustrated. Children in this setting were less motivated to engage in play, and less likely to initiate play, and they spent most of the time by themselves.

The other fact that was associated with children's stress was attention paid only to a provider's own children or a child who confronted another. In this environment, the child displayed either passive stress behavior because of the negative atmosphere, or exhibited active stress behavior such as bullying other children or being verbally or physically aggressive.

All of the above can be the examples of lack of provider effort in establishing a positive climate and motivating children. Children in child care that lacked a positive atmosphere not only displayed both passive and active stress behavior, but worse, the

stress behavior escalated. They showed discomfort in the environment and very little motivation to learn.

Difference Between H-DAP and L-DAP Child Care Homes

The children in the H-DAP child care homes appeared more oriented and were busy playing or working on the activities. They seemed to understand the routine, what they were supposed to do, and also what was expected. In contrast, in the L-DAP child care homes, children often wandered around the room. Some children often had nothing to do because the activities or the toys that were available were not age appropriate for them. The other noticeable fact of the L-DAP child care homes was that some toys did not function well or at all. According to this study, some DAP aspects that might contribute to the difference between two groups are daily schedule and routine, transition activities, planned activities, and motivating the children.

The adult-child interaction was different between the H-DAP child care homes and the L-DAP child care homes. In the H-DAP child care homes, the providers knew each child well; they spent time with individual children. They not only worked, talked, and played with them but also assessed their ability, interests, and needs. There was a lot of interaction, instruction, and guidance taking place, and adult supervision at all times. On the other hand, in the L-DAP child care homes, the provider spent little time with the children, there were few one-on-one conversations between adults and children, the providers usually talked to children in general without using individual names or making eye contact, and they also seemed to have a hard time remembering children's names and

identifying children's stress or unusual behavior indicative of discomfort and illness. Therefore, the DAP aspects such as "meeting children's individual needs" and "equal amount of attention" varied with the quality of the child care homes.

Health and safety seem to be basic issues and yet have a serious effect on children's early lives (Jewett, 1997). This study has found that in the L-DAP child care homes there are some serious concerns in this area. The environments of the H-DAP child care homes were always clean and routines were established to maintain cleanliness throughout the day. In contrast, in the L-DAP child care homes, the carpets were dirty, unpleasant odors were often detected, and there were things such as food or pennies on the floor, to which younger children had access.

In the H-DAP child care homes, age-appropriate learning activities were planned to fit children's interests in various areas, such as math, science, language and literacy, and also gross and fine motor development. In the L-DAP child care homes, activities seemed designed to keep children occupied rather than to use the activities as learning opportunities. Emphasis in the L-DAP homes was more often focused on the final product rather than on the actual learning process.

The H-DAP child care homes promoted a positive climate for learning. The providers helped children to establish positive, constructive relations. Providers encouraged them to accomplish things or engage in problem-solving themselves. The providers in the H-DAP child care homes were patient and consistent. However, the providers in L-DAP child care homes did not appear to have clear limits. Limits were enforced arbitrarily, and they told children what to do instead of reasoning with them.

Providers treated their own children differently than the children for whom they cared.

Teaching strategies were broadly used in the H-DAP child care homes, which reflected activities known to promote children's self confidence and motivation for learning. These included extending children's ideas, encouraging questions, developing children's interests, challenging children with more complex tasks, posing problems, asking questions, giving information, assisting when needed, and encouraging children's problem-solving skills.

The adult/child ratio distinguished the efficacy of utilizing DAP in child care settings. In the H-DAP child care homes, the adult-child ratio ranged from 1 to 3 to 1 to 6. In the L-DAP homes the ratio ranged from 1 to 5 to 1 to 10. High ratio appears to be the most important reason for poor supervision, and lack of adult-child interaction. With high ratios, providers seemed able only to pay attention to children who were confronting others by using active stress behaviors.

Limitations of This Study

The results from this study cannot be generalized because the methodology employed precludes generalization. However, it does offer a feasible connection in implementing DAP into family child care homes and reducing children's stress behavior. First of all, this was a qualitative study containing a fairly small sample ($N = 6$). Secondly, the sample was selected by the early childhood professionals who work with the family child care providers in this area rather than randomly selected from

populations of family child care homes in the area. The sampling method may have produced bias.

The assessment tool used to examine children's stress in this study (Classroom Child Stress Behavior Instrument) was originally designed for quantitative studies. The researchers discover children's behavior patterns by implementing observations over a longer period of time. Coding in qualitative research should be based on the context of the behavior, not just the appearance of the behavior. In the other words, the circumstances of the exhibited behavior should be taken into account. In addition, the utilization of this instrument might cause bias. For example, the target child Angus, from the H-DAP group, exhibited a large number of self-to-self active stress behaviors. The number of self-to-self active stress behaviors had brought the total stress behavior count to the second highest among all six children. Also, Dave and Frank displayed high levels of aggressive behavior. Since personality was not measured in this study, there was a concern regarding the high level of stress behavior coded that might be due to the children's personalities or other factors.

The design could raise some threats to internal validity. One threat to validity in this study was that the child care providers who participated in this study knew the observers were looking for DAPs. Since the providers had knowledge of DAP, they may have intentionally or unintentionally utilized more DAPs during the observation.

Since all the providers recognized who the target child was, the interaction between the child and care provider might not have been typical. For example, the provider might be more aware of the behavior of the target child, which would affect the

amount of time spent with the target child or attitudes towards him/her.

Novelty effects may also be a threat to internal validity. There were two observers present in the same room with the child care provider and the children. The observers watched the provider and the children, especially the target child, carefully, and wrote down what happened. It was possible that both the provider and the target child may have done things to impress the observers without intending to do so.

Implications for Further Research

Further research should replicate this study in different child care facilities, and perhaps extend the study in a longitudinal design. Examining the association between DAP and children's stress behaviors in child care centers, preschools, or kindergartens will provide a broader view in how implementing DAP in early childhood settings can minimize stress in children.

Children with various SES and racial backgrounds tend to experience different opportunities to build necessary skills through appropriate experiences (Burts et al., 1992). Further research should also focus on assessing the relations between DAP and children's stress behavior in children from different SES and race backgrounds.

There were some inappropriate practices found in this study, such as the lack of adult supervision. The child care providers should already be equipped with the knowledge to manage the situation appropriately, since this type of issue was covered in the licensing requirements. It is not fully understood why family child care providers had difficulties implementing the concepts from their licensing training into their practices.

By conducting this study using qualitative methods, instead of finding the relationships between DAP and children's stress behavior in general (Burts et al., 1992; Hart et al., 1998), some specific appropriate practices were found to be more helpful in minimizing children's stress behavior than others. Further research is needed in examining how some appropriate practices help children in minimizing and coping with stress.

In addition, current studies indicate more certainly that DAP contributes in reducing stress to a supportive level and providing strong foundational experiences for children's later development (Hart et al., 1998). Therefore, extended studies in revealing how certain aspects of DAP reduce children's stress level should be important in helping children cope with stress.

This study has revealed the importance of implementing DAP in early childhood settings. Early childhood educators should be equipped with knowledge in basic child development, and also, the ability to assess children's development level in order to apply appropriate curriculum and teaching strategies to enhance children's development. Early childhood educators should be encouraged to acquire an understanding of DAP and how it affects children's development. Based on the understanding of the child's development level and his/her interests, by implementing DAP to enhance the child's development, early childhood educators can promote optimal development in young children.

Implications for Policy

Some of the child care providers had difficulties implementing DAP in their

settings, even though they were mandated to receive DAP-related training to fulfill their license requirements.

Thus, the licensing requirement of receiving trainings is not a guarantee of quality child care. Policy makers should recognize the benefit of regulating an appropriate setting, such as adult-child ratio and physical environment, to facilitate appropriate practice. Then, the policies will not only require that the child care provider receive the training, but also ensure that they are able to implement the knowledge into their practice. For example, during the regular home visits, the state licensor should include these aspects of DAP as criteria to evaluate the child care setting.

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APPENDICES

Appendix A
Provider Survey

1. Was this a typical day in your child care?

Yes

No

why

2. Based on your lesson plan, did everything go as you planned?

Yes

No

why

3. Was the target child behaving in a typical manner?

Yes

No

why

Appendix B

Field Note Recording Form

Date: June 21, 1998 Location: Flora Page: 3

Time	Note
2:35	<ol style="list-style-type: none"> 1. He asks Angela to push him which she does. He asks for another push 2. but one of the toddlers who seems very tired and maybe should be taking 3. a nap is screaming. The provider spends most of her attention on this 4. child. Frank tells one boy who has a ball he wants, "Give that back 5. or I'll kick you." Flora asks the children who wants to go on a hike. 6. Frank quickly joins the group. They walk back and forth through the 7. field waving their arms. Frank follows and copies the actions that 8. the leader is doing. He comes back to the swing and asks me to push 9. him.
2:45	<ol style="list-style-type: none"> 1. The girl comes back and takes Frank's swing away. She hits him on 2. the head and he walks away holding his head. Frank is in the house 3. part of the swing set with several children. He kicks the older boy in the 4. back and spans his little brother. He says, "I'm a bad guy." The older 5. boy has organized a game that the other children are participating in. 6. Frank pretends to be a lion and roars. I'm pushing a child in a swing. 7. The provider has gone in to help a child. Frank has tied a rope around 8. his foot. He starts yelling "OWWWW". I look to see what's going on. 9. He says, "She's pinching my back." I ask her what she's doing. She 10. says, "nothing." Her sister comes up and very visibly pinches Frank 11. on his back. He makes sounds of protest again and I made a comment 12. about pinching to the girls.

Appendix C

Sample of Research Journal

March 28, 1999

We had an observation at Dora's at 10:00 a.m. I thought this time should be better for her because last time we went (11:00 a.m.), it was almost the time they had lunch. Dora was busy getting lunch ready, she had to run back and forth from the kitchen which is upstairs to where the kids were.

Dora has too many children. She's always rushed in getting things done. We got in at the time they were getting ready for snacks. Kids were running around the room. One baby (DeDe) set on highchair playing a spoon. Target child, Dave, and two other boys were trying to lift the table. Several times, they were going to flip the table. I didn't think that was appropriate (the legs of the table might smash their toes or hurt someone), but both adults were too busy to see that. I really wonder if they are concerned about safety. They have too many children to care for all of them.

There was bread, honey, butter, and milk for snack. Dora said her husband probably had a bed time snack so there was not enough home made bread for them. Since last time we went over and saw those broken chairs were in use but chairs were still not enough for all the kids there. Today, all the kids had snacks standing up. Therefore, some of them walked around while eating. There was bread on the floor, Andrea said later on the young kids picked it up to eat. DeDe had a bowl of milk of some sort, the bowl fell on the floor, also the milk was spilled on the chair and floor. She cried for a while before Dora came over took care of her. (Andrea said they were going to doctor so Debi was really concerned about the cleanliness of her outfit.) Debi washed the tray and wiped of the milk off the chair. She did not pick the bowl up or clean the milk on the floor which made me notice Dora's carpet was really dirty. At that point in time, I felt really uncomfortable sitting on the floor.

After snacks, it was time for an activity. They made butterflies using coffee filters and cloth clips. Debi was in charge. She showed all the kids standing around the table step by step. I think she did a pretty good job describing the procedure. The interesting reaction was, those kids kept saying "I need help!" without even trying. Later on, Debi repeated the instruction. She also asked questions. She was very specific about the answers. Then, she had each kid fold the coffee filter. (Andrea said she's really firm about how the filter should be folded). Instead of inviting children to try it out, she told them what to do next. (I did not like that.)

DeDe came over to the table and spilled the dye. Debi immediately went over to move DeDe away from the table and undress her. She did not really care about the dye spill on the table where other kids will get into it. Of course, some kids then had blue dye on their clothes.

While waiting for the coffee filters to dry, they had a music and movement section. Debi insisted that they sing each song once beside her daughter's favorite one. I like the way she did "Head and Shoulder," she got more attention from the children. Just like the butterfly activity, Debi asked children to do things instead of getting them involve.

From three experiences that I had at Dora's, I felt she's always hurrying to get things done. I know she's never had a chance to take a break, whenever she had time, she would pick a kid up either to sit on her lap or rock/baby him/her. But there's very little interaction (adult/children or child/child) going on. During transitions, children usually had nothing to do. Even during activities, younger children couldn't be involved because the activities were for older kids. But my biggest concern is safety and cleanliness, even though they are the basics, there is still much to be done. Dora is working toward the end of her CDA, the training she had should cover all my concerns. This has raised a really important issue: how well do providers conceptualize what they learned from trainings and what's the obstacle in applying their knowledge to taking care of children?

Those concerns above made me think about my DAP coding system. Instead of using the one I adopted from Dr. Charlesworth, I should look into the one in the DAP book. Because hers is more about the curriculum, but the DAP book covers a greater variety of things that happen in child care.

Child's Name:

Date:

PASSIVE	ACTIVE		
<p>1. Physically</p> <ul style="list-style-type: none"> <input type="checkbox"/> a. Withdrawn (physically removing self from group activity, appears to be doing nothing) <input type="checkbox"/> b. Excessive fatigue (e.g. dozes, complains of tiredness) <input type="checkbox"/> c. Head on desk, slumping, lying down <input type="checkbox"/> d. Sitting inappropriately in chair <input type="checkbox"/> e. Standing at inappropriate times <input type="checkbox"/> f. Yawning and/or stretching <p>2. Facially</p> <ul style="list-style-type: none"> <input type="checkbox"/> a. Frowning, scowling, pouting, sulking, worried look <input type="checkbox"/> b. Has blank dull vacant expression daydreaming <input type="checkbox"/> c. Gazing/looking around the room <p>3. Non-responsive/Negative</p> <ul style="list-style-type: none"> <input type="checkbox"/> a. Refuses to do work, gives up <input type="checkbox"/> b. Ignores friendly overtures from others <p>4. On looking (alone, stepping back from activity, watching others' activity)</p>	<p><u>Self with Self</u></p> <p>5. Automanipulation</p> <ul style="list-style-type: none"> <input type="checkbox"/> a. Hand/hand manipulation <input type="checkbox"/> b. Nose picking <input type="checkbox"/> c. Mouth manipulation <input type="checkbox"/> d. Plays with/sucks hair <input type="checkbox"/> e. Masturbation/playing with self/exposing self <input type="checkbox"/> f. Ear pulling <input type="checkbox"/> g. Clothing manipulation (twisting, biting) <input type="checkbox"/> h. Scratching <input type="checkbox"/> i. Rubbing/picking body parts <p>6. Repetitive/Restricted Movement</p> <ul style="list-style-type: none"> <input type="checkbox"/> a. Rocking <input type="checkbox"/> b. Repetitive leg and arm movement <input type="checkbox"/> c. Shuffling (repetitive foot movement while standing) <input type="checkbox"/> d. Facial twitches <input type="checkbox"/> e. Hand tremors <p>7. Wiggles/Squirms</p> <p>8. Self Destructive (head banging, slapping self, biting self, self name-calling)</p> <p>9. Removes Self from Mainstream</p> <ul style="list-style-type: none"> <input type="checkbox"/> a. Runs away, hiding, sneaking <input type="checkbox"/> b. Slump into fetal position as a means of removal <p>10. Physiological Reactions</p> <ul style="list-style-type: none"> <input type="checkbox"/> a. Temper tantrums <input type="checkbox"/> b. Wets or soils clothes <input type="checkbox"/> c. Throws up <input type="checkbox"/> d. Cries, near tears <input type="checkbox"/> e. Complains of feeling sick (stomach ache) <p>11. Unusual Noises, Heavy Sighing</p>	<p><u>Self with Others</u></p> <p>12. Hostile/Aggressive</p> <ul style="list-style-type: none"> <input type="checkbox"/> a. Sassy/back talk <input type="checkbox"/> b. Verbal hostility, disruptive <input type="checkbox"/> c. Bullying or threatening children <input type="checkbox"/> d. Physical hostility, fights, pushes <input type="checkbox"/> e. Argues <input type="checkbox"/> f. Instigating others to gang up on other children <input type="checkbox"/> g. Making fun of other children <p>13. Dependency</p> <ul style="list-style-type: none"> <input type="checkbox"/> a. Stretches and leans in order to see other students' work during specified independent work <input type="checkbox"/> b. Whines or asks for mother <input type="checkbox"/> c. Teacher attention seeking <p>14. Verbal Dysfunctions</p> <ul style="list-style-type: none"> <input type="checkbox"/> a. Refuses to talk in group <input type="checkbox"/> b. Talking at inappropriate time <input type="checkbox"/> c. Nervous inappropriate laughter <input type="checkbox"/> d. Talks fast <input type="checkbox"/> e. Compulsive talking <input type="checkbox"/> f. Stutters <p>15. Touching Others at Inappropriate Times/Ways</p>	<p><u>Self with Object</u></p> <p>16. Destructive</p> <ul style="list-style-type: none"> <input type="checkbox"/> a. Destroy toys and games <input type="checkbox"/> b. Destroy worksheet or workbook <input type="checkbox"/> c. Doodling on desk <p>17. Nondestructive</p> <ul style="list-style-type: none"> <input type="checkbox"/> a. Playing with toy/object at inappropriate time and inappropriate ways <input type="checkbox"/> b. Doodling on paper <input type="checkbox"/> c. Pencil tapping <input type="checkbox"/> d. Clumsy or fumbling behavior <input type="checkbox"/> e. Sucking/biting object

(Burts, Charlesworth, Hart, Hernandez, Kirk, & Mosley, 1988)

Appendix E

Rating Scale for Measuring the Degree of DAP in Early Childhood Classrooms

CURRICULUM GOALS

1. Range of Curriculum Area for Which Program is Designed

DAP	DIP
<ul style="list-style-type: none"> • physical • social • intellectual • learning for understanding 	<ul style="list-style-type: none"> • narrow focus • intellectual emphasis • discrete academic • skills emphasis

2. The Place of Children's Self-esteem, Sense of Competence, and Positive Feelings Toward Learning in the Curriculum and Instruction.

DAP	DIP
<ul style="list-style-type: none"> • each child is given an equal amount of positive attention 	<ul style="list-style-type: none"> • children who conform receive more attention • children are given attention according to their level of academic performance

3. View of Growth and Development

DAP	DIP
<ul style="list-style-type: none"> • work is individualized • children move at their own pace 	<ul style="list-style-type: none"> • evaluated against a group norm • everyone is expected to achieve the same narrowly defined skills • everyone does the same thing at the same time

TEACHING STRATEGIES

4. The Emphasis in the Curriculum

DAP	DIP
<ul style="list-style-type: none"> • learning occurs through projects and learning centers • children's ideas are extended, questions are encouraged, and interests are developed • all subjects are integrated into units • art, music, and physical education are taught once per week by specialists 	<ul style="list-style-type: none"> • curriculum is divided into discrete subject and time units • emphasis on reading first and math second • social studies, science, health are included only if time permits

5. Organization of the Curriculum

DAP	DIP
<ul style="list-style-type: none"> • activities center on topics such as in science or social studies • topic activities include story writing and story telling, drawing, discussion, hearing stories and informational books, and cooperative activities • skills are taught as they are needed to complete a task 	<ul style="list-style-type: none"> • teacher directed reading groups lecturing to the whole group • paper and pencil exercises, workbooks, worksheets • projects, learning centers, and play are offered if time permits or as a reward for completing work

6. Teacher Preparation and Organization for instruction

DAP	DIP
<ul style="list-style-type: none"> • Learning centers are set up which provide opportunities for writing, reading, math and language games, dramatic play • errors are viewed as normal and something from which children can learn 	<ul style="list-style-type: none"> • little time for enrichment activities • may be interest centers available for children who finish their seatwork early • may be centers where children complete a prescribed sequence of teacher-directed activities within a controlled time period

7. Instructional Activities

DAP	DIP
<ul style="list-style-type: none"> • children work and play cooperatively in groups • projects are self-selected with teacher guidance • activity centers are changed frequently • one or more field trip • resource people visit • peer tutoring • peer conversation 	<ul style="list-style-type: none"> • children work alone, silently on their worksheets • little, if any, peer help is permitted • penalties for talking

8. Learning Materials and Activities

DAP	DIP
<ul style="list-style-type: none"> • concrete, real, and relevant to children's lives • blocks, cards, games, arts and crafts materials, woodworking tools, science • Flexible work spaces (table, Carpet, etc) • playful activity only when work is done 	<ul style="list-style-type: none"> • limited primarily to books, workbooks and pencils • permanent desks that are rarely moved • mostly large group instruction

INTEGRATED CURRICULUM

9. Language and Literacy

DAP	DIP
<ul style="list-style-type: none"> • technical skills are taught as needed • generous amounts of time are provided to learn through literature and nonfiction reading; drawing, dictating, and writing stories; bookmaking; and library visits • daily reading aloud by teacher • subskills such as letters and phonics and taught individually and in small groups using games • literacy is taught through content areas such as science and social studies • children's invented spellings are accepted 	<ul style="list-style-type: none"> • teaching is geared to passing standardized tests and/or skill checklists • reading taught through skills and subskills • reading taught as a discrete subject • silence is required • language, writing, and spelling instruction focus on workbooks • teaching focuses on reading groups with other children having an adequate amount of seatwork to keep busy • phonics instruction stresses learning rules rather than relationships • everyone must complete the same basals no matter what their abilities everyone know who is in the slowest reading group • acceptable writing has correct spelling and is standard English

10. Math

DAP	DIP
<ul style="list-style-type: none"> • children encouraged to use math through exploration, discovery, and solving meaningful problems • integrated with other areas • skills acquired through play, projects, and daily • math manipulatives are used • math games are used daily 	<ul style="list-style-type: none"> • taught as separate subject • taught at a scheduled time each day • focus on textbook, workbook, practice sheets, board work, and drill • lessons follow text sequence, seldom any "hands on" activity • must finish work in order to use games and manipulative

11. Social Studies

DAP	DIP
<ul style="list-style-type: none"> • themes may extend over a period of time learned through playful activities, discussion, trips, visions, writing, reading, social skills development, (planning, sharing, taking turns) • art, music, dance, drama, woodworking, and games are incorporated 	<ul style="list-style-type: none"> • included occasionally if reading and math are completed • mostly related to holidays • brief activities from the social studies textbook or commercially developed newspaper (i.e. Weekly Reader) and doing dittoed seatwork

12. Science

DAP

- discovery, built on the children's natural interest in the world
- projects are experimental and exploratory, encourage active involvement of every child
- plants and pets in the classroom
- through projects and field trips children learn to plan, apply thinking skills, hypothesize, observe, experiment, verify
- learn science facts related to their own experience

DIP

- taught from a single textbook or not at all
- complete worksheets
- watch teacher demonstrations
- no field trips
- materials in the science center are rarely changed

13. Health and Safety

DAP

- project designed to help children use personalized facts
- teachers learn to integrate facts into their daily habits
- dictate or write their own plans
- draw and write about these activities
- read about these activities
- enjoy learning because it is related to their lives

DIP

- poster and textbooks are used
- once a week lesson or once a year unit on health

14. Art, Music, Movement, Woodworking, Drama, and Dance

DAP

- Integrated throughout the day
- specialists work with teachers and children
- children explore a variety of art media and music
- children design and direct their own products and productions

DIP

- taught as separate subjects once a week
- specialist do not coordinate closely with classroom teachers
- representational art is emphasized
- crafts substitute for artistic expression
- coloring book type activities
- use patterns and cut-outs

15. Multicultural Education

DAP

- materials and activities are multicultural and nonsexist

DIP

- Materials and activities lack evidence of attention to cultural diversity and a nonsexist point of view

16. Outdoor Activity

DAP	DIP
<ul style="list-style-type: none"> Planned daily so children can develop large muscle skills, learn about outdoor environments, and express themselves freely on a well-designed playground 	<ul style="list-style-type: none"> limited because it interferes with instructional time provider as a time for recess to use up excess energy

GUIDANCE OF SOCIAL-EMOTIONAL DEVELOPMENT

17. Prosocial Behavior, Perseverance, and Industry

DAP	DIP
<ul style="list-style-type: none"> stimulating, motivating activities are provided that promote student involvement individual choices are encouraged enough time is allowed to complete a work private time with friend or teacher is provided 	<ul style="list-style-type: none"> lectures about the importance of appropriate social behavior punishes children who become bored and restless with seatwork and whisper, talk, or wander around punishes children who dawdle and do not finish work in allotted time no time for private conversations only the most able students finish their work in time for special interest or interaction with other students

18. Helping, Cooperating, Negotiating, and solving Social Problems

DAP	DIP
<ul style="list-style-type: none"> daily opportunities to develop social skills such as helping others, cooperating, negotiating, and talking with others to solve problems 	<ul style="list-style-type: none"> little time to develop social skills — mostly independent seatwork and teacher directed activities only social opportunity is on the playground but no consistent adult is available to provide guidance

19. Guidance Techniques

DAP	DIP
<ul style="list-style-type: none"> positive guidance techniques are used. <ul style="list-style-type: none"> clear limits are set in a positive manner children involved in establishing rules redirection is used meets with children (and with parents) who have problems recognize that every infraction doesn't warrant attention and identifies those that can be used as learning opportunities 	<ul style="list-style-type: none"> teacher is in adversarial role emphasis on power to provide rewards and punishment maintaining control of the classroom is primary goal teachers: <ul style="list-style-type: none"> enforce rules give external rewards for good behavior punish infractions teacher attitude is demeaning to child

20. Facilitation of self esteem by expressing respect, acceptance, and comfort for children regardless of their behavior.

DAP	DIP
<ul style="list-style-type: none"> • children trusted to make some of their own decisions • children are encouraged to develop their own self control • teacher is warm and accepting • teacher provides understanding and nurturance • teacher adapts to children's needs 	<ul style="list-style-type: none"> • teacher screams in anger • teacher neglects children's individual needs • physical or emotional pain is inflicted • criticizes, ridicules, blames, teases, insults, name-calls, threatens, frightens, and/or humiliates • laughs at children in derogatory manner

MOTIVATION

21. Internal vs External Sources of Motivation and Rewards for Achievement

DAP	DIP
<ul style="list-style-type: none"> • encourage development of internal rewards and internal critique • guides children to see alternatives, improvements, and solutions • guides children to find and correct own errors • teacher points out how good it feels to complete a task, to try to be successful, to live up to one's own standards for achievement • the reward for completing a task is the opportunity to move on to a more difficult challenge 	<ul style="list-style-type: none"> • uses external rewards and punishments • corrects errors; makes sure children know right answers • rewards children with stickers, praises in front of group, holds children up as examples • motivation through: <ul style="list-style-type: none"> - percentage or letter grades - stickers - stars on charts - candy - privileges

22. Teacher as a Model for Motivation

DAP	DIP
<ul style="list-style-type: none"> • through relationship with teacher, child models teacher's enthusiasm for learning, identifies with teacher's conscientious attitude toward work, and gains in self motivation 	<ul style="list-style-type: none"> • children identify with teacher's lack of enthusiasm and interest in his or her work and emulate it

TRANSITIONS

23. Transitions within the School

DAP

- children are assisted in making smooth transitions between groups or programs throughout the day by teachers who:
 - maintain continuity
 - maintain ongoing communication
 - prepare children for each transition
 - involve parents
 - minimize the number of transitions necessary

DIP

- day is fragmented among many different groups and programs with little attempt by adults to communicate or coordinate successful transitions

24. Transitions within the Classroom

DAP

- transition activities (i.e. special song)
- warning signals are given
- ample time is allowed
- next activity is intrinsically enticing

DIP

- single announcement
- abrupt changes
- wait for all to arrive before begin next activity
- individuals singled out for being slow or distracted

Charlesworth, Burts, and Hart, 1994

Appendix F

Guidelines of Developmentally Appropriate Practice

Creating a caring community of learners

Promoting a positive climate for learning

- help children establish positive, constructive relationships
- support children begin friendships and learn from each other
- develop children's self-confidence and positive feelings toward learning
- provide opportunities to accomplish meaningful tasks (can succeed but enough challenge)

- design activities based on children's individual abilities, developmental levels, and interests
- help to build a sense of the group
- demonstrate the explicit valuing of each child
- bring each child's culture and language to share in school; let children feel accepted and belong
- respect and appreciate similarities and differences among people
- value working and playing collaboratively; let children work in small, flexible groups
- problem-solving as a group; taking attendance by recognizing who's miss in the group
- provide supports for the children with special needs

Fostering a cohesive group and meeting individual needs

- know each child well

Teaching to enhance development and learning

Environment and schedule

- prepare and prepare a learning environment which foster children's initiative, active exploration of materials, and sustained engagement with other children
- maintain a safe, health environment and careful supervision
- support age-appropriate risk within safe boundaries
- organize the daily schedule to allow for alternating periods of active and quiet, adequate nutrition, and naptime.
- allow children to explore and learn about the environment, ... their curiosity and experiment with cause-and-effect relationships

Learning experiences

- plan a variety of concrete learning experiences with materials and people relevant to children's own life
- opportunities for children to plan and select their own activities from among a variety of learning areas and projects
- program goals are based on children's interests and abilities
- use various materials and experiences in teaching

Language and communication

- encourage children's developing language and communication skills by talking to them and have them talk to each other
- teachers engage their conversations about real experiences, projects and current events; encourage children to describe their products or ideas and respond attentively to describe their products or ideas; respond attentively to children's verbal initiatives
- teachers incorporate experiences to enhance children's ability to actively listen and observe based on children's developing capacities

Teaching strategies

- teachers observe and interact with individuals and small groups in all contexts to maximize their knowledge of children's ability
- help children acquire new skills or understandings
- stimulate and support children's engagement in play and activities by posing problems, asking questions, making suggestions, adding complexity to tasks and providing information, materials, and assistance as needed
- provide many opportunities for children to plan, think about, reflect on, and revisit their own experiences
- provide opportunities for children to learn to work collaboratively and develop social skills such as cooperating, helping, negotiating, and talking with other people to solve problems
- foster the development of social skills and group problem solving at all time through modeling, coaching, grouping, and other strategies

Motivation and guidance

- draw on children's curiosity and desire to make sense of their world to motivate them to become involved in interesting learning activities.
- use verbal encouragement in ways that are genuine and related to an actual task or behavior; acknowledging children's work with specific comments
- facilitate the development of social skills, self-control, and self-regulation in children by using positive guidance techniques such as modeling and encouraging expected behavior, redirecting children to more acceptable activities, setting clear limits, and intervening to enforce consequences for unacceptable, harmful behavior
- Teachers are patient

Guidelines of Developmentally Appropriate Practice (continued)

Constructing appropriate curriculum

Integrated curriculum

- curriculum goals address learning in all developmental areas
- curriculum content from various disciplines

The continuum of development and learning

- Teachers are knowledgeable about the continuum of development and learning for preschool children in each content area.

Coherent, effective curriculum

- plan and implement a coherent curriculum to help children achieve important developmental and learning goals.
- plan curriculum that is responsive to the specific context of children's experiences.

Curriculum content and approaches

- use a variety of approaches and provide daily opportunities to develop children's language and literacy skills
- use a variety of strategies to help children develop concepts and skills in mathematics, science, social studies, health, and other content areas
- Children have daily opportunities for aesthetic expression and appreciation through art and music.
- Children have opportunities throughout the day to move freely and use large muscles in planned movement activities.
- Children have opportunities throughout the day to develop fine-motor skills.
- Children have opportunities and teachers' support to demonstrate and practice developing self-help skills

Assessing children's learning and development

- use observational assessment of children's progress, and adapt curriculum to meet individual needs.
- The program has a place for every child of legal entry age, regardless of the developmental level or prior learning of the child.

Reciprocal relationship with parents

- Teachers work in partnership with parents to build mutual understanding and ensure that children's learning and developmental needs are met.
- Teacher and parents work together to make decisions to best support children's development and learning
- Parents are always welcome in the program, and home visit by teachers are encouraged.

Program policies

- Teachers engage in ongoing professional development activities.
- The group size and ratio of teachers to children is limited to enable individualized and age-appropriate programming.
3-year-old : adults = 16 : 2
4-year-old : adults = 20 : 2
kindergartners : adults = 25 : 2
- The program is administered and staffed to ensure continuity of care and relationship among adults and children over a given day and across many months and even years.
- Administrators responsible for programs have professional preparation or in service training relevant to the development and learning of this age group, including establishing positive relationships with families.

NOTE:

YES - ✓ NO - X A LITTLE - ✗ NOT SURE - ?

Appendix G

Contact Summary Form

Contact type: _____ Site: _____
Observation _____ Contact date: _____
Interview _____ Today's date: _____
Written by: _____

1. What were the main issues or themes that struck you in this contact?

2. Summarize the information you got (or failed to get) on each of the target questions you had for this contact.

Behavior/DAP

Information

3. Anything else that struck you as salient, interesting, illuminating or important in this contact?

4. What new (or remaining) target questions do you have in considering the next contact with this child/provider?

Appendix H

Sample Spreadsheet

Observ. #1 Behavior		Observ. #1 DAP	
<u>Sec.</u>	<u>Line</u>	<u>Line</u>	<u>DAP Items</u>
N1-21.3	2a-Frowning; look frustrated	N1-21.5-6	#2 Pos. climate for learning-equal amount of let baby: crying in the back room
N1-41.1	11-Unusual noises: screaming	N1-21.12-#4	Teaching strategy -give info, assist as needed by jacket on floor-help TC put it on
N1-41.7	17a-Play w/ toy inapp. way: throw toy	N1-31.1	#21 Trans.C are assisted in making smooth transitioning to do while waiting for outside
N1-51.4	11-Unusual noises: making all sorts of	N1-31.3	providing acting weird
N1-51.5	17a-Play w/ toy inapp. way: hit a tree	N1-31.5	DIP setting nothing for C to do
N1-51.9	17a-Play w/ toy inapp. way: throw wood	N1-41.4-6	providing is avoiding us to see her husband
		N1-41.6-9	Safety sticks, branches are all over the backyard
		N1-41.6-9	Guidance no direction of how to play appropriately
		N1-51.2-3	Guidance They don't have to know
		N1-51.3-5	Safety jump rope w: wire attached found in backyard
		N1-51.5-6	Guidance Tell C: You don't suppose to be there
		N1-61.1-2	Safety: Supervision bumping ea other w: tricycle
		N1-61.3-4	Guidance: problem solving? problem solving?
		N1-61.6-7	#2 Pos. climate for learning-equal amount of give direction to Michel (her son boy) but not Emory (girl)
		N1-61.7	#2 Pos. climate for learning-equal amount of no complement for girl
		N1-61.8	#2 Pos. climate: Rules/limits-consistency no consistency
Observ. #2 Behavior		Observ. #2 DAP	
<u>Sec.</u>	<u>Line</u>	<u>Line</u>	<u>DAP Items</u>
N2-1.1	2b-Dull vacant expression: staring	N2-1.1-1	#2 Pos. climate for learning-equal amount of attention on her sick son
N2-1.1.2	4-On looking: watch Andrea	N2-2.1.1	#2 Pos. climate for learning-equal amount of attention on her sick son
N2-1.1.3	4-On looking: watch Andrea	N2-2.1.1	Safety: sticks on the floor
N2-1.4	1a-Withdraw/doing nothing: sits & staring	N2-21.2-3	Forstoring a cohesive group & meet indiv. needs Not aware TC's sick even he's in bathroom for a long time
N2-1.6	1c-head on hands	N2-21.4-7	Health & Safety: Messy room
N2-2.1-2	1a-Withdraw/doing nothing: sits in front of	N2-21.9	G-Pos Guidance/verbal encouragement encourage baby girl to walk
N2-2.1.5	1a-Withdraw/doing nothing: sits & staring	N2-21.11	Forstoring a cohesive group & meet indiv. needs Not aware TC acts differently: watching
N2-2.1.8	1a-Withdraw/doing nothing: hold a car	N2-21.13	Forstoring a cohesive group & meet indiv. needs Not aware TC acts differently: not playing
N2-3.1.1	1a-Withdraw/doing nothing: sits & staring	N2-31.1	Forstoring a cohesive group & meet indiv. needs Not aware TC acts different but the wrong reason-because the
N2-3.1.1-2	4-On looking: watch his sister	N2-31.3-4	Forstoring a cohesive group & meet indiv. needs Not aware TC acts differently: not playing
N2-3.1.5	4-On looking: watch	N2-31.8-9	Forstoring a cohesive group & meet indiv. needs Not aware TC acts differently: nothing interest TC
N2-3.1.5	1f-yawning	N2-4.1	Health & Safety: penny on the floor not picking it
N2-3.1.5	1f-Rubbing	N2-41.2-3	Safety: baby play a purse w: lots changes in it
N2-3.1.5	1a-Withdraw/doing nothing: sits	N2-41.9	Health & Safety: not knowing how to clean up
N2-4.1	1f-yawning		
Observ. #3 Behavior		Observ. #3 DAP	
<u>Sec.</u>	<u>Line</u>	<u>Line</u>	<u>DAP Items</u>
N3-21.2	4-On looking: watch	N3-11.3	DIP activity TV on
N3-21.5-6	4-On looking: watch	N3-11.5-6	DIP toys action cartoon characters
N3-31.2	4-On looking: watch	N3-11.6	Health & Safety: bad smell the room smells
N3-31.6-7	4-On looking: walk to the window	N3-11.9	#2 Pos. climate for learning-equal amount of TC can only play w/ the toys her own children don't play
N3-31.8	4-On looking: walk to the table	N3-21.1-2	Motivation & guidance; #18 Social skills it's okay for her own child not to share
N3-31.8	1c-bying down	N3-21.2-3	Forstoring a cohesive group & meet indiv. needs don't look out for children-broken toe nail
N3-41.7	1c-head on hands	N3-21.4-5	Motivation & Guidance-motivate & redirect Home C don't put dishes away
N3-41.8	1c-bying down	N3-21.5-6	Motivation & Guidance-motive C become involved encourage baby girl to walk
		N3-21.7-8	#2 Pos feeling toward learning environment No consistency w: her boys
		N3-21.8-9	Motivation & Guidance-encouragement "good cars"
		N3-21.9	Motivation & Guidance-motive C become involved talking about train
		N3-31.3-4	#2 Pos. climate for learning-equal amount of only play w: girls
		N3-31.6-7	Motivation & Guidance-pos. guidance & redirect didn't specify the expected behavior
		N3-31.8-9	#2 Pos feeling toward learning environment her boys don't have to listen to her
		N3-41.3-4	Safety: plastic bag on floor where baby has access
		N3-41.7-8	Safety: string hanging down from the blind
		N3-51.1	Motivation & guidance; #18 Social skills TC couldn't get the toy, he want because Nancy's boys won't
		N3-51.4-5	Motivation & guidance; #18 Social skills ask her son to give toys away-still didn't teach him to share
		N3-51.5-6	M & G; #18 Social skill home C don't give toys away nicely and ask TC to say thank
		N3-51.6-8	#2 Pos feeling toward learning environment No consistency w: her boys
		N3-61.1	#4 Teaching Strategy-C's ideas are extended, talking about camping
		N3-61.5-8	G-Pos guidance-modeling & encouraging expected Nancy told him not to play there since Sec. 2

Appendix I

Sample Diagram

