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The relationship between social skills and resiliency among preschool children

Kathleen M. Twohig
University of Northern Iowa

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THE RELATIONSHIP
BETWEEN SOCIAL SKILLS
AND RESILIENCY
AMONG PRESCHOOL CHILDREN

An Abstract of a Thesis
Submitted
in Partial Fulfillment
of the Requirements for the Degree
Specialist in Education

Kathleen M. Twohig
University of Northern Iowa
May 2004

ABSTRACT

The purpose of this study is to examine the relationship between social skills and resiliency among preschool children. Numerous research studies have suggested that social skills and resiliency are related. However, the precise relationship between these two constructs remains unclear. Specifically, is it possible for a child to possess good social skills but not be resilient? Is it possible for a child to be resilient but not have good social skills?

In the present study, preschool teachers from a private day care center rated children in their classes ($n = 68$) using behavior rating scales purported to measure social skills (i.e., Social Skills Rating System-Teacher, or SSRS-T) and resiliency (i.e., Devereux Early Childhood Assessment, or DECA). The scores from the two scales were correlated to determine the relationship between the constructs of social skills and resiliency. There was a strong positive correlation between the total Social Skills scores on the SSRS-T and the Total Protective Factor scores on the DECA [$r = .72, n = 68, p \leq .01$]. Statistically significant correlations were found between the subscales on the SSRS-T and the DECA. A statistically significant correlation was also found between children's scores on the Problem Behaviors scale on the SSRS-T and the Behavior Concerns subscale on the DECA.

Although there are other possible explanations for the results obtained in this study, the pattern of findings strongly indicates that the SSRS-T and the DECA are measuring much of the same construct. The implication of these findings suggests that fostering children's social skills may enhance their resiliency.

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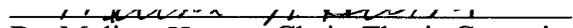
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University of Northern Iowa
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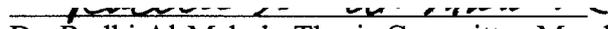
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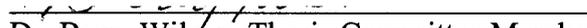
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Dr. Radhi Al-Mabuk, Thesis Committee Member

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Dr. Barry Wilson, Thesis Committee Member

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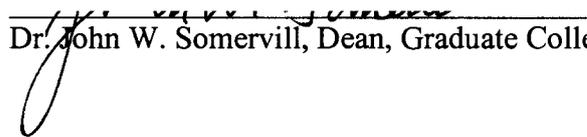

Dr. John W. Somerville, Dean, Graduate College

TABLE OF CONTENTS

	PAGE
LIST OF TABLES	vii
LIST OF FIGURES	viii
CHAPTER 1-INTRODUCTION	1
Statement of the Problem	1
Purpose	3
Overview	3
Research Questions	4
Important Terms	5
CHAPTER 2-REVIEW OF THE LITERATURE	6
Definition of Assessment.....	6
History of Preschool Assessment	7
Purposes of Assessment.....	9
Screening	10
Diagnosis	10
Individual Program Planning and Monitoring	11
Program Evaluation	11
Social and Emotional Development	11
Social Development.....	11
Emotional Development	13
Influences on Social and Emotional Development.....	14

	PAGE
Child characteristics	14
Parental style and characteristics	15
Environmental influences	15
Interaction of influences	16
Assessment of Children's Social-Emotional Functioning	16
Interviews	17
Observations	18
Behavior Rating Scales	19
Play	20
Social Competence	22
Social Competence and Social Skills Defined	22
Appropriate Social Skills for Preschool Children	23
Theoretical Approaches to Intervention	25
Operant interventions	26
Social learning interventions	28
Cognitive-behavioral interventions	29
Resiliency	31
Characteristics	32
Promoting Resiliency	34
Critique of the Literature	35

	PAGE
CHAPTER 3-METHODOLOGY	37
Participants	37
Instruments	37
Social Skills Rating System (SSRS).....	37
Standardization	39
Validity	40
Reliability	41
Devereux Early Childhood Assessment (DECA)	42
Standardization	43
Validity	44
Reliability	44
Procedure	45
Assessment	47
Data Analysis.....	47
CHAPTER 4-RESULTS	48
Descriptive Report.....	48
Correlational Findings	52
CHAPTER 5-DISCUSSION	57
Discussion of Results.....	57
Limitations.....	61

	PAGE
Implications for Future Research	62
REFERENCES	63

LIST OF TABLES

TABLE	PAGE
1. Means and Standard Deviations for SSRS-T and DECA Scales.....	49
2. Means and Standard Deviations for Individual Classes on the DECA	52
3. Means and Standard Deviations for Individual Classes on the SSRS-T	53
4. Correlations between SSRS-T and DECA Subscales.....	55

LIST OF FIGURES

FIGURE	PAGE
1. Histogram of TPF Scores	50
2. Histogram of Social Skills Scale Scores	51
3. Scatterplot of SSRS-T and DECA Scores	54

CHAPTER 1

INTRODUCTION

Statement of the Problem

One of the most significant accomplishments of a child's development is the capability to interact effectively with others (Elliott, Barnard, & Gresham, 1989; Gresham, Sugai, & Horner, 2001; Guralnick, 1993). Social interaction is an everyday occurrence and when people are able to relate to others well, their needs can be fulfilled in appropriate ways (Hutchins, 1999). Social-emotional development begins soon after children are born and see people interact with and relate to each other. In infancy, children learn that by smiling and crying they are able to gain attention from their caregiver. Eventually, children learn to take the perspective of others and gain knowledge of the rules, norms, and values of society, and they learn how to apply these rules, norms, and values in their everyday lives.

Children must learn and be able to control their emotions if they are to engage in positive social interactions with others and be successful in their social environment (Hutchins, 1999). Social skills and emotional regulation are important for successful relationships with family members, peers, and teachers. Children who do not possess appropriate social-emotional skills face a number of difficulties in their relationships and overall adjustment that may continue into adulthood (Gresham & Elliott, 1993). Children who do not master these skills are more likely to have school adjustment problems and lower rates of academic achievement, lower feelings of self-efficacy and self-esteem, and greater chances of peer rejection, disruptive behavior problems, delinquency, and mental

health problems later in life (Elliott, Barnard, et al., 1989; Gresham, 1988; Guralnick, 1993; Irvin, Nippold, Noell, Schwarz, & Walker, 1994; Kupersmidt, Coie, and Dodge, 1990; Mize, 1995; Parker & Asher, 1987).

A report from the Children's Defense Fund (1993) provided a disturbing portrait of the United States as a country in which rising percentages of young children live in impoverished homes, lack basic health care, are exposed to violence, and thus become more at-risk for an assortment of developmental problems. The grim circumstances and challenges that children face have spurred an increasing emphasis on preschool assessment (Keith & Campbell, 2000; Nagle, 2000; Vasquez, Nuttall-Vasquez, & Hampel, 1999). Specifically, there has been a noteworthy emphasis on assessing and providing psychoeducational services to preschool-aged children with social-emotional problems (Merrell, 1996). The assessment of social-emotional functioning in preschool children is critical because these affective and social skill-related components establish a foundation that directs and influences children's later functioning in their home, schools, and communities (Knoff, Stollar, Johnson, & Chenneville, 1999).

In promoting social-emotional development, there has been an increasing emphasis on fostering resiliency and social skills in preschool children. Widespread interest has increased due to the negative implications that have been found for children with poor social and emotional skills. Several researchers (e.g., Dirling, 1999; Wang, Haertel, & Walberg, 1997; Werner, 2000) have noted that resilient children often possess considerable social competence. Questions arise such as, "Can a child be resilient but

lack social skills?” and “Is it possible for a child have social skills but not possess resilient characteristics?”

Purpose

The purpose of this research is to study the relationship between social skills and resiliency in preschool children. Specifically, the goal is to identify if scores on a social skills rating scale for preschool children correlate with scores on a rating scale measuring resiliency in preschool children. Identifying the relationship between social skills and resiliency in preschool children will increase our knowledge of these constructs and give insight regarding the relatedness of social skills and resiliency as measured on two particular scales.

Several research studies have found that children who are resilient possess good social skills but there is limited research that addresses the precise relationship between social skills and resiliency. Research suggests that children’s social skills and their resiliency are important aspects of children’s healthy growth and development (Gresham & Elliott, 1993; McGinnis & Goldstein, 1990; Werner, 1984). Identifying the relationship between the two constructs may help to ensure more effective programming and greater beneficial outcomes for all children.

Overview

The second chapter of this paper contains a literature review on the social-emotional assessment of preschool children. A definition of assessment and summary of the history of preschool assessment is provided. The purposes of preschool assessment are discussed. An overview of preschool children’s social-emotional development is

provided. Different methods to assess children's social-emotional development are highlighted. Information on social competence and social skills is presented. Resiliency theory is discussed along with suggestions on how to promote resiliency in children.

The third chapter explains the methodology and procedures used in this study. Results of the study are reported in the fourth chapter. The fifth chapter includes a discussion of the results, implications of the results, discussion of limitations in the study and suggestions for further research.

Research Questions

1. What is the relationship between social skills and resiliency as measured by the Social Skills Rating System-Teacher Version (SSRS-T) and the Devereux Early Childhood Assessment Scale (DECA) for children?
2. What is the relationship between the SSRS-T subscales (Cooperation, Assertion, and Self-Control) and the DECA subscales (Initiative, Self-Control, and Attachment) for preschool children?
3. What is the relationship between the problem behaviors scale on the SSRS-T and the behavior concerns scale on the DECA?

Important Terms

Resiliency

“A child's inner strength to deal competently and successfully, day after day, with the demands he or she encounters” (Brooks & Goldstein, 2001, p. 1).

Social and Emotional Development

“The development of attachment, the growth of self, emergence of emotions, and the development of adaptive behaviors which include self-care” (Knoff et al., 1999).

Social Competence

“A general evaluative term referring to the quality or adequacy of a person’s overall performance in a particular task” (McFall, 1982, p. 12).

Social Skills

The behaviors which, within given situations, predict important social outcomes for children and youth (Gresham, 1998).

CHAPTER 2

REVIEW OF THE LITERATURE

In order to be successful in American society, a person must interact with others appropriately (Gresham & Elliott, 1993). One of the most important tasks of childhood is to develop the social-emotional skills necessary for successful relationships (Elliott, Barnard, et al., 1989; McGinnis & Goldstein, 1990). Young children are increasingly facing troubling circumstances and these challenges have spurred an increasing emphasis on preschool assessment (Keith & Campbell, 2000; Nagle, 2000; Vasquez et al., 1999). Studies exploring emotional and behavior difficulties shown by preschool children and the prevalence of these types of problems in young children have documented that larger numbers of children are displaying some type of emotional or social maladjustment (Lutz, Fantuzzo, & McDermott, 2002). Therefore, there has been a noteworthy emphasis on assessing and providing psychoeducational services to preschool-aged children with social-emotional problems (Merrell, 1996). Several authors have stated that assessment of social-emotional functioning in preschool children is critical because this affects their functioning in their homes, schools, and communities for years to come (Knoff et al., 1999).

Definition of Assessment

Several scholars have attempted to define the term assessment. Salvia and Ysseldyke (1995) stated, "Assessment is the process of collecting data for the purposes of (a) specifying and verifying problems and (b) making decisions about students" (p. 9). The authors emphasized assessment as a tool to help make decisions in educational and

psychological evaluation. Bondurant-Utz (2002) reiterated this statement and also stated that the assessment procedure should offer information and insights about children and their families which correctly recognize their typical behaviors, accurately identify their strengths, and correctly target possible areas in need of intervention. Assessments should be carried out with a definite purpose. Vasquez et al. (1999) developed another definition of preschool assessment: “The process of obtaining information from different levels, through different means, and in different contexts, to identify the problems experienced by children who are at risk or with disabilities and by their families, and to design solutions to solve those problems” (p. 3).

History of Preschool Assessment

Preschool assessment is relatively new in the history of testing (Kelley & Surbeck, 2000). However, preschool assessment issues, practices, and procedures are connected to strategies and techniques that began in Europe and the United States over 150 years ago. Kelley and Surbeck (2000) recognized two periods of extensive development in the area of preschool assessment. One significant phase of development in this area was through the work of Arnold Gessell at the Yale Clinic for Child Development. Gessell created a “Developmental Schedule” that contained about 150 items in four areas: motor development, language development, adaptive behavior, and personal-social behavior. The Developmental Schedule represented a ground-breaking attempt to provide a methodical, research-based approach to assess the behavior development of young children (Anastasi & Urbina, 1997). His work continues to influence the assessment of preschool children.

During the 1960s through the 1990s, notable growth occurred in the assessment of preschool children (Anastasi & Urbina, 1997; Kelley & Surbeck, 2000). Kelley and Surbeck (2000) stated that the primary reason for the surge was due to the federal government's increasing role in the education of children. Other factors that were responsible for the increased interest were the rapid expansion of educational programming for children with mental disabilities and the extensive development and growth of preschool programs for poor children (Anastasi & Urbina, 1997). A number of researchers discussed the legislation and mandates aimed at the early identification and remediation of disabilities in preschoolers (Anastasi & Urbina, 1997; Kelley & Surbeck, 2000; Merrell, 1996; Nagle, 2000). Nagle (2000) stated that the most important influence on the assessment of preschool children has been federal legislation.

In 1975 the Education for All Handicapped Children Act (Public Law 94-142) was passed and stated that all schools must provide school-aged children with disabilities a free and appropriate education in the least restrictive environment (Nagle, 2000). Public Law 94-142 stated that preschool children aged three to five with disabilities must be offered services. Public Law 94-142 was amended in 1986 and policies that presided over practices with school-aged children were applied to the assessment of preschool children. Public Law 94-142 was renamed the Individuals with Disabilities Education Act (IDEA).

Under IDEA, Part B, preschool children are entitled to services under the same disability categories as older children (Nagle, 2000). Professionals have raised concerns about the application of these disability categories for very young children. One concern

is that the obligation to identify a disability may lead to misdiagnosis and inappropriate services. Also, a diagnostic label has the potential to stigmatize children at an early age. Responding to these concerns, Public Law 102-119 was put into effect to give states the opportunity to include an additional category for children ages three to five who have developmental delays in the areas of physical development, cognitive development, communication development, social or emotional development, or adaptive development. In response to these laws, new tests and publications have been developed and extensive research has been carried out on new approaches to assessment (Anastasi & Urbina, 1997).

The expansion of educational supports and services to young children has extended the role of the school psychologist to incorporate preschool assessment activities (Nagle, 2000; National Association of School Psychologists, 2000). A Position Statement from the National Association of School Psychologists (2000) endorses early childhood assessment activities that are: (a) developmentally appropriate, broad, focused on the family, and address environmental factors; (b) conducted by a multi-disciplinary team; (c) connected to intervention strategies designed for young children; (d) based on comprehensive educational or behavioral concerns; (e) nondiscriminatory; and (f) technically reliable and valid.

Purposes of Assessment

The purpose of assessment is to gather information which can be used to make appropriate decisions about children which will enhance their healthy growth and development (Nagle, 2000). The four main purposes of assessment are grouped into

several areas that include screening, diagnosis, evaluation of the child's progress, and program evaluation (Keith & Campbell, 2000; Knoff et al., 1999; Nagle, 2000).

Screening

Screening is the evaluation of large groups of children using brief, inexpensive procedures to identify children who may need further assessment or may qualify for special services or programs. The purpose is to negate, improve, or reduce the damage of a possible negative outcome through early intervention (Keith & Campbell, 2000; Nagle, 2000). Screenings are relatively easy to administer and are usually not time consuming. However, Nagle (2000) expressed concerns about the accuracy of decisions based on screening test information.

Diagnosis

Diagnostic assessment typically stems from screening and involves the follow-up evaluation of child who has been identified as having a possible problem needing intervention (Nagle, 2000). Knoff et al. (1999) stated that assessment should not emphasize diagnosis but rather the goal should be to develop effective intervention design and evaluation. This assessment should include data collection from a number of different sources and settings. The primary purpose during this assessment is to discover whether a problem exists, determine the cause of the problem, and to decide what interventions, programs, and services most appropriately suit the needs of the child and family (Knoff et al., 1999; Nagle, 2000).

Individual Program Planning and Monitoring

Linking assessment and intervention while focusing on prevention is critical because early and successful preschool intervention is one of the most effective deterrents to more serious problems (Knoff et al., 1999). Individual planning and monitoring is crucial in order to develop goals and procedures to meet the child's needs. Information gained from assessment may be used in planning for an appropriate, individualized program. Monitoring may be based on observations, interviews, curriculum-based measurement, and other types of tests (Nagle, 2000).

Program Evaluation

Program evaluation is necessary to determine the quality of the program being implemented (Nagle, 2000). Accountability and documentation of program effectiveness are critical components of program evaluation. A primary focus of program evaluation should be to identify which features of the program influenced its effectiveness.

Social and Emotional Development

Professionals who assess social and emotional functioning in preschool children must have a basic understanding of child development, as well as the factors that affect social and emotional development (Keith & Campbell, 2000). The following sections will provide information on preschool children's social and emotional development as well as the major influences on social and emotional development.

Social Development

“Social development involves a spiraling increase of knowledge of both self and others” (Edwards, 1999, p. 17). As children grow, they gain new knowledge of the self

that helps them to understand their social worlds. Preschool children make sense of the social world by focusing on concrete and immediate cues when assessing themselves and others, analyzing social interaction, and understanding social terms, relationships, and rules.

Selman (1980) stated that with regard to friendship, most preschool children are in Stage 0, the momentary playmateship stage of friendship, or Stage 1, which Selman entitled one-way assistance. During Stage 0, children are egocentric and are not able to take another child's perspective. They have a difficult time connecting a physical action with the intention behind it. At this age, friends are usually chosen because of a physical characteristic or because of another child's possessions. During the preschool years, a "friend" is someone who the child likes presently or someone with whom the child is engaging in play (Edwards, 1999). Although friendships are not as stable in the preschool years, they are repaired rapidly and with ease.

During Stage 1, children do not grasp the concept of mutual "give and take" (Selman, 1980). Children at this stage are starting to be able to distinguish between their point of view and other people's. Friendships are usually based on one child taking the lead and the other child following. Children at this stage usually have a preference for playmates of the same gender and there are distinct differences in play behavior between genders. Girls' play is usually characterized as more cooperative, while boys' activities are more aggressive.

Emotional Development

Edwards (1999) stated that recently there has been an increase in interest in the topic of emotional development in children. Erik Erikson's theory of psychosocial development is useful for educators to remember because it serves as a useful framework for understanding preschoolers' emotional development. Erikson's stages suggest that children face two developmental crises during the preschool years (Erikson, 1963). The crisis of *autonomy versus doubt and shame* occurs during the toddler period and focuses on the child's attempt at self-control. The main issue during this stage is whether the child feels competent or incompetent as a result of these attempts. Children who develop a sense of autonomy will want to take action and be assertive.

During the later preschool years, children face the crisis of *initiative versus guilt*. This stage centers on the child's use of energy and initiative in exploring the world. The issue is whether this leaves the child feeling strong and proud, or guilty regarding negative thoughts and actions. Trawick-Smith (1997) explained that the dilemma between initiative versus guilt clarifies why preschool children actively pursue imaginary play activities. It also explains why some children see themselves as "naughty." Erikson (1963) stated that feelings of guilt may play a positive role in a child's development as long as it is not overwhelming. Adults can promote a sense of initiative in children by encouraging them to take risks in a non-critical environment.

Trawick-Smith (1997) stated that initiative appears in the developing preschool child through the child's interactions with peers. Once a child develops autonomy, she is more likely to want to reach out to others, make social contacts, and try different social

behaviors. Research suggests that social initiative is imperative for positive peer relationships. Children who take initiative in play are more likely to sustain peer interactions (Mize & Ladd, 1990).

Social initiative appears to make a significant contribution to a positive self-concept (Trawick-Smith, 1997). Self-concept can be defined as a person's theory of the self. Children who take initiative when interacting with other children and who are less dependent on adults have been found to be more self-assured and confident in their abilities.

Vernon (1993) stated that young children often express their emotions through their actions and gestures. The author also stated that the way emotions are modeled in a child's family impacts her reactions to feelings such as anger, fear, happiness, sadness, and affection. Preschool children lack the ability to recognize that it is possible to have simultaneous feelings about a situation, but they do grasp that it is possible to have different emotions at different times.

Influences on Social and Emotional Development

Major influences on social and emotional development include: (a) the characteristics of the child; (b) parental style and characteristics; (c) family characteristics; (d) environmental influences; and (e) the interaction of these factors (Keith & Campbell, 2000).

Child characteristics. The reciprocal role of child characteristics in shaping the environment and shaping the child's development through environmental response has been documented (Keith & Campbell, 2000). Several characteristics inherent in the child

have been referred to as temperament. Thomas and Chess (1977) described temperament as the behavioral individuality of the child. Temperament has been defined as individual variations in the strength, timing, and regularity of arousal and emotions. Nine dimensions of temperament have been identified and include activity level, rhythmicity, approach-withdrawal, adaptability to change, threshold of responsiveness, intensity of reaction, mood, distractibility, and attention span. Thomas and Chess (1977) grouped these nine components into three categories: The *easy child* shows positive responses to caregivers and is playful and adaptable. The *difficult child* has a lower degree of responsiveness and may cry more than other children and be difficult to comfort. The *slow-to-warm child* adapts to change more slowly (as cited in Mobley & Pullis, 1991).

Parental style and characteristics. Traits of parents and their approaches to relating to their children have influence on children's social and emotional development. Baumrind (1973) stated that parenting styles can be divided into three components: (a) the *authoritarian parent* who stresses firm limits and discourages independence; (b) the *authoritative parent* who firmly enforces rules and encourages independence; and (c) the *permissive parent* who does not set limits or enforce rules (as cited in Keith & Campbell, 2000).

Environmental influences. Society does play a significant role in the social and emotional development of young children. Bronfenbrenner (1986) discussed the impact of external influences on the family and child. In fact, external support systems can be a protective factor against chronic stress (as cited in Keith & Campbell, 2000).

Interaction of influences. Keith and Campbell (2000) stated that there is not one single influence that is solely responsible for the social-emotional development of a child. There is strong empirical evidence for the interaction of these influences and their affect on social-emotional development and functioning.

Assessment of Children's Social-Emotional Functioning

Assessment is a critical yet oftentimes overlooked component to recognize social-emotional problems in children and therefore offer appropriate interventions (Merrell & Gimpel, 1998). A multi-method, multi-source, and multi-setting assessment is necessary in order for the procedure to be valid (Jones, Sheridan, & Binns, 1993; Merrell, 2001; Sheridan, Hungelmann, & Maughan, 1999). The most critical aspects of the assessment are that it permits a functional analysis of behavior (Elliott, Sheridan, & Gresham, 1989; Gresham, 1998) and that the assessment is linked to the intervention (Merrell, 2001; Sheridan et al., 1999). There are a number of limitations in assessing preschool children which should be addressed.

First, preschool children are cognitively limited as compared to older children, which influences assessment practice in several ways (Keith & Campbell, 2000, Merrell, 1999). Most preschool children cannot read or express themselves verbally. Preschool students do not understand the purposes of assessment and therefore usually cannot adjust their behavior to meet the demands of the assessment situation. Also, preschool children have a limited understanding of social-emotional concepts, which often hinders inquiry about emotions and feelings. Lastly, preschool children often have an egocentric view of the world and have difficulty comparing themselves to others.

Secondly, social-emotional traits are not as stable in preschool children as they are in older children (Keith & Campbell, 2000). Preschool children's social and emotional functioning may also vary in different situations and contexts. A final limitation is that there is a large range of normal developmental progress in preschool children and it is often difficult to differentiate between preschool children who demonstrate normal social-emotional functioning relative to children who do not.

Despite the general limitations in assessing preschool children, there are a broad range of assessment procedures which may be used to evaluate children's social-emotional functioning. These include: (b) interviewing; (c) direct observation; (d) behavior rating scales; and (e) play-based assessment (Keith & Campbell, 2000; Merrell, 1996). Merrell (2001) stated that best practices in social-emotional assessment is to use behavior rating scales supplemented with interviews with appropriate people (e.g., teachers, parents, and/or the student) and observations.

Interviews

Interviewing is the most commonly used and oldest assessment method. Interviews may occur with the child, the parents, and/or the teachers (Jones et al., 1993). Interviews allow for flexibility and may provide the interviewer with pertinent and functional information regarding environmental circumstances, allowing the assessment method to be linked to the intervention (Merrell, 2001). However, the use of interviewing in assessing children's social-emotional skills has not been studied or condensed into a format that allows for consistent use on the part of clinicians. Also, preschool children may not have the vocabulary required for these interviews. Merrell

(2001) asserted that the use of interviewing should be considered as a secondary technique in the assessment of social skills.

Observations

Direct observations provide a measure of a child's social interactions in certain settings, permit a functional analysis of the child's behaviors in the context of the social environment, and allow a chance to monitor the reactions of other children (Jones et al., 1993). The use of teacher observations as a method of assessing children's social-emotional development is valuable because of the problems that can arise from traditional assessment techniques due to the limitations of preschool children mentioned earlier.

Using a teacher's classroom observations to assess children's behavior is also advantageous because these observations are less intrusive than having an outside evaluator come into the classroom (Hutchins, 1999). The teacher's ratings may be more reliable because she may be able to observe during several times throughout the day in different activities so a more accurate view of the child's development may be established. Also, preschool classrooms usually include the teacher along with other professionals such as assistants or classroom aides. When more than one rater is available to evaluate the child, reliability is enhanced. Data received from preschool teachers about their preschool students' social-emotional functioning may be an extremely beneficial aspect of the assessment process.

The most appropriate settings for observations are in environments where the targeted child interacts with peers. Merrell (2001) advocated for the use of a coding system in order to document certain behaviors. Unlike other assessment methods, there

are no specific instruments to use for observation. Observational procedures that are designed to meet the needs of the situation are used to assess the target child. There are a small number of available assessment tools used for observation of a child's social and emotional skills and none available for use with preschool children.

Despite the empirical basis for using behavioral observation to assess the social and emotional skills of children, the technique is time-consuming and psychometric problems may arise due to a lack of planning and execution of the observation (Merrell, 2001). The third concern has to do with the number of observations that are necessary in order to obtain a reliable and valid measurement of behavior. Merrell (2001) cited a study by Doll and Elliott (1994) in which the authors found that for young children it may be necessary to obtain several observations over time in order to ensure that a reliable social observation has taken place. The authors provided a rationale that the social behavior in young children is often reactive or influenced by the specific social context or social demands of the environment.

Behavior Rating Scales

Behavior rating scales are commonly used to assess the social-emotional functioning of preschool children (Keith & Campbell, 2000; Merrell, 1999). In fact, behavior rating scales are often the primary assessment tool used in assessment. Usually, raters familiar with the preschool child, such as a parent, teacher, or day care worker responds to a list of items that describes the child across several different domains of behavior. Items typically include specific behaviors. Raters are asked to indicate whether a particular behavior is present or absent and often to what degree.

Behavior rating scales can facilitate a number of different assessment decisions (Demaray et al., 1995). They can be used (a) as part of the screening, referral, and identification process; (b) to compare behaviors in different environments; (c) to examine behavior at different time periods; and (d) in research. One of the major advantages of behavior rating scales is the capability to attain judgments about several different behaviors from different sources in a timely manner. There are several other advantages of having preschool or day care providers rate children's behavior (Hutchins, 1999). Teachers may be valuable raters because they have an ample opportunity to observe children for several hours during the day, may be more impartial than parents, and may see the children more consistently than other professionals. Limitations of third-party rating instruments include possible variability in ratings and questionable technical adequacy issues. Teachers or caregivers may be biased when rating children.

Play

“Play is the work of young children” (Reifel & Yeatman, 1993, p. 348). Play serves a significant role for preschool children, both in their relationships with others and in their own social-emotional skill development (Vernon, 1993; Wilburn, 2000). Children are able to develop social skills and learn to regulate their emotions through play (Hutchins, 1999). A number of researchers have emphasized the importance of play in the development of social-emotional skills. Play is the main context for studying how preschool children acquire essential social skills and learn to regulate their emotions (Fantuzzo, Manz, & McDermott, 1998; Guralnick, 1993).

Piaget's cognitive theory of play has led to the belief that play develops in three stages (Reifel & Yeatman, 1993; Weinberger & Starkey, 1994). The first stage is generally referred to as functional, practice, or exploratory play, which is the earliest stage which is based primarily on repeated muscle movements with or without objects. An example of this type of play is a child banging pots and pans. The next stage of development is constructive play in which the child manipulates objects to create something else. An example of this stage is a child building a house with legos. Pretend play is the third type of play to emerge as children substitute imaginary objects or situations for real ones in order to satisfy their desires, resolve conflict, and provide enjoyment (Weinberger & Starkey, 1994).

There are three stages of pretend play (Weinberger & Starkey, 1994). The first stage is the self-referenced pretense stage. During this stage, children replicate their own actions during a particular play episode. A second stage is the other-referenced pretense, in which the child recouples her actions to other objects. The third stage, called sociodramatic play, is the most advanced as it is characterized by symbolism and sophisticated role play in which the child uses negotiation and assumes different roles. High levels of organization, planning, and verbal abilities are also required. An example is a child playing house and taking on social roles such as mother or child.

It is crucial to remember the importance of play in the development of social and emotional skills when assessing preschool children (Hutchins, 1999). Play gives children the chance to learn to negotiate, learn rules, cooperate with others, resolve conflicts, take turns, and share (Wilburn, 2000). Play offers an opportunity to assess and observe

children's social skills and emotional regulation in a naturalistic environment (Hutchins, 1999).

Social Competence

Recently, there has been growing interest in the development of social skills and social competence in children. Widespread interest has increased due to the negative implications that have been found for children with poor social skills (Choi & Heckenlaible-Gotto, 1998; Cox & Schopler, 1991; Elliott, Sheridan, et al., 1989).

Social Competence and Social Skills Defined

The constructs of social skills and social competence have often been used interchangeably in the research literature but there are differences between them (Elliott & Gresham, 1993). It is important to distinguish between them because they are independent from each other (McFall, 1982). According to McFall (1982), social competence is a summary term used to judge whether a person has performed adequately on a specific task. Social skills, however, are certain behaviors that an individual must demonstrate to perform capably on a given task. These precise behaviors result in evaluations based on opinions of other people (e.g., teachers, peers); evaluations based on a sample; or contrasts made with reference to a clear criterion (e.g., number of tasks presented correctly; Gresham, 2002; McFall, 1982).

McFall's (1982) view of social competence identifies social skills as certain behaviors that produce judgments by others regarding those behaviors. Social skills are specific actions that "must be taught, learned, and performed" (Gresham, 2002, p. 1030).

The judgments made in different situations and periods of time regarding the behaviors represent social competence.

Gresham and Elliott (1993, p. 139) stated, “Social skills are those behaviors that occur in specific situations which predict important social outcomes for children and youth.” Important social outcomes may consist of (a) positive self-esteem; (b) peer acceptance; (c) important others’ evaluations of social skills; (d) positive adaptation to home, educational, and societal environments; and (e) academic success (Gresham & Elliott, 1993).

Appropriate Social Skills for Preschool Children

What social skills should preschool children possess? There is no certain set of social skills that are seen as suitable for preschoolers. This may be due to various preschool settings, differences between children, and cultural values, which create an array of behaviors that might be seen as appropriate for preschoolers to have (Swetnam, Peterson, & Clark, 1983). However, in order to increase the likelihood of socially valid interventions, it is important to understand the social skills of preschoolers that are significant to their development and to their teachers and parents.

In a study by Elliott, Barnard, et al. (1989), a group of parents were asked to identify the most important social skills for their children to possess. Upon being given a list of 50 social behaviors from Gresham and Elliott’s Social Skills Rating System (1990), the parents chose the following skills: (a) shows respect for others’ feelings; (b) attends to instructions; (c) asks for parent consent before leaving the house; (d) tells a parent of difficulties; and (e) gives an adult information about emergencies or mishaps.

Teachers in the study by Elliott, Barnard, et al. (1989) reported that the most imperative social skills in their classrooms were: (a) obedience to directions; (b) assignment completion within a reasonable time period; (c) asks necessary questions when uncertain of expectations for class work; (d) cooperation with peers; and (e) listens to directions. Numerous researchers have found similar results as Elliott and his colleagues in their surveys of parents' and teachers' expectations for children's social skills.

Researchers have attempted to derive common dimensions, or clusters, of social skills. Caldarella and Merrell (1997) conducted a qualitative meta-analysis to obtain an "empirically based taxonomy" of children's levels of social skill functioning. The authors had a thorough understanding of the most widely used definitions for the construct of social skills when constructing the taxonomy. Previous empirically based taxonomies have focused on child and adolescent maladaptive behaviors, but this study was the first to attempt in the research literature to develop a taxonomy of positive social behaviors. The authors analyzed 21 empirically based, factor analytic research studies based on 20 years of research which utilized 19 social skills inventories and rating scales. The studies included more than 22,000 students with ages spanning from 3-18.

Caldarella and Merrell (1997) used four "levels" to analyze each empirical study: (a) characteristics of the study; (b) aspects of common social skills identified in the study; (c) an examination of factor items associated with these aspects; and (d) the creation of a social skills taxonomy. Using these levels, the authors divided common skills addressed in the studies into five broad dimensions: (a) peer relations skills (occurring in 11 of the

studies analyzed), (b) self-management skills (occurring in 11 studies), (c) academic skills (occurring in 10 studies), (d) compliance skills (occurring in 8 studies), and (e) assertion skills (occurring in 7 studies).

Caldarella and Merrell (1997) stated that the taxonomy is useful for practitioners to focus on when developing assessment and intervention strategies. The authors stated that the taxonomy is a valuable resource for individuals to utilize in order to (a) provide a classification system to use to refer to the typical five patterns; (b) identify areas in which children may be weak or have strengths; (c) plan behavioral interventions; (d) evaluate the results of the interventions; and (e) assist in the development of theory with regard to the cause, prognosis, and reactions of students to the social skill interventions.

Elliott and Gresham (1993) identified five major clusters of social skills that form the acronym CARES. The clusters are cooperation, assertion, responsibility, empathy, and self-control. Cooperative behaviors include helping, sharing, and obeying rules. Assertive behaviors are initiating and responding to other people's actions (e.g., responding to peer pressure). Responsibility is a behavior that expresses the ability to communicate with others and to care for one's property. Empathy is characterized by being concerned about others' feelings. Self-control usually surfaces in conflict situations, when a child is required to respond appropriately to certain events and actions.

Theoretical Approaches to Intervention

Elliott, McKeivitt, and DiPerna (2002) classified the range of procedures that may be used to treat social skills deficits in preschool children. These include operant conditioning, social learning, and cognitive-behavioral procedures. With regard to the

most effective intervention, research has shown that all three types of interventions have the potential to be very effective. Results of different studies suggest that operant and social learning interventions have been the most effective procedures for preschool students. The following interventions were selected for review because of their empirical support in the literature.

Operant interventions. Operant methods focus on overt, distinct behaviors and the antecedent and consequent events that surround the behavior. Reinforcement and/or punishment is provided based on the display of desired targeted behaviors and used to manage the behaviors, along with the manipulation of antecedents and consequences. Operant procedures presuppose that a child has acquired certain skill(s) but does not perform them at preferred levels (Jones et al., 1993). Unresponsive social environments often cause young children's social interactions to fail. Teachers manipulate antecedent conditions when they cue and/or prompt students to engage in positive social interactions in a constructive environment (Elliott et al., 2002). Two antecedent approaches that are often used are cooperative learning and peer social initiation.

Goodwin (1999) defined cooperative learning as a small, diverse group of children working together to achieve a task. A collaborative relationship should be encouraged and children should have the opportunity to learn and demonstrate prosocial behaviors. Learning a skill is accomplished best in a situation that seems natural to the learner. A cooperative learning setting would be the most natural way to practice and reinforce necessary social skills (Johnson, Johnson, & Holubec, 1988).

Peer social initiation is a method in which trained peers reinforce the target child for presenting appropriate social skills and initiate and maintain social relationships with the child. Elliott et al. (2002) noted that this approach has the potential to be useful as long as the target child's rate of interaction is above zero.

Consequent strategies that may be employed include reinforcement strategies and behavioral contracts (Gresham & Elliott, 1993). Reinforcement strategies are contingent on whether a child demonstrates a given social behavior and may include the use of a point system, attention, or praise. Behavioral contracts are agreements written by the student and a mentor that document the connection between a certain behavior and the consequences of that action.

Elliott et al. (2002) also described another procedure used to modify and eliminate difficult, interfering behaviors that block the acquisition or performance of a social skill. Differential reinforcement is a technique in which a certain behavior is reinforced during the occurrence of a certain stimulus (e.g., saying please and thank you), but is not reinforced when another stimulus is presented (e.g., swearing). This method attempts to rid the target child of detrimental behaviors and increase positive behaviors.

Gresham and Elliott (1993) discussed the use of positive practice. The authors described this technique as the "component of overcorrection" (p. 149). This is the strategy of having a student repeatedly practice a suitable behavior that is unable to coexist with an improper behavior. An example is having a student who teases another child be encouraged and told to constantly give praise and be nice to the teased child.

Another strategy is response cost. In order to decrease the occurrence of a certain behavior, a positive reinforcer is taken away. Response cost may involve penalties or fines. An advantage of response cost is that it is easy to apply and maintain in group settings (Gresham & Elliott, 1993).

Group contingencies entail the delivery of consequences for group behavior. Besides being time-efficient and requiring little effort on the part of the teacher because students manage their own behavior, this technique can be applied in different ways. Reinforcement can be given based on the behavior of the individual independent from others' behavior (independent group contingency); based on the group behavior (interdependent group contingency); or a dependent group contingency, in which reinforcement is applied based on the behavior of certain children (Jones et al., 1993). Group contingencies have been successful for social skills training, are used frequently, and are similar to cooperative learning techniques (Elliott et al., 2002; Gresham & Elliott, 1993).

Social learning interventions. Social learning procedures are based on Bandura's (1977) social learning theory, which states that behavior is a result of observation and reinforcement (Elliott et al., 2002). This procedure encourages the use of modeling as a method to learn socially correct behaviors. Modeling, or observational learning, is a visual method of learning a behavior in which an individual watches another person perform that desired skill (Gresham & Elliott, 1993; Michelson, Sugai, Wood, & Kazdin, 1983). This approach is one of the most effective ways to instruct social behavior and

has empirical support as an intervention that promotes social skills development both for children and adolescents.

Interventions using modeling techniques involve the training of desired social behaviors through videotaped, filmed, or live displays of the skills to be obtained. Two modeling approaches may be utilized by practitioners: (a) live modeling, in which the target individual observes appropriate social skills being modeled by other individuals; and (b) participant modeling, in which the target student is expected to model certain social skills (Elliott, Sheridan, et al., 1989).

Peer mediated interventions have also been powerful reinforcers for positive student behavior and are based on the notion that children with social skills deficiencies may be positively affected when their peers reinforce appropriate social skills. Research has suggested that using peers as mediators may influence the rate of positive social behaviors (Mathur & Rutherford, 1991, as cited in Elliott et al., 2002). Peer mediation may be more effective than teacher mediation because peers have more opportunities to observe the targeted child more consistently and apply necessary reinforcements (Elliott et al., 2002).

Cognitive-behavioral interventions. Cognitive-behavioral procedures concentrate on the child's internal control of her behavior. The child's ability to solve problems and to regulate her own behavior are hallmarks of this approach. Cognitive-behavioral interventions focus on the cognitive processes that have been related to social problem solving and social competence. For young children, two commonly used cognitive-

may be too cognitively difficult for preschool students and recommended that more “skill-oriented, externally reinforcing procedures” should be used with this population.

Resiliency

Although there is not a universally accepted definition of resiliency, Henderson and Milstein (2003) defined the term as the capability to recover and successfully adapt in the face of hardship, and develop social, vocational, and academic competencies even with exposure to severely stressful life situations or merely the stress that is present in the world presently. Resilience also includes coping with challenges, relating with others, and treating both the self and others with respect. Resilience varies between people and can expand or weaken over time.

Protective factors have been defined as the characteristics within a person or environment that lessen the potentially harmful impact of the stressful situations and conditions. With enough protective factors, an individual may cope with adversity without experiencing a considerable interference in life functioning. Protective factors can be divided into three categories: (a) a supportive family environment; (b) community support systems; and (c) child attributes (Garmezy, 1985). Henderson (1998) stated, “The goal is to build in enough protective factors to offset the impact of stressful life events. When the balance is favorable, successful adaptation—resiliency—is the outcome” (p. 17).

Werner (2000) identified that the term resilience has been used to describe three different trends. The first type focuses on children who have had positive developmental outcomes and overcome difficult odds despite coming from high-risk backgrounds.

Children who flourish despite living in poor economic conditions, having a parent with a mental illness, and experiencing child abuse and neglect are examples of this type of resilience.

The second trend that has emerged is the type of resilience in which children possess sustained competence under stressful conditions, such as a divorce in the family (Werner, 2000). The third trend focuses on individuals who have successfully recovered from serious childhood traumas such as war and political violence.

Characteristics

From early on, a resilient child exhibits qualities or protective factors that enhance resilience (Dirling, 1999). Benard (1993) stated that resilient children are socially competent, possess problem solving skills, autonomy, and a sense of purpose and look forward to the future. Resilient children usually are optimistic about what is going on around them, seek positive attention, and find a way to escape from problems through creative interests, athletics, and hobbies (Dirling, 1999). Resilient children also have the capability to seek help and advice from people close to them (e.g., peers, teachers, family members (Tarwater, 1993). Resilient children are able to plan and are resourceful (Wang et al., 1997).

Resilient children have a sense of hopefulness and self-worth (Brooks & Goldstein, 2001). Resilient children also feel special and appreciated, set realistic goals and expectations for themselves, are able to problem solve and make decisions, and possess productive coping strategies. Children who have resilient characteristics also are aware of their weaknesses and strengths, have a strong self-concept, and are able to

identify the aspects of their lives they have control over along with those they do not. They have a tendency to perceive their experiences constructively, have an ability at a young age to gain people's positive attention, and use faith in order to maintain a positive vision for a meaningful life (Werner, 1984).

Resilient children and resilient adults have very similar characteristics (Benard, 1991; Higgins, 1994). They tend to be socially competent and have positive relationships with others, are effective problem solvers, and are motivated to achieve in school and life. Resilient children and adults also are good critical thinkers and have the ability to take initiative. They foresee a positive future for themselves.

One of the largest studies of resiliency in children who were at-risk for potential problems was the longitudinal study of a diverse group of 698 infants born in 1955 on the island of Kauai, Hawaii (Werner, 1989, 2000; Werner & Smith, 1992, 2001). In this classic study, Werner found that one-third of the children studied who were at high-risk due to the presence of four or more significant risk factors (e.g., perinatal complications, chronic poverty, parental alcoholism, neglect) did not experience negative outcomes and became loving, caring, responsible adults. Werner (1989) hypothesized that the positive outcomes were due to the protective factors the children possessed that offset the effects of the risk and adversity the children experienced.

Wolin and Wolin (1993) proposed seven internal characteristics, or resiliencies, which are typical in both resilient children and adults based on their studies of children who had lived in alcoholic homes and other stressful surroundings. The researchers reported that children who live in these environments may develop problems but they

may also develop internal resiliencies of initiative, independence, insight, relationship, humor, creativity, and morality. The Wolins stated that children who possess even one of these characteristics may be able to prevail over the potential negative effects of the stressful environment.

Promoting Resiliency

Brooks and Goldstein (2000) stated that parents and caregivers should know about and value the components of resilience, so that their actions and ideas will be guided by these principles. The authors identified parenting “guideposts” which foster resiliency in children. These include: (a) being empathic; (b) communicating well and listening actively; (c) changing negative “scripts”; (d) loving children in ways that help them feel unique and valued; (e) accepting children for who they are and helping them to set reasonable expectations and goals; (f) helping children experience success by recognizing and reinforcing their competencies; (g) assisting children in viewing mistakes as learning experiences; (h) fostering responsibility, compassion, and social conscience by providing children with opportunities to contribute; (i) teaching children to problem solve and make decisions; and (j) disciplining in a way that encourages self-discipline and self-worth.

Schools are critical environments for children to develop the ability to bounce back from adverse circumstances, adapt to stress and problems, and develop social, academic, and vocational competencies necessary to succeed in life (Henderson & Milstein, 2000). Werner (1984) encouraged educators to foster resiliency in children by accepting children’s individual differences and giving them experiences which challenge

but do not overwhelm. Educators should also communicate to children a sense of responsibility and caring and reward them for being helpful and cooperative. Children should be persuaded to develop a special interest, hobby, or activity that is rewarding and will enhance self-esteem. Also, educators should encourage children to reach out to others beyond their nuclear family and develop positive role models and friends.

Critique of the Literature

Numerous researchers have agreed that the assessment of social-emotional functioning is critical during the preschool years. However, the history of preschool assessment is relatively new and further research needs to be conducted in this area if the field is to progress to a point where a significantly larger impact can be made in reducing the pain and distress that often accompanies social and emotional problems. Specifically, more social-emotional assessment tools need to be developed that are specifically geared toward preschool children and their developmental levels. The present status of preschool assessment instruments still leaves much to be desired with regard to their reliability and validity.

Several authors have discussed the importance of preschool children possessing good social skills and resilient characteristics. However, practical issues still must be addressed in the assessment and remediation of social skills deficits and resiliency in children, such as the identification of behaviors that are considered to be important to parents and teachers of young children, the influence of child and family background variables on social behavior and resiliency, the use of parents and teachers in the assessment of preschoolers' social skills and resiliency characteristics, and enhancing the

generalization of social skills and promoting resiliency in children. These are concern areas that educators and psychologists will face, yet there is little published information on these issues at hand.

CHAPTER 3

METHODOLOGY

Participants

The participants in this study were 68 children and 8 teachers. All participants were from a private preschool program in northeastern Iowa. Participants were divided between two centers, with 5 teachers and 41 students participating from one center, and 3 teachers and 27 children participating from the other center. The children were 3 ($n = 17$), 4 ($n = 28$), and 5-year olds ($n = 23$). Approximately half of the children were female ($n = 32$). The teachers involved in the data collection were trained to use the Devereux Early Childhood Assessment (DECA) and the Social Skills Rating System-Teacher (SSRS-T) by the researcher.

Instruments

Social Skills Rating System (SSRS)

The SSRS is an inventory designed to screen and assess children's social skills in different settings and to aid in the development of interventions when social skill deficits are identified (Gresham & Elliott, 1990). The items were based on empirical research from child development, clinical psychology, educational psychology, and special education. The SSRS is a norm-referenced scale comprised of two behavior rating scale forms that are used at the preschool level: The Social Skills Rating System-Teacher (SSRS-T) and the Social Skills Rating System-Parent (SSRS-P).

The SSRS-T is appropriate for rating children 3-5 years of age (Gresham & Elliott, 1990). At the preschool level, the SSRS-T contains 40 items made up of 30

prosocial behavior items and 10 problem behavior items. The prosocial items are rated on dimensions of frequency and importance for success in the classroom environment. Problem behavior items are rated according to their frequency only. Each of the prosocial behavior items are rated with scores ranging from 0 (never demonstrates the ability or skill) to 3 (very often demonstrates the ability or skill). The importance of the skill for success in the classroom is rated with scores ranging from 0 (not important) to 2 (critical).

The SSRS-T has been factor-analyzed into the following scales: Cooperation, Assertion, and Self-Control for the Social Skills section, and Internalizing and Externalizing for the Problem Behaviors section (Gresham & Elliott, 1990). Adding the raw scores of the three social skills subscales and the two Problem Behaviors subscales yields total social skills and total problem behaviors raw scores which can be converted into standard scores and percentile ranks. The standard scores have a mean of 100 and a standard deviation of 15.

Standardized behavioral levels of “fewer,” “average,” and “more” are obtained based on the raw scores for the three Social Skills and two Problem Behaviors subscales. The words “fewer,” “average,” or “more” can be understood as referring to amounts, or frequencies of behavior (Gresham and Elliott, 1990). Behavioral Levels were derived from cutoff points that were based on the performance of the standardization sample.

Raw scores within one standard deviation of the mean of the standardization sample are considered to be in the “average” range. A score in the average range would suggest that the student exhibits social skills to the degree that was average for the

standardization sample comparison group. Raw scores above one standard deviation from the mean are labeled “more,” which would suggest that the student exhibits social skills to a greater degree than the average for the standardization sample comparison group. Raw scores below one standard deviation from the mean of the standardization sample are labeled “fewer.” Thus, a student earning a Behavior Level of “fewer” on the Social Skills Scale can be thought of as exhibiting social skills to a lesser degree than the average for the standardization group. Due to the negative characteristics of problem behaviors, the meaning of the Behavioral Levels is reversed on the Problem Behaviors Scale (e.g., a child earning a behavioral level of “more” on the Problem Behaviors Scale can be interpreted as exhibiting more problem behaviors than was average for the standardization group).

Sample items for the Social Skills scale include: “follows your directions,” “helps you without being asked,” and “waits turn in games or other activities.” Sample items for the Problem Behaviors scale include “has temper tantrums” and “disturbs ongoing activities.”

Standardization. The norms for the SSRS-T were developed for both boys and girls using 34 teachers who rated 212 children from a national tryout sample during January through October of 1987 (Gresham & Elliott, 1990). Ten states were involved in the tryout edition. The teacher forms contained 50 positively phrased social skills items along with 10 negatively phrased problem behavior items. Preschool norms were constructed from the national tryout sample data. The standardization sample was

stratified on gender, race, region of residence, socioeconomic status, and size of community of residence based on data from the 1988 Census.

Validity. Gresham and Elliott (1990) extensively documented the content, social, criterion-related, and construct validity of the SSRS. Social and content validity was established through teachers' and parents' ratings of the importance of the SSRS items. Criterion-related validity was documented by comparing the SSRS in various studies to the Social Behavior Assessment, the Piers-Harris Children's Self-Concept Scale, the Harter Teacher Rating Scale, and various forms on the Child Behavior Checklist. The evidence supporting the system's construct validity included factor analyses, convergent and discriminant correlation analyses, and comparisons of contrasted groups, along with the consistency of these analyses across the demographic characteristics (e.g., gender and ethnicity) of those children evaluated by the SSRS.

The content validity of the SSRS was documented by Elliott, Barnard, et al. (1989) who analyzed the SSRS-T and SSRS-P ratings of a diverse sample of 212 preschool children. Results showed that almost all of the behavior items included on the SSRS-T and SSRS-P were rated as either "Critical" or "Important" by the raters. To document concurrent validity, the same study compared the SSRS-T and SSRS-P to Burks' Behavior Rating Scale responses. Significant positive correlations were found between the Interfering Behaviors Factor (one of the pre-published factors of the SSRS) on both the SSRS-T and SSRS-P and the three problem areas (Aggression, Inhibition, and Inattention) of the Burks. Negative correlations were found between the prosocial factors

on the SSRS-T and SSRS-P and problem behaviors on the Burks. These findings support the concurrent validity of both forms of the SSRS at the preschool level.

Reliability. The internal consistency of the scale was determined by using the normative sample and data described above. A relatively high degree of scale homogeneity was found based on coefficient alphas ranging from .83 to .94 for the Social Skills scale and .73 to .88 for the Problem Behaviors scale across all forms and levels. According to prediction, the coefficients for the separate subscales were lower, with median correlations ranging from .78 to .84 for Cooperation, Assertion, Self-Control, and Externalizing Problems (Gresham & Elliott, 1990).

Relative to test-retest reliability, both the SSRS-T and the SSRS-P appear to have good to excellent stability. Reliability coefficients of .85 for the Social Skills scale and .84 for the Problem Behaviors scale were reported for the SSRS-T with a sample tested and then retested after four weeks. However, these results were computed using the elementary level of the standardization sample and not the preschool level sample (Gresham & Elliott, 1990).

While additional research is needed for the SSRS, it does demonstrate the potential to accurately assess the prosocial and problem behaviors of preschoolers and to allow monitoring of children's progress in these skills over time. The SSRS may also provide a link between assessment and intervention, a critical need in preschool social-emotional assessment (Gresham & Elliott, 1990; Knoff et al., 1999; Lyon, Albertus, Birkinbine, & Naibi, 1996).

Devereux Early Childhood Assessment (DECA)

The Devereux Early Childhood Assessment (DECA) is a nationally normed behavior rating scale that purports to evaluate protective factors in preschool children aged two to five (LeBuffe & Naglieri, 1999). The DECA has three main purposes: (a) to identify children who attain low scores on the scales measuring protective factors so that interventions can be employed at school and home to strengthen these skills; (b) to develop classroom profiles that document the strengths of the children in the classroom so that classroom interventions and strategies can support and build upon healthy social and emotional development; and (c) to identify children who may demonstrate emotional or behavioral concerns and develop interventions before these problems exacerbate into major problems.

Completed by caregivers and early childhood professionals (e.g., parents, preschool teachers, and childcare providers), the raters record the frequency of 27 positive behaviors and 10 behaviors of concern. Sample positive behavior items include: “keep trying when unsuccessful (act persistent),” “listen to or respect others,” and “seek help from children/other adults when necessary.” Sample behavior concern items include: “become upset or cry easily,” and “destroy or damage property.”

LeBuffe and Naglieri (1999) used a two-step approach to develop the scale items on the DECA. The authors first reviewed literature on the concept of resilience. Secondly, focus groups were held with parents and educators of preschoolers. The members of the groups were asked to describe positive and negative behaviors related to social and emotional health and functioning. Following a pilot study and separate

standardization study, a factor analysis was conducted on the items. A three-factor solution including attachment, self-control, and initiative was created and a fourth scale involving behavior concerns was developed.

Ratings on the DECA vary from 0 (never displays the behavior) to 4 (very frequently displays the behavior) (LeBuffe, 1998). Scoring the DECA produces a Scale Raw Score, Percentile Score, T-Score, and a category rating assignment of “strength,” “typical,” or “concern” for the Attachment, Initiative, Self-Control, and Behavior Concerns subscales. A strength is categorized as a score at or above the 83rd percentile, a typical score lies between the 82nd and 18th percentiles, and a concern is at or below the 17th percentile. The cut-off scores for classifications of strength, typical, and concern resulted from the standardization of the DECA. Totaling the scores for the subscales of Attachment, Initiative, and Self-Control produces a Total Protective Factors (TPF) score.

Standardization. The DECA was standardized on a sample of more than 2,000 preschool children from 27 states in the fall of 1997 and spring of 1998 (LeBuffe & Naglieri, 1999). The sample was made up of children ages 2 years 0 months to 5 years 11 months, 30 days. Approximately 51% of the children were males and 49% were females. One-half of the children sampled were rated by a preschool teacher or daycare center staff and the other half were rated by a parent or caregiver. Twenty-five percent of the children lived in households receiving public aid or subsidized childcare. This percentage corresponded to the prevalence of poverty among young children. The standardization sample was stratified on sex, race, ethnicity, region of residence,

socioeconomic status, and size of community of residence based on the data from the 1997 Census.

Validity. LeBuffe and Naglieri (1999) examined construct, content, and criterion-related validity for the DECA. Construct validity was inspected by correlating the scores on the Behavior Concerns Scale and the Total Protective Factors (TPF) scale. A correlation of $-.65$ indicates a moderate relationship. Content related validity is supported through a broad review of resiliency literature and the results of focus groups because currently there are no other measures purporting to assess protective factors. Criterion validity was established by investigating the DECA's ability to acceptably predict whether a child was part of a clinical ($n = 95$) or a matched non-referred ($n = 86$) sample. The clinical sample incorporated any child who had been given a psychiatric diagnosis, was seeing a mental health professional, had been asked to exit a child care center because of problem behaviors, or had an individualized behavior management plan. Children who did not meet these criteria were included in the non-referred sample. The DECA classified 69% of the children in the study with accuracy.

Reliability. LeBuffe and Naglieri (1999) analyzed the DECA's internal consistency, interrater, and test-retest reliability. The researchers reported that internal consistency for the Total Protective Factor (TPF) scores for both parents and teachers exceeded an alpha of $.90$. Teacher and parent internal consistency values for the Attachment, Initiative, Self-Control, and Behavior Concerns subscales ranged between $.90$ and $.71$. Interrater reliability was found by comparing ratings from teachers and teachers' assistants ($.59$ to $.77$). These correlations were significant at the $.01$ level.

LeBuffe and Naglieri (1999) reported that correlations between parents or between parents and teachers were lower, ranging from nonsignificance to .41 ($p \leq .05$). This indicates that the DECA is sensitive to contextual disparities in children's behavior. Test-retest reliabilities were collected over a 24-72 hour time range. Test-retest reliability scores for parent and teacher ratings on the Attachment, Initiative, Self-Control, and behavior concerns subscales ranged between .55 and .91. These correlations were also significant at the .01 level.

Overall, the results of the reliability and validity studies indicated that the DECA is a reliable instrument for assessing children's protective factors and the evidence also suggests that the DECA does measure what it purports to measure (LeBuffe & Naglieri, 1999).

Procedure

The researcher contacted a private day care program in northeast Iowa. A proposal meeting was scheduled in which the researcher explained the purpose of the study. A letter of consent was obtained from the associate director of the preschool center. A Human Subjects Review Form from the University of Northern Iowa was completed prior to beginning the study. The study's methodology was explained and specified in detail. The University of Northern Iowa Graduate College reviewed the procedures for ethical considerations. The study's procedures were approved on February 20, 2003.

The researcher arranged meetings with the teachers in the preschool centers. The study was described during the teachers' team meetings and consent was obtained. Each

teacher was given a consent form to read and sign. Eight of nine teachers contacted agreed to participate in the study.

A consent form was distributed to approximately 130 parents whose children were in the classrooms of teachers participating in the study. Children who were between the ages of three and five were enlisted to participate in the study. The consent forms explained the purpose of the study and both parents and teachers were given the option to choose not to participate in the study. Confidentiality was emphasized on the consent forms.

The consent forms were distributed the last week of February and parents were given 7 days to return the forms. Each teacher had her own procedure for distributing the consent forms. Teachers either handed the forms to the parent/guardian or gave the form to the child to take home. The researcher contacted the teachers during the middle of the week to ensure the consent forms were being returned and also gave the teachers a reminder letter to send home with the children who had not returned a permission form. Teachers received an incentive based on the number of children in the individual classrooms whose parents returned forms allowing their children to participate in the study. Teachers who had 1-5 children participate received a \$10 gift certificate to a local restaurant. Teachers received a \$15 gift certificate if they had 5-9 children participate. Teachers who had 9 or more children participate received a \$25 gift certificate. No incentive was given to the children or parents for participating. One center had a 51% return rate and the other returned a rate of 53%. A total of 77 forms were returned. Of these, 68 parents granted permission for their children to participate in the study.

Assessment

The teachers of children who were given consent to participate by their parents rated the children on the SSRS-T and DECA scales. The researcher met with each teacher individually and explained how to complete the SSRS-T and the DECA. The teachers completed the SSRS-T one week and then the DECA scale the second week. The teachers were given the opportunity to choose when they would fill out the scales, whether it be during work or free time.

The researcher scored the SSRS-T and the DECA scales and returned them to the preschool centers the children in the study attended. The scales remained in the children's files and are available to both parents and teachers.

Data Analysis

The scales and subscales on the SSRS-T and the Total Protective Factor scores on the DECA were correlated using Pearson's product moment correlation coefficient. Group means and standard deviations were calculated. The correlations between the DECA subscales (Initiative, Self-Control, and Attachment) and the SSRS-T (Assertion, Cooperation, Self-Control) were analyzed. The correlation between the problem behaviors scale on the SSRS-T and the behavioral concerns subscale on the DECA was also examined. Alpha was set at the .05 level.

CHAPTER 4

RESULTS

Descriptive Report

Sixty-eight students were rated by their teachers using the SSRS-T and DECA scales. Table 1 displays the means and standard deviations for the Social Skills and Problem Behaviors scales on the SSRS-T and the Total Protective Factors and Behavior Concerns scales on the DECA. Means and standard deviations for the SSRS-T subscales (Cooperation, Assertion, Self-Control) and the DECA subscales (Initiative, Self-Control, Attachment) are also reported.

In the standardized sample for the SSRS-T, the Social Skills and Problem Behaviors score has a mean of 100 and a standard deviation of 15. Scores between 85 and 115 are considered statistically within the normal range of student performance. Since the subscales do not convert into standard scores, the raw scores for each of the subscales fall between 0 and 20. Gresham and Elliott (1990) noted that distributions of raw scores on the total Social Skills score were negatively skewed in the standardization sample. Therefore, to equalize the ceiling points of the Scales, the authors assigned a standard score of 130 to all raw scores at and above the 98th percentile of the smoothed cumulative frequency distribution obtained from the standardization sample.

In the present study, the Social Skills score for the SSRS-T yielded a mean of 103. Also, the Problem Behaviors score for the SSRS-T yielded a mean ($M = 100$). The raw score means for the subscales on the SSRS-T ranged from 13.04 to 14.65.

In the standardized sample for the DECA, raw scores were converted into T-scores where the mean is 50 and the standard deviation is 10. On the DECA scales, T-scores of 40 and below are considered areas of concern and T-scores of 60 and above are considered strengths. In the present study, the means for the scales in the DECA ranged from 50.69 to 53.06, which are within the average range.

Table 1
Means and Standard Deviations for the SSRS-T and DECA Scales

Scale	Mean	Standard Deviation
SSRS-T		
Social Skills	103.24*	14.34
Cooperation	14.65**	3.78
Assertion	13.82**	4.09
Self-Control	13.04**	4.30
Problem Behaviors	100.38*	15.21
DECA		
TPF	51.75*	10.45
Initiative	51.93*	9.25
Self-Control	53.06*	10.66
Attachment	50.69*	9.72
Behavior Concerns	52.12*	11.95

Note. *standardized score **raw scale score

Figures 1 and 2 are histograms that represent the distribution of the Total Protective Factors scores (TPF) and the Social Skills Scores on the DECA and the SSRS-T scales for the present study, respectively. Preliminary tests of normality indicate a normal distribution of scores.

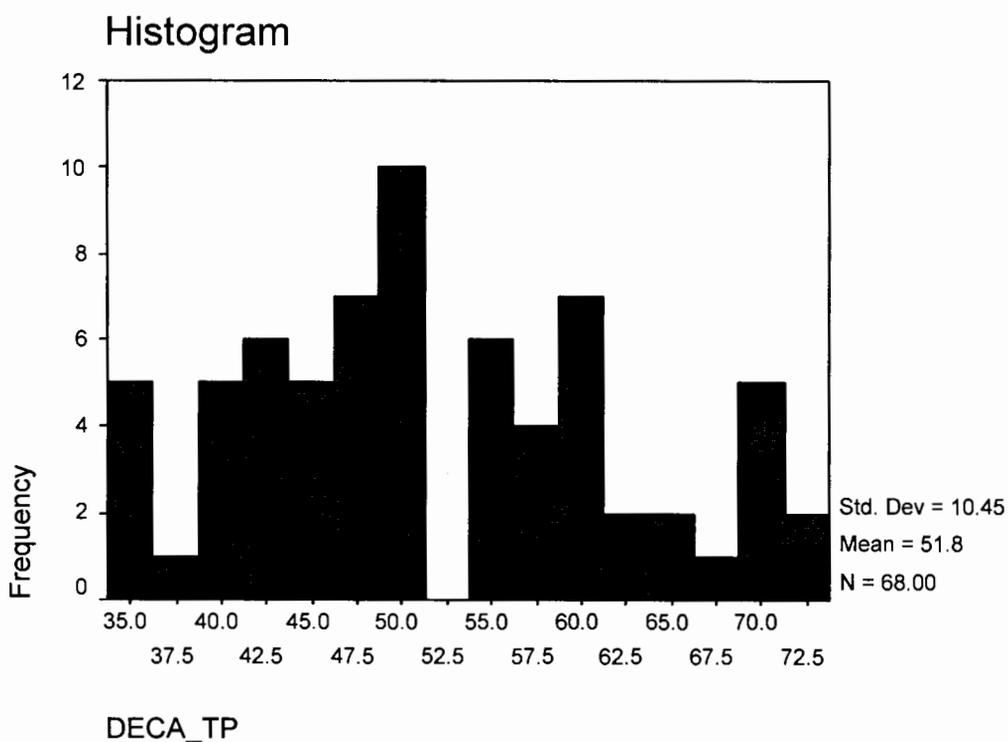


Figure 1. Histogram of TPF Scores.

Note. Each bar represents the score ± 1.75 points.

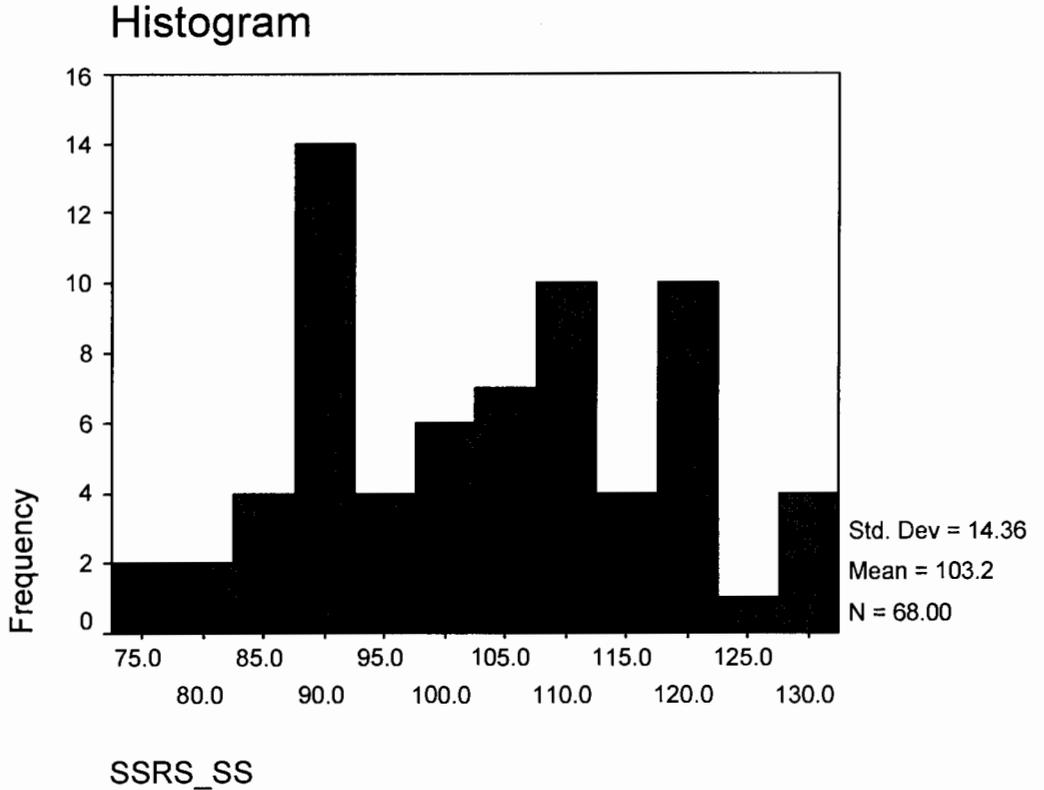


Figure 2. Histogram of Social Skills Scale Scores.

Note. Each bar represents the score ± 2 points.

To further explore the means on the DECA and SSRS-T scales, differences between classes were also investigated. Tables 2 and 3 represent the means and standard deviations of the TPF and Social Skills scores for each of the eight classes along with the number of children participating in each classroom.

Table 2
Means and Standard Deviations for Individual Classes on the DECA

Class	<i>N</i>	<i>M</i>	<i>SD</i>
Two	10	60.10	9.61
Six	8	58.50	8.04
Five	10	57.90	10.33
Four	7	51.70	7.61
Three	4	47.00	17.09
One	10	46.50	4.50
Eight	16	45.13	8.18
Seven	3	44.67	2.08

Correlational Findings

The relationship between social skills and resiliency as measured by the SSRS-T and the DECA scales was investigated using a Pearson product-movement correlation coefficient. Preliminary analyses were performed to identify any violation of the assumptions of normality, linearity, and homoscedasticity. No violations were found. There was a strong positive correlation between the total Social Skills scores on the SSRS-T and the TPF scores on the DECA [$r = .72, n = 68, p < .01$]. The coefficient of determination shows that the two scales have a 51.6% shared variance, which means that the variance in one variable accounts for 51.6% of the variance in the other variable.

Table 3

Means and Standard Deviations for Individual Classes on the SSRS-T

Class	<i>N</i>	<i>M</i>	<i>SD</i>
Six	8	122.88	9.34
Two	10	109.60	12.41
Four	7	107.43	9.16
One	10	104.00	10.70
Five	10	103.30	14.59
Three	4	96.75	14.22
Seven	3	92.00	5.29
Eight	16	90.81	8.42

Figure 3 is a scatterplot that shows each participant's SSRS-T and DECA scores.

The scores appear to follow a straight trend line. This trend line demonstrates the statistically significant correlation between the scores. This significant correlation suggests that children who received a high score on the DECA also received a high score on the SSRS-T. Consequently, children who received low scores on the DECA also received low scores on the SSRS-T.

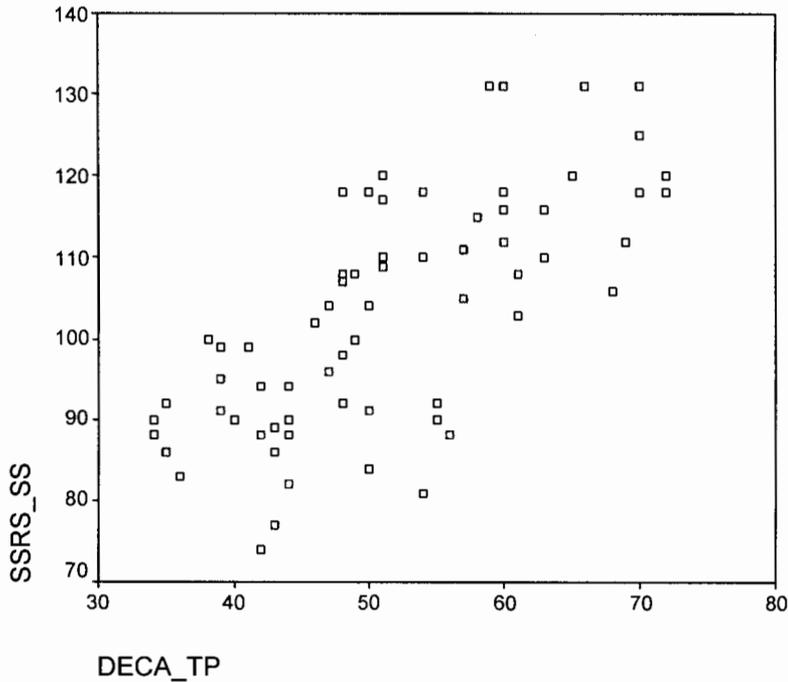


Figure 3. Correlations between SSRS-T and DECA Subscales.

To determine the relationship between subscales on the SSRS-T and the DECA and the Problem Behaviors and Behavior Concerns on the two rating scales, correlations were calculated for all subscales. Table 4 shows the correlations between the scales and subscales. Statistically significant correlations were found between Cooperation and Initiative ($r = .66, p \leq .01$), Cooperation and Self-Control ($r = .75, p \leq .01$), Cooperation and Attachment ($r = .57, p \leq .01$), and Cooperation and TPF ($r = .76, p \leq .01$). Statistically significant correlations were found between Assertion and Initiative ($r = .60, p \leq .01$), Assertion and Self-Control ($r = .58, p \leq .01$), Assertion and Attachment ($r = .61, p \leq .01$), and Assertion and TPF ($r = .67, p \leq .01$). Statistically significant correlations were also found between Self-Control and Initiative ($r = .50, p \leq .01$), Self-Control on the

SSRS-T and Self-Control on the DECA ($r = .87, p \leq .01$), Self-Control and Attachment ($r = .51, p \leq .01$), and Self-Control and TPF ($r = .71, p \leq .01$).

Table 4

Correlations between SSRS-T and DECA Subscales

Scale	Initiative	Self Control	Attachment	Behavior Concerns	TPF
Cooperation	.66**	.75**	.57**	-.81**	.76**
Assertion	.60**	.58**	.61**	-.56**	.67**
Self-Control	.50**	.87**	.51**	-.78**	.71**
Social Skills	.56**	.77**	.57**	-.76**	.72**
Problem Behaviors	-.36**	-.66**	-.28*	.70**	-.49**

Note. * $p \leq .05$ ** $p \leq .01$

A significant negative correlation was found between social skills as measured by the SSRS-T and behavior concerns as measured by the DECA ($r = -.76, p \leq .01$).

Significant negative correlations were found between problem behaviors as measured on the SSRS-T and Initiative ($r = -.36, p \leq .01$), Self-Control ($r = -.66, p \leq .01$), Attachment ($r = -.28, p \leq .05$), and TPF ($r = -.49, p \leq .01$). A significant positive correlation was found between Problem Behaviors as measured by the SSRS-T and Behavior Concerns as measured by the DECA ($r = .70, p \leq .01$). Significant negative correlations were found

between Behavior Concerns as measured on the DECA and Cooperation ($r = -.81, p \leq .01$), Assertion ($r = -.56, p \leq .01$), and total Social Skills ($r = -.76, p \leq .01$).

CHAPTER 5

DISCUSSION

Discussion of Results

The purpose of the current study was to determine the relationship between social skills and resiliency among preschool children. Sixty-eight children were rated by their teachers using the DECA and the SSRS-T. The DECA purports to measure resiliency among preschool children and the SSRS-T purports to measure social skills in preschool children.

The scores on the two rating scales were correlated to determine if there was a relationship between social skills and resiliency. There was a significant positive correlation between the SSRS-T Total Social Skills score and the DECA Total Protective Factors scores. Significant positive correlations were found between all of the SSRS-T and DECA subscales.

A significant positive correlation was found between scores on the SSRS-T Problem Behaviors scale and scores on the DECA Behavior Concerns scale. Significant negative correlations were found between the SSRS-T Problem Behaviors scale and the DECA TPF and subscale scores. Similarly, significant negative correlations were found between the DECA Behavior Concerns scale scores and the SSRS-T Total Social Skills scores and subscale scores.

This pattern of findings does not support the validity of the SSRS-T or the DECA as independent measures of social skills and resiliency, respectively. Rather this pattern of findings strongly indicates that these two scales are measuring the same construct

(either social skills or resiliency). Given the extensive construct validity already developed for the SSRS-T, it appears that the DECA probably measures social skills, rather than resiliency per se.

The significant correlation found between the Social Skills scale score on the SSRS-T and the TPF scores on the DECA does suggest that most children who are rated by their teachers as possessing resilient characteristics also possess more social skills. The data suggest that children who have lower levels of resilient characteristics are also seen by their teachers as lacking social skills. The strong correlation between resiliency as measured by the DECA and Social Skills as measured by the SSRS-T suggest that it is unlikely for a child to be resilient yet lack social skills and also for a child to have strong social skills yet not possess resilient characteristics. However, this conclusion assumes that the SSRS-T does measure social skills and the DECA does measure resiliency.

There are a number of possible explanations for the pattern of significant correlations found between social skills and resiliency in this study. One explanation may be the similarity of the items on the DECA and SSRS-T. The three subscales on the SSRS-T are Cooperation, Assertion, and Self-Control. The subscales on the DECA are Initiative, Self-Control, and Attachment. Self-Control is measured in both of the scales and items in both of the scales measuring self-control are very similar, although not entirely identical. Both of the Self-Control subscales measure the child's skill at controlling anger, listening, showing patience, and sharing. Overall, items on the two rating scales are somewhat similar, including items that measure the child's skill at

initiating and participating in play with other children, making independent decisions, cooperation, and controlling anger and frustration.

Another explanation for the correlations found in this study could be the importance of social skills in the attainment of social support and the connection between social support and resiliency. Werner (1984) argued that children who possess resilient characteristics often have sources of support to protect them against stressful life events. Studies suggest that social skills serve as a protective factor against stress, as children with adequate social skills have the ability to elicit greater social support from family members, teachers, and peers (Luthar, 1991).

Werner (1984) also noted that resilient children possess personal competencies that protected them against stressful life events. Children who are resilient can be protected from stressful life circumstances because of certain attributes such as academic ability and social competence. Studies have also suggested that students who react in prosocial ways to the teacher (e.g., paying attention, smiling at the teacher) often receive more positive consideration and are more likely to thrive in the academic environment, which boosts their personal competencies (Mize, 1995).

Due to the high correlation between social skills and resiliency, it can be hypothesized that by fostering children's social skills, resiliency will also be enhanced. Social skills may indeed impact resiliency and vice versa. Therefore, teaching children social skills may boost their inner strength to deal competently and successfully, day after day, with the demands they encounter.

Elliott et al. (2002) claimed that there is extensive support for the use of social skills training for all children and particularly for preschool children. Although most social skill interventions have been geared toward children in elementary school, preschool children have the opportunity to benefit from social skills training (Mize & Ladd, 1990). In fact, Schneider and Byrne (1985) reported in a meta-analytical study that social skills interventions are more effective for preschool children than elementary school children.

There are several reasons why the preschool age is a crucial period to begin social skills training. The first reason is that during the infant or toddler stage of development, a child's level of social competence is established, and by preschool, it is possible to see connections between a child's social competence and peer acceptance. Therefore, Mize and Ladd (1990) asserted that it is possible to recognize children in preschool settings who could benefit from social skills instruction.

Another reason preschool social skill interventions may be successful is attributed to the preschool environment. Mize and Ladd (1990) discussed the notion that this time period is conducive to social skills training because parents and teachers are more open to social development and do not place as great an emphasis on academics as in elementary or high school. The instructional design of most social skills interventions is also consistent with the behavioral methods and teaching practices of preschool teachers. Moreover, reputational biases are less rigid and peer groupings are more flexible during the preschool years than in other ages, so children may be more likely to be accepted by their peers after learning or changing certain negative behaviors (Mize, 1995). The

preschool years seem an ideal period to introduce social skills training to children who have difficulties interacting with others. Given that appropriate social skills are important for preschoolers to possess, it is necessary to implement effective skill training techniques.

Limitations

The reader must be cautious when interpreting the results of this study due to several limitations. First, the validity of the two scales may be a concern. Given these findings, it seems somewhat unclear whether the scales are measuring the constructs they each purport to measure.

Another limitation in this study was the narrowness of the sample and the inability to generalize the results outside of the specific population. The sample consisted of a small group of children who attend a private preschool center in northeastern Iowa. The sample was a convenience sample because the program director at the preschool and the parents who chose to return consent forms determined who would participate in the study.

Another limitation involves the use of teacher ratings in this study. Teacher ratings may have error. The teachers in this study completed the rating scales at different times over a two-week period. Results may have been affected due to different circumstances and conditions. Also, the teachers completed the SSRS-T first and then the DECA. Completing the questions from the SSRS-T first may have impacted how the teachers responded to the questions on the DECA. Readers are cautioned to remember these limitations when interpreting results.

Implications for Further Research

The current study attempted to clarify the actual relationship between social skills and resiliency. The results indicated a strong correlation between the two constructs, as measured by the SSRS-T and the DECA. Data from this study suggest that promoting children's social skills may be a way of enhancing their resilience and vice versa. Future research should examine the relationship between other factors related to social skills and resiliency that were not addressed in the present study by the DECA and SSRS-T scales, such as the effects family, background variables, and poverty on resiliency and social skills.

Also, the DECA and SSRS-T are relatively new instruments and more research is needed to support their validity and reliability. Research should look at the predictive validity of the two scales to determine how well they forecast resiliency and social skills over time. Further longitudinal studies are needed in both the areas of resiliency and social skills to determine how the two are related over time and what specific factors contribute to healthy social-emotional adjustment among children.

REFERENCES

- Anastasi, A., & Urbina, S. (1997). *Psychological testing*. New York: Pearson.
- Benard, B. (1991). *Fostering resiliency in kids: Protective factors in the family, school, and community*. Portland, OR: Western Regional Center for Drug-Free Schools and Communities, Northwest Educational Laboratory.
- Bondurant-Utz, J. A. (2002). *Practical guide to assessing infants and preschoolers with special needs*. Upper Saddle River, NJ: Prentice Hall.
- Brooks, R., & Goldstein, S. (2001). *Raising resilient children*. Chicago: Contemporary Books.
- Caldarella, P., & Merrell, K. W. (1997). Common dimensions of social skills of children and adolescents: A taxonomy of positive behaviors. *School Psychology Review*, 26(2), 264-278.
- Children's Defense Fund. (1993). *The state of America's children: 1993*. Washington, DC: Author.
- Choi, H. S., & Heckenlaible-Gotto, M. J. (1998). Classroom-based social skills training: Impact on peer acceptance of first-grade students. *Journal of Educational Research*, 91(4), 209-215.
- Cox, R. D., & Schopler, E. (1991). Social skills training for children. In M. Lewis (Ed.), *Child and adolescent psychiatry: A comprehensive textbook* (pp. 903-909). Baltimore: Williams and Wilkins.
- Demaray, M. K., Ruffalo, S. L., Carlson, J., Busse, R. T., Olson, A. E., McManus, S. M., et al. (1995). Social skills assessment: A comparative evaluation of six published rating scales. *School Psychology Review*, 24(4), 648-671.
- Dirling, J. (1999). Inclusion: Enhancing resilience. *Preventing School Failure*, 43(3), 125-128.
- Edwards, C. P. (1999). Development in the preschool years: The typical path. In E. Vasquez, I. Romero, & J. Kalesnik (Eds.), *Assessing and screening preschoolers* (pp. 9-24). Boston: Allyn & Bacon.
- Elliott, S. N., Barnard, J., & Gresham, F. M. (1989). Preschoolers' social behavior: Teachers' and parents' assessments. *Journal of Psychoeducational Assessment*, 7, 223-234.

- Elliott, S. N., & Gresham, F. M. (1993). Social skills interventions for children. *Behavior Modification, 17*(3), 287-312.
- Elliott, S. N., McKeivitt, B. C., & DiPerna, J. C. (2002). Best practices in preschool social skills training. In A. Thomas & J. Grimes (Eds.), *Best practices in school psychology-IV* (pp. 1041-1056). Bethesda, MD: NASP.
- Elliott, S. N., Sheridan, S. M., & Gresham, F. M. (1989). Assessing and treating social skills deficits: A case for the scientist-practitioner. *Journal of School Psychology, 27*, 197-222.
- Erikson, E. H. (1963). *Childhood and society* (2nd ed.). New York: Norton.
- Fantuzzo, J., Manz, P. H., & McDermott, P. (1998). Preschool version of the social skills rating system: An empirical analysis of its use with low-income children. *Journal of School Psychology, 36*(2), 199-214.
- Garnezy, N. (1985). Stress-resistant children: The search for protective factors. In J. Stevenson (Ed.), *Recent research in developmental psychopathology* (pp. 213-233). Oxford: Pergamon.
- Goodwin, M. (1999). Cooperative learning skills: What skills to teach and how to teach them. *Intervention in School and Clinic, 35*(1), 29-33.
- Gresham, F. M. (1988). Social skills: Conceptual and applied aspects of assessment, training, and social validation. In J. Witt, S. Elliott, & F. Gresham (Eds.), *Handbook of behavioral therapy in education* (pp. 523-546). New York: Plenum.
- Gresham, F. M. (1998). Social skills training with children: Social learning and applied behavioral analytic approaches. In T. Watson & F. Gresham (Eds.), *Handbook of child behavioral therapy* (pp. 475-497). New York: Plenum.
- Gresham, F. M. (2002). Best practices in social skills training. In A. Thomas and J. Grimes (Eds.), *Best practices in school psychology-IV* (pp.1041-1056). Bethesda, MD: NASP.
- Gresham, F. M., & Elliott, S. N. (1990). *Social Skills Rating System*. Circle Pines, MN: American Guidance Service, Inc.
- Gresham, F. M., & Elliott, S. N. (1993). Social skills intervention guide: Systematic approaches to social skills training. *Special Services in the Schools, 8*(1), 137-158.

- Gresham, F. M., Sugai, G., & Horner, R. H. (2001). Interpreting outcomes of social skills training for students with high-incidence disabilities. *Exceptional Children, 67*(3), 331-344.
- Guralnick, M. J. (1993). Developmentally appropriate practice in the assessment and intervention of children's peer relations. *Topics in Early Childhood Special Education, 13*(3), 344-371.
- Henderson, N. (1998). Make resiliency happen. *The Education Digest, 63*, 15-18.
- Henderson, N., & Milstein, M. M. (2003). *Resiliency in schools: Making it happen for students and educators*. Thousand Oaks, CA: Corwin.
- Higgins, G. O. (1994). *Resilient adults: Overcoming a cruel past*. San Francisco: Josey-Bass.
- Hutchins, L. K. (1999). A rating scale for the assessment of social development in preschoolers (Doctoral dissertation, Central Michigan University, 1999). *Dissertation Abstracts International, 60*, 2406.
- Irvin, L., Nippold, M., Noell, J., Schwarz, I., & Walker, H. (1994). Social skills in school-aged children and youth: Issues and best practices in assessment and intervention. *Topics in Language Disorders, 14*, 70-82.
- Johnson, D. W., Johnson, R. T., & Holubec, E. J. (1988). *Cooperation in the classroom* (Rev. ed.). Edina, MN: Interaction.
- Jones, R. N., Sheridan, S. M., & Binns, W. R. (1993). Schoolwide social skills training: Providing preventative services to students at-risk. *School Psychology Quarterly, 8*(1), 57-80.
- Keith, L. K., & Campbell, J. M. (2000). Assessment of social and emotional development in preschool children. In B. Bracken (Ed.), *The psychoeducational assessment of preschool children* (pp. 364-382). Baltimore: Williams and Wilkins.
- Kelley, M. F., & Surbeck, E. (2000). History of preschool assessment. In B. Bracken (Ed.), *The psychoeducational assessment of preschool children* (pp. 1-18). Baltimore: Williams and Wilkins.

- Knoff, H. M., Stollar, S. A., Johnson, J. J., & Chenneville, T. A. (1999). Assessment of social-emotional functioning and adaptive behavior. In E. Vasquez-Nuttall, I. Romero, & J. Kalesnik (Eds.), *Assessing and screening preschoolers* (pp. 126-160). Boston: Allyn and Bacon.
- Kupersmidt, J., Coie, J., & Dodge, K. (1990). The role of peer relationships in the development of a disorder. In S. Asher & J. Coie (Eds.), *Peer rejection in childhood* (pp. 274-308). New York: Cambridge University.
- LeBuffe, P. A. (1998). The measurement of within-child protective factors in preschool children. In Chapter 5, *Prevention and early intervention*. Proceedings of the annual research conference, A System of Care for Children's Mental Health: Expanding the Research Base (Tampa, FL, March 8-11, 1998).
- LeBuffe, P. A., & Naglieri, J. A. (1999). *Devereux early childhood assessment user's guide*. Lewisville, NC: Kaplan.
- Luthar, S. S. (1991). Vulnerability and resilience: A study of high-risk adolescents. *Child Development, 62*, 600-616.
- Lutz, M. N., Fantuzzo, J., & McDermott, P. (2002). Multidimensional assessment of emotional and behavioral adjustment problems of low-income preschool children: Development and initial validation. *Early Childhood Research Quarterly, 17*, 338-335.
- Lyon, M. A., Albertus, C., Birkenbine, J., & Naibi, J. (1996). A validity study of the social skills rating system-teacher version with disabled and nondisabled preschool children. *Perceptual and Motor Skills, 83*, 307-316.
- McFall, R. M. (1982). A review and reformulation of the concept of social skills. *Behavioral Assessment, 4*, 1-33.
- McGinnis, E., & Goldstein, A. P. (1990). *Skillstreaming in early childhood*. Champaign, IL: Research.
- Merrell, K.W. (1996). Social-emotional problems in early childhood: New directions in conceptualization, assessment, and treatment. *Education and Treatment of Children, 19*, 458-473.
- Merrell, K. W. (1999). Assessment of young children. In K. Merrell (Ed.), *Behavioral, social, and emotional assessment of children and youth* (pp. 337-358). Mahwah, NJ: Erlbaum.

- Merrell, K. W. (2001). Assessment of children's social skills: Recent developments, best practices, and new directions. *Exceptionality*, 9(1&2), 3-18.
- Merrell, K. W., & Gimpel, G. A. (1998). *Social skills of children and adolescents: Conceptualization, assessment, treatment*. Mahwah, NJ: Erlbaum.
- Michelson, L., Sugai, D. P., Wood, R. P., & Kazdin, A. E. (1983). *Social skills assessment and training with children: An empirically based handbook*. New York: Plenum.
- Mize, J. (1995). Coaching preschool children in social skills: A cognitive-social learning curriculum. In G. Cartledge & J. Milburn (Eds.), *Teaching social skills to children and youth* (pp. 237-261). Boston: Allyn and Bacon.
- Mize, J., & Ladd, G. W. (1990). A cognitive-social learning approach to social skill training with low-status preschool children. *Developmental Psychology*, 26(3), 388-397.
- Mobley, C. E., & Pullis, M. E. (1991). Temperament and behavioral adjustment in preschool children. *Early Childhood Research Quarterly*, 6, 577-586.
- Nagle, R. J. (2000). Issues in preschool assessment. In B. Bracken (Ed.), *The psychoeducational assessment of preschool children* (pp. 19-32). Baltimore: Williams and Wilkins.
- National Association of School Psychologists. (2000). *Position statement on early childhood assessment*. Retrieved April 14, 2003 from http://www.nasponline.org/information/pospaper_eca.html
- Parker, J., & Asher, S. (1987). Peer relations and later personal adjustment: Are low-accepted children at-risk? *Psychological Bulletin*, 102, 357-389.
- Reifel, S., & Yeatman, J. (1993). From category to context: Reconsidering classroom play. *Early Childhood Research Quarterly*, 8, 347-367.
- Salvia, J., & Ysseldyke, J. E. (1995). *Assessment in special and remedial education* (4th ed.). Boston: Houghton Mifflin.
- Schneider, B. H., & Byrne, B. M. (1985). Children's social skills training: A meta-analysis. In B. Schneider, K. Rubin, & J. Ledingham (Eds.), *Children's peer relations: Issues in assessment and intervention* (pp. 175-192). New York: Springer-Verlag.

- Selman, R. L. (1980). *The growth of interpersonal understanding: Developmental and clinical analyses*. New York: Academic.
- Sheridan, S. M., Hungelmann, A., & Maughan, D. P. (1999). A contextualized framework for social skills assessment, intervention, and generalization. *School Psychology Review*, 28(1), 84-103.
- Swetnam, L., Peterson, C. R., & Clark, H. B. (1983). Social skills development in young children: Preventive and therapeutic approaches. In C. LeCroy (Ed.), *Social skills training for children and youth* (pp. 5-27). New York: Haworth.
- Tarwater, P. (1993). Glass, plastic, or steel? *Childhood Education*, 69(5), 272-273.
- Trawick-Smith, J. W. (1997). *Early childhood development*. Upper Saddle River, NJ: Prentice-Hall.
- Vasquez, E. V., Nuttall-Vasquez, K., & Hampel, A. (1999). Introduction. In E. Vasquez-Nuttall, I. Romero, & J. Kalesnik (Eds.), *Assessing and screening preschoolers* (pp. 1-8). Boston: Allyn and Bacon.
- Vernon, A. (1993). *Developmental assessment and intervention with children and adolescents*. Alexandria, VA: American Counseling Association.
- Wang, M. C., Haertel, G. D., & Walberg, H. J. (1997). Fostering resilience: What do we know? *Principal*, 77(2), 18-20.
- Weinberger, L. A., & Starkey, P. (1994). Pretend play by African American children in Head Start. *Early Childhood Research Quarterly*, 9, 327-343.
- Werner, E. E. (1984). Resilient children. *Young Children*, 40(1), 68-72.
- Werner, E. E. (2000). Protective factors and individual resilience. In J. Shonkoff & S. Meisels (Eds.), *Handbook of early childhood intervention* (pp. 115-132). New York: Cambridge University Press.
- Werner, E. E., & Smith, R. S. (1989). *Vulnerable but invincible: A longitudinal study of resilient children and youth*. New York: Adams, Bannister, and Cox.
- Werner, E. E., & Smith, R. S. (1992). *Overcoming the odds: High-risk children from birth to adulthood*. New York: Cornell University Press.
- Werner, E. E., & Smith, R. S. (2001). *Journey from childhood to midlife: Risk, resiliency, and recovery*. New York: Cornell University Press.

Wilburn, R. (2000). Play and sociodramatic play in preschool. In R. Wilburn (Ed.), *Understanding the preschooler* (pp. 95-105). New York: Peter Lang.

Wolin, S. J., & Wolin, S. (1993). *The resilient self: How survivors of troubled families rise above adversity*. New York: Villard.