

AN INVESTIGATION OF THE PROTECTIVE FACTORS PRESENT AMONG
LOW-INCOME PRESCHOOL CHILDREN

By

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ABSTRACT

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An Investigation of Protective Factors Present Among Low-Income Preschool Children

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The majority of children who do well in life despite the adversity and the exposure to poverty are said to be resilient. These are the children who are able to thrive despite the risks in their lives. Researchers have identified protective factors within individuals that help to promote resilience and prevent negative outcomes.

This research project is an investigation of the protective factors present among low-income preschool children. Knowledge of these protective factors is necessary for the development of classroom strategies which promote and foster

them, thus adding to the choice of effective strategies to help routinely meet the needs of at risk students in the school environment.

There were four research objectives for this study. They were: (1) Assess the resiliency attributes of low-income preschool children; (2) Examine what protective factors are stronger and comparatively weaker among the group; (3) Examine the implications of resilience for social and emotional kindergarten readiness; and (5) Suggest classroom strategies for teaching and support staff in early childhood environments programs that support and reinforce protective factors in low-income children.

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This acknowledgement wouldn’t be complete without thanking my family, co-workers, and friends who have continuously encouraged and supported me through this graduate school process. There are too many to mention individually, but you know who you are. I appreciate and am thankful for each and every one. Your support that was boisterous and sometimes given quietly and unknowingly, will always be remembered.

DEDICATION

This research is dedicated to all the resilient Indianhead Community Action Agency Head Start Children.

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CHAPTER ONE

Introduction

Children in today's schools bring with them a host of diverse learning, behavioral, emotional, and social needs every day to class. With the use of effective teaching strategies and well-developed support services, some, if not most, of these needs can be met routinely in the school environment (Christiansen & Christiansen, 1997). However, there are still children who are at risk for school failure. Children at risk for school failure have factors in their lives such as poor school attendance, low self-esteem, low academic achievement, child abuse, and neglect, and many have a history of living in poverty. However, some children who are considered at risk have protective factors that give them the ability to respond actively and positively to life stress and adversity. Educating school staff about these protective factors and ways to foster resiliency may be an effective strategy to help routinely meet the needs of at risk students in the school environment.

Contributing to the challenge are the increasing numbers of children who face adversity and encounter stress in their daily lives. According to the Children's Defense Fund (2000), one in every five children is poor, and of those children, seventy-four percent live in working families who cannot make enough to escape that cycle of poverty. Secombe (2002) defined poverty as a family of three with an annual income under \$13,874 or \$17,463 for a family of four. Children living in poverty are more likely to live in single parent families, lack appropriate health care, be exposed to alcohol abuse, stress, and mental illness, have received poor prenatal care, have chronic health problems, and lack appropriate childcare. Children of poverty live in multistressed environments that

are unrelenting, woven into daily life, and are a result of societal conditions and pressures that are beyond the control of the individuals. Duncan and Brooks-Gunn (1997) stated the grim facts that children from families that were always poor were more likely to be placed out of an age-appropriate regular classroom by age twelve. Seccombe (2002) stated that the negative consequences of poverty for children have been documented and appear to intensify the longer the child is impoverished. Thus, it is logical to conclude that the earlier the intervention of assessing and fostering protective factors in these impoverished children, the greater the likelihood that the child will be more resilient.

Based on the entire poverty statistics, it can be generalized that lower family income decreases family stability, thus lowering the chance of normal social and emotional development, which has implications on kindergarten readiness (Hadden, 2002). However, some young children have the resiliency skills necessary to handle the many social pressures that they are going to face as young adults.

Much research has been focused on the social problems caused by poverty, rather than on the ways in which seemingly vulnerable people avoid problems. What allows some impoverished children to flourish in the face of adversity and others to fail? What protective factors were present in the life of the child who beat the odds? Many of us have heard the stories of the successful person who grew up in some of the poorest, substandard conditions that most people could not endure. Take, for example, a fictional example of a young woman who grew up in poverty. The family moved from home to home several times within a short amount of time, and then eventually to shelters as her family tried to find stable work. Her mother raised her and her siblings by herself, she never knew her father. The children in the family saw numerous boyfriends come and go

and none of these men should have been allowed to be around children. The important father figure was missing. There was alcoholism and drug abuse in the house followed by violence against mom and the children. She would cry herself to sleep at night and could not focus on school when she was there because her teeth hurt so badly from the lack of proper dental care. She dropped out of high school as soon as she could to spend more time on the streets and eventually run away from home and her problems, so she thought. She became a teenage mother, even had an abortion in her young lifetime. Through her adversity she found she had the skills and desire to become an educator and work with young children. By all rights she should have been emotionally and socially ruined, however there was something present in her young life that empowered her to thrive. She began to solve her problems in her life, pick herself up, and move on with life. She became a successful early childhood teacher. We hope that all children living in adverse conditions turn out just as successful as the person in this case scenario, but that is not always true. Others in that very same situation would have easily continued that cycle of poverty, abuse, and stress.

Children living in poverty can create a tremendous challenge for teachers and family members in promoting healthy social and emotional growth; however, there is a growing body of research that demonstrates that if these children have certain protective factors that allow them to weather the storm and sometimes thrive in the face of stress and adversity, they can have healthy social and emotional growth. These protective factors are attributes that can be measured and fostered in young children.

Statement of the Problem

The purpose of this study was to assess the protective factors of low-income preschool children attending Head Start in Rusk County, as perceived by the teaching staff. Head Start teaching staff will complete the Devereux Early Childhood Assessment during the month of March, 2003. Implications from the results will be delineated.

Research Objectives

There were four research objectives for this study. They were:

1. Assess the resiliency attributes of low-income preschool children.
2. Examine what protective factors are stronger and comparatively weaker among the group.
3. Examine the implications of resilience for social and emotional kindergarten readiness.
4. Suggest classroom strategies for teaching and support staff in early childhood environments to develop strength-based programs that support and reinforce protective factors in low-income children.

Definition of Terms

The definitions of terms listed here are provided to clarify any ambiguities within the study:

1. *Attachment* - A mutual, strong, and long-lasting relationship between a child and significant adults such as parents, family members, and teachers.
2. *Child Attributes* - Characteristics of a child such as temperament, intelligence, personality, and behavioral traits.

3. *Initiative* - The child's ability to use independent thought and action to meet his or her own needs.
4. *Rater* -The person who completes the items on the Devereux Early Childhood Assessment profile.
5. *Resilience* - The ability to respond positively and actively to adverse life conditions, stress, misfortune or change.
6. *Self-control* - The child's ability to experience a range of feelings and express them using actions and words that are developmentally appropriate.
7. *Total Protective Factors* - An overall indication of the strength of a child's protective factors.

Assumptions

There were two assumptions pertinent to this examination. The researcher assumed that each Indianhead Community Action Agency Head Start teacher rater objectively observed each child. It was assumed that the rater considered only behaviors that have occurred in the past four weeks.

Limitations

The researcher identified two limitations:

1. The examination took place at a location chosen by the researcher. The area is a small rural community.
2. The research group consisted of families in a Head Start Program, excluding other low-income children. Head Start children already receive some social and emotional support services.

CHAPTER TWO

Literature Review

Introduction

In this chapter, defined and discussed are the concepts of childhood resiliency, attachment, self-control, and initiative, and the characteristics of resilient children are described. The chapter is concluded with a discussion of the total protective factors and how to foster those protective factors in young children who live with poverty.

Childhood Resiliency

Howard and Johnson (2000) defined childhood resiliency as “the process of, and the capacity for or outcome of successful adaptation despite challenging or threatening circumstances” (p. 321). One of the first researchers to study the concept of resiliency was Emmy E. Werner, a child psychologist at the University of California, and Ruth Smith, a clinical psychologist (1998). Werner and Smith followed the development of a group of Hawaiian children from 1955 to 1985. Through her longitudinal research, she found that one-third of the children who were affected by four or more significant risk factors became successful adults. Some of the characteristics the successful adults had in common were: 1) they had been active and sociable infants; 2) they had at least one positive role model who supported their development of trust, autonomy, and initiative; and 3) they had at least one skill that gave them a sense of pride and acceptance within their peer group. Koralek (1999) identified risk factors, situations, and characteristics that are thought to contribute to the probability that a child will have great difficulty dealing with life. An example of a risk factor is poverty, because of the long-term effects of living in poverty. At the same time, a child’s personal protective factors support the child and can reverse the negative effects of risk factors found in the child’s life. There

are also community and family protective and risk factors that affect a child's ability to be resilient. A supportive family is a proactive factor, and the contrary is a family with a history of violence and abusive behavior, which is a risk factor. A quality early childhood program found within a community is a protective factor; a community without any support services for young children and their families is a risk factor.

Knowledge of the protective factor attributes low-income preschool children possess, and the fostering of those protective factors will increase the likelihood of resilience and school success of these at-risk children. Davies (1999) stated that resilient children tend to have had environments that are supportive in critical ways and that capacity for resilience develops over time in the context of environmental support. Christiansen and Christiansen (1997) stated four characteristics of resilient children. They: 1) tend to approach problems proactively; 2) are often good-natured; 3) are able to accept and work with life's challenges; and 4) tend to have a sense of control over their lives. It would be hard not to argue that these are positive characteristics we want to see in all of our children.

Attachment

Koralek (1999) defined attachment as a mutual, strong, and long-lasting relationship between a child and significant adults such as teachers, family members, and parents. It differs from bonding in that when attachment occurs, both parties act in a way that enhances and strengthens the relationship, instead of a one way relationship. Securely attached children receive affection, comfort, protection, and guidance from their caregivers and respond in ways that show positive feelings for these special people in their lives.

Secure attachment develops very early in a child's life. Attachment develops in the first year of life as a baby and their primary caregivers get to know, value, and enjoy each other. Babies can develop secure attachments with one or many caregivers in their life, but they need at least one constant caregiver to start the attachment process. Babies who are talked to, picked up, and comforted when crying, experience an initial bond with a caregiver. Attachment and trust give a baby the confidence and early brain-based development to explore the world. This exploration leads to the development of cognitive skills, and they are more successful in school than children who lack this protective factor. A secure attachment supports the development of trust. This trust can be directed at people, themselves, and the world. Children who experience attachment exhibit characteristics such as seeking help from other children and adults when necessary, acting happy or excited when family members return, and trusting familiar adults, which includes believing what they say.

Studies such as those done by Werner and Smith (1998) have shown that most children establish a secure attachment with an important person in their life. For the remaining children who do not experience attachment early in life, the same research shows that this insecure attachment can be the result of environmental conditions, such as living in poverty and all the stresses that are a by-product of poverty. Krovetz (1999) suggests that a healthy emotional relationship between parents and their children is important for healthy language and cognitive development; as children grow older, they develop relationships with other people. These relationships might include extended family members, neighbors, peers, child care professionals, and teachers. These

relationships provide other opportunities for children to feel cared for and accepted, and it is in the context of these relationships that much learning takes place.

Self-Control

Koralek (1999) defined self-control as the ability to receive a range of feelings and express them using the words and actions that society considers appropriate. This skill of self-control allows a child to get along with peers and adults and participate in classroom routines, activities, and experiences. Other characteristics of children who have self-control include controlling anger, showing patience, cooperating with others, and calming themselves when upset.

Self-control develops gradually throughout a lifetime through our interactions with family members and other significant adults, and by playing with peers and other older children. Other factors that affect the development of self-control are family and cultural expectations, as well as the individual child's temperament. Securely attached children who trust the world around them have obtained the first part of the skill that allows them to be able to develop self-control. Consistent schedules, daily routines, and expectations also help to develop self-control. Children who live in poverty are at a greater risk to have inconsistent routines and have more days filled with transitions.

Besides well developed secure attachment, development of positive self-esteem, cause and effect thinking, and emotional thinking skills are components of self-control. A child's sense of self is the foundation for gaining self-esteem and they need to value themselves to maintain their self-esteem. Maintaining self-esteem occurs when adults encourage children to gain new skills and to be independent, thus empowering children to feel competent and powerful.

As adults help young children learn what behaviors are appropriate and what behaviors are not, young children learn the ability to control their impulses so they can behave in appropriate ways. With an intrinsic sense of competence and power, the child is better able to control how they respond to emotions. This is an example of cause and effect thinking; a cognitive skill. If a child learns to think before acting on impulse because of consequences, they are practicing cause and effect thinking, a skill critical to developing self-control.

As with cause and effect thinking, children use emotional thinking to understand and predict the consequences of certain actions. Emotional thinking is fostered when children are able to link different ideas with feelings and understand how they are linked. This in turn teaches children to share, handle frustration, and complete difficult tasks. Through play, exploration, trial and error, and interactions with adults in their life and experienced peers, children can become more skilled thinkers and problems solvers, therefore more able to use their self-control skills.

Initiative

Young children demonstrate initiative by asking questions, exploring, experimenting, making and carrying out plans, and using their creativity. It is developed through what psychoanalyst Erik Erikson described as psychosocial development, with eight stages. The first stage of Erikson's theory is basic trust versus mistrust. This stage is from birth to about one year of age. As long as the baby's basic needs are met, there is a development of trust and the child begins to view the world as a safe place. Trust is important to have in order to move on to stage two: autonomy versus shame and doubt. As children start to do things for themselves, about one to two years of age, they start to

instill skills such as self-control and self-confidence. If children are not allowed independence and are overprotected, children can doubt their abilities and this can have lifelong effects. The third stage is initiative versus guilt. Children in this stage of development are 2 to 6 years of age, and if the previous stages of development were successful, they begin to think and act on their own. They will use previously gained skills to explore new interests and they learn quickly what they can and cannot control. Children in this stage need responsibility, recognition for accomplishments, and plenty of time for meaningful, active learning experiences (Hohmann & Weikart, 1995). Without these critical beginning stages of development, healthy social and emotional development will slow down or even stop. Children who have developed a sense of initiative will do things for themselves, try or ask to try new things and activities, say positive things about the future, and ask other children to play with them. Koralek (1999) stated that initiative allows children and adults to be in control of their learning and activities, while using self-control to behave in a way that society deems appropriate. These skills can increase success in school, on the job, and family life.

The Total Protective Factors

The study of resilient children has revealed certain characteristics that they tend to have in common. These characteristics are called protective factors. Lebuffe and Naglieri (1999) researched protective factors and refer to them as characteristics or processes that moderate or buffer the negative effects of stress, resulting in more positive behavioral and psychological outcomes in at-risk children than would have been possible without them. Protective factors can be divided into three categories: 1) community support systems; 2) a supportive family environment; and 3) child attributes. Children

lacking one or more of the protective factors are more likely to experience negative life outcomes and could be considered vulnerable and at-risk. Programs that are designed for at-risk children are needed to strengthen protective factors in young children to reduce the subsequent occurrence of negative outcomes such as severe emotional and behavioral disorders. Children who are resilient tend to have experienced consistent responsive protective factors over time and throughout their development. It may be more appropriate to refer to the protective factors as the protective processes, since in order to promote truly effective resiliency, they must be present across many years of the child's development (Davies, 1999).

CHAPTER THREE

Methodology

Introduction

This chapter includes information about how the sample was selected, a description of the sample, and the assessment tool used. In addition, data collection and analysis procedures are given. The chapter concludes with the methodological limitations.

Participants

The parents of all 4 and 5 year-old children enrolled in a Head Start program in Rusk County were asked to provide consent for their child's assessment. To qualify for the Head Start program, families must meet national annual income guidelines. (The national Head Start income guidelines are located in Appendix A). At the time of the study there were 36 four and five year old eligible Head Start children enrolled in two centers located in Rusk County whose parents were asked to consent that their children be observed for the study. Both male and female children were observed.

The Director of Indianhead Community Action Agency was initially contacted to approve the study. Parents and/or guardians were sent a cover letter, along and an informational pamphlet explaining the Devereux Early Childhood Assessment (DECA), the protective factors, the assessment and process, and consent form to be signed and sent back to the Head Start Center. (A copy of the letter and permission form sent is located in Appendix B). Nineteen of the 36 possible 4 to 5 year old low-income preschool children in the Rusk County Head Start programs had parental permission to be included in the study (11 females and 8 males). Following parent consent, the children were

observed by the Head Start teaching staff for approximately four weeks. After four weeks, teaching staff completed the DECA assessment form, which involves rating the children on the frequency of 27 behaviors possibly observed in the last four weeks. (A copy of the DECA assessment form is found in Appendix C).

Instrumentation

Developed over a two-year period from 1996-1998, the DECA is a standardized, norm-referenced behavior rating scale evaluation of within-child protective factors in preschool children aged two to five years. The DECA evaluates the frequency of 27 behaviors exhibited by preschoolers. These items were derived from the early childhood resilience literature and through focus groups conducted with early child care and education professionals and family members (LeBuffe & Naglieri, 1999). The results of the internal consistency, test-retest reliability, and interrater studies indicate that the DECA is a highly reliable instrument for assessing preschool children's protective factors. The results of the internal consistency study demonstrated that the DECA meets the desirable standards that professionals have recommended. The test-retest reliability assessment showed that raters give very similar ratings on the same child across relatively short periods of time. This finding indicates that the DECA is not overly influenced by random day-to-day changes, but tends to yield a consistent picture of the child. The results of the interrater reliability study demonstrated that the different raters tended to give similar ratings. This finding indicates that the DECA is measuring the child's characteristics, and not overly influenced by the characteristics of the rater (Lebuffe & Naglieri, 1999).

Content-related, criterion-related, and construct validity tests were also done on the DECA. Protective factors scales were significantly associated with the presence or absence of significant problem behaviors, a major negative outcome for preschool children. High protective factors were seen to moderate the effects of at-risk preschool children as required by the resilience theory (Lebuffe & Naglieri, 1999).

Procedure

Permission had been given by the Director of The Indianhead Community Action Agency for the study. Children were observed for a time period of one month, March 1, 2003 to April 1, 2003 after parental permission had been given. Head Start teaching staff were given directions for observing the children and at the end of the month, then individually, teaching staff completed the DECA and returned it to researcher.

Data Analysis

Scoring of the DECA is completed on the record form. The researcher scored the DECA. The scoring process begins by computing the raw scores for initiative, self-control, and attachment, creating a raw score for the total protective factors. From that data, the researcher created a protective factors profile for each child on the DECA individual profile sheets and then ultimately, compiled a sample profile. (A sample of these forms is found in Appendix D). The next step was to determine the T-Scores and percentile scores using the tables provided in the DECA manual. The last step of the scoring process was to determine and interpret the descriptions for the scale scores. The DECA suggests using terminology of “concern” to describe either a protective factor scale T-Score less than or equal to 40, “typical” to describe a protective factor T-Score

between 41 and 59 inclusive, and “strength” to describe a protective factor scale T-Score greater than or equal to 60.

Limitations

The researcher has identified one limitation.

1. The DECA forms, informational letter, and consent forms were sent home for family members to read and interpret themselves. There may have been adults who are unable to read and understand the forms completely, and this may have influenced those individuals to not allow their child’s participation in the study

CHAPTER FOUR

Results

Introduction

This chapter includes the results of this study. The tables address each anonymous child's raw scores, T-Scores, percentile ranking, and interpretation of the T-Scores.

Results

The information in Table 1 shows the initial raw scores for each protective factor. The scale raw scores for initiative, self-control, attachment, and total protective factors are obtained by adding the raw scores for all of the items that comprise each scale from the child observation record.

Table 1

Total Raw Scores

Child	Initiative	Self-Control	Attachment	Total Protective Factors
1	28	16	24	68
2	31	24	28	83
3	27	18	20	65
4	24	16	17	57
5	30	28	15	73
6	30	26	22	78
7	34	23	23	80
8	26	17	22	65

9	20	26	21	67
10	29	22	23	74
11	24	22	24	73
12	32	21	27	80
13	31	16	25	72
14	28	19	21	68
15	41	32	36	109
16	40	24	25	89
17	38	29	22	89
18	23	14	21	58
19	32	23	29	84

The total raw scores of each child's protective factor were then used to determine the percentiles and T-Scores, as shown in Table 2. The percentiles and T-Scores were derived from the total raw scores and easily converted by using the teacher rating scale found in Appendix D.

Table 2

Percentiles and T-Scores

Child	Percentile/T-Score			Total Protective Factors
	Initiative	Self-Control	Attachment	
1	54/51	31/45	50/50	42/48
2	69/55	82/59	79/58	76/57
3	50/50	42/48	21/42	34/46

4	34/46	34/45	12/38	21/42
5	62/53	96/68	5/34	54/51
6	62/53	66/54	34/46	66/54
7	82/59	76/57	42/48	69/55
8	42/48	43/46	34/46	34/46
9	16/40	92/64	27/44	42/48
10	58/52	69/55	42/48	54/51
11	34/46	69/55	50/50	54/51
12	73/56	62/53	73/56	69/55
13	68/55	31/45	58/52	50/50
14	54/51	50/50	27/44	42/48
15	98/70	99/72	99/72	99/72
16	99/72	82/59	58/52	88/62
17	93/69	97/69	34/46	88/62
18	31/45	18/41	27/44	21/42
19	73/56	76/57	86/61	79/58

The T-Scores were then used to determine the descriptions of the scale scores. The researcher used the suggested terminology of “concern” to describe either a protective factor scale T-Score less than or equal to 40, “typical” to describe a protective factor T-Score between 41 and 59 inclusive, and “strength” to describe a protective factor scale T-Score greater than or equal to 60. Table 3 shows the interpretative terminology

for each child for each protective factor measured. The majority of the protective factors are described as typical.

Table 3

Interpretation of Scores

Child	Initiative	Self-Control	Attachment	Total Protective Factors
1	Typical	Typical	Typical	Typical
2	Typical	Typical	Typical	Typical
3	Typical	Typical	Typical	Typical
4	Typical	Typical	Concern	Typical
5	Typical	Strength	Concern	Typical
6	Typical	Typical	Typical	Typical
7	Typical	Typical	Typical	Typical
8	Typical	Typical	Typical	Typical
9	Concern	Strength	Typical	Typical
10	Typical	Typical	Typical	Typical
11	Typical	Typical	Typical	Typical
12	Typical	Typical	Typical	Typical
13	Typical	Typical	Typical	Typical
14	Typical	Typical	Typical	Typical
15	Strength	Strength	Strength	Strength
16	Strength	Typical	Typical	Strength
17	Strength	Strength	Typical	Strength
18	Typical	Typical	Typical	Typical
19	Typical	Typical	Strength	Strength

The following figures show the total profile for all the combined low-income preschool children in Rusk County involved in the study.

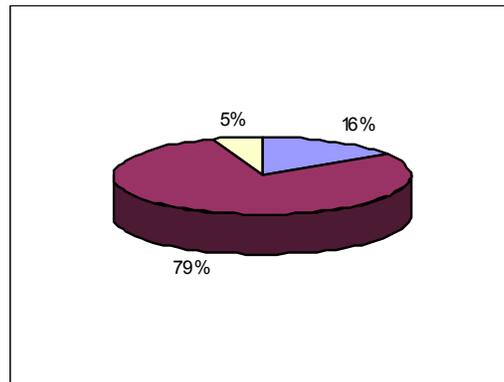


Figure 1: Initiative profile for all the combined low-income preschool children in Rusk County.

Figure 1 shows that 79% of the preschoolers involved in the study are considered typical, while 16% were considered to have strength in initiative. Only 5% of the low-income preschool children in Rusk County showed a concern with initiative.

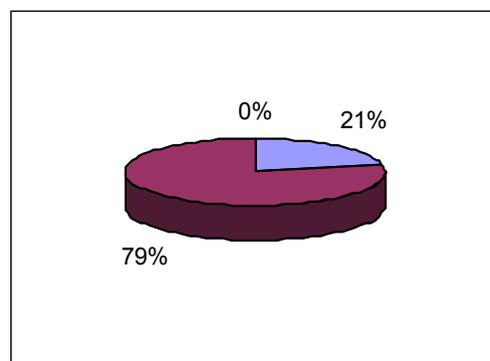


Figure 2: Self-Control profile for all the combined low-income preschool children in Rusk County

Self-control was typical among 79% of the preschool children involved in the study. Twenty one percent were considered to have strength in self-control and no children involved in the study scored with concern.

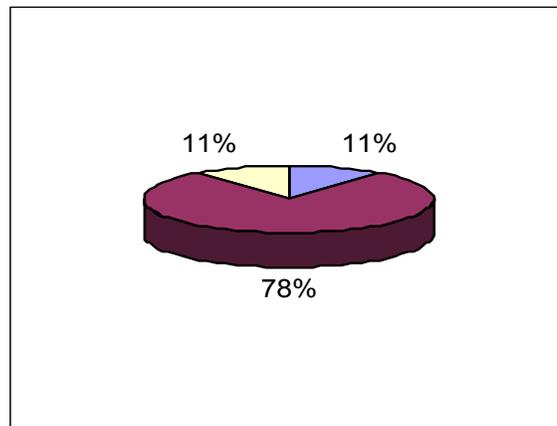


Figure 3: Attachment profile for all the combined low-income preschool children in Rusk County.

Attachment was typical for 78% of the children. The ratings of concern and strength were equal at 11%. Attachment was the protective factor where for which a greater percentage scored concern, compared to all the other protective factors measured in this study.

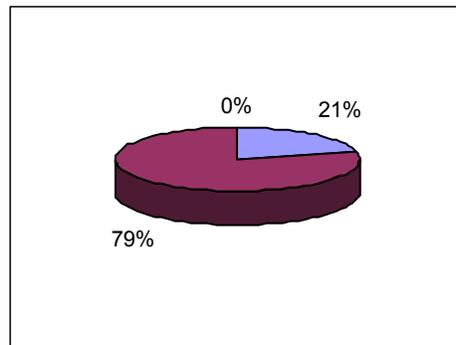


Figure 4: Total Protective Factors profile for all the combine low-income preschool children in Rusk County.

For the total protective factors among low-income preschool children in the study, 79% were considered typical, and 21% of the children had the total protective factors as their strength. The overall strength of all the protective factors was highest for the self-control and the total protective factors.

CHAPTER FIVE

Discussion and Recommendations

Introduction

This chapter summarizes the results of the study and its implications for early childhood professionals and kindergarten teachers. The chapter concludes with recommendations for further study.

Discussion

The resiliency attributes among low-income preschool children in Rusk County can be considered as typical. The only protective factor that ranked weaker than the other protective factors was attachment. Preschool children living in poverty may have had many day care provider transitions daily, weekly, and even monthly, as low-income parents who hope to find day care providers who are affordable later find them sometimes to be inappropriate. Because of numerous transitions between providers, these young children have had many significant adults come in and out of their life. The development of the mutual, strong and long lasting relationships that are critical in the development of attachment may not take place with these providers. Of those children who scored concern in attachment, 50% were male and 50% were female. More children showed strength in the total protective factors than any other protective factor. The data also showed that no children scored concern in self-control or the total protective factors.

The results of this study are meaningful and have implications for social and emotional kindergarten readiness. As young children get ready for the first day of kindergarten, they take with them a mixture of excitement and anticipation to learn and explore the world around them. What and how much they learn will depend on the social

and emotional competence they have developed in their young lifetime. Socially and emotionally healthy school ready children have some characteristics that most teachers would consider desirable of their students; they are persistent, and friendly, they listen to instructions, and are attentive. The overwhelming result of typical for the protective skills means low-income children entering into a school district need to have classroom strategies and an environment that will continue to foster existing resiliency skills and that will also continue to increase the resiliency skills of low-income students.

Teaching Strategies

An early childhood environment that promotes resilience includes an arrangement of the indoor and outdoor play areas, the types and kinds of materials children use, how those materials are displayed and stored, and most importantly the people –teachers, family members, specialists, and others whose actions help each child feel important and valued. Koralek (1999) suggests that a well planned environment that promotes resilience includes: (a) caring, skilled adults who build relationships with individual children; (b) a room that is free from health and safety hazards where children are allowed to explore and experiment while teachers focus on supporting their developmental learning; (c) the space allows for flexible arrangement of equipment and furniture; (d) space that accommodates the needs of the children enrolled, including children with disabilities; (e) a room is attractive and inviting; (f) places for children to play alone and/or in groups of different sizes; and (g) play items that encourage children's sense of security and offer appropriate challenges.

One classroom strategy to support resilience among children by manipulation of the environment is to set up well-stocked interest areas that reflect children's current

skills and interests. This arrangement promotes self-control and initiative as children can choose which interest area to explore and who to play with. They may also be allowed to explore special interests in depth. It is also important to establish clear traffic paths and boundaries around interest areas. This practice also promotes initiative and self-control as children will be less distracted by activities in other areas and less likely to run into or get in each other's way if traffic paths go around interest areas rather than from one room to the other. Toys and materials should be displayed on low, open shelves within the children's reach, promoting the total protective factors. Children feel secure when they can find what they want, they are encouraged when they don't need to ask an adult to help them find what they need, and children can help care for the room when they can see where things go. Creating a simple system to limit the number of children who can use an area at a time encourages self-control and attachment, as children gain a sense of security when they understand and have support to adhere to the limits. It is important to provide a few be-by-myself spaces that are private, but still visible to teachers. This strategy promotes attachment and initiative because spending time alone helps children see themselves as separate independent people. Storage areas should be provided to keep unfinished projects and/or to display individual work and belongings. Children feel secure when they have a place to keep their belongings and avoid frustration because they can find what they need, and working on long-term projects helps children learn to set and meet goals, handle frustration, solve problems, cooperate, get along with others, and delay gratification. It is important to create a home-like atmosphere that reflects children's families, cultures, and home languages. This strategy is a strong promoter of the total protective factors because children feel security and self-control to explore

features and items like those found at home. Also, use of home languages will connect children to their homes and families.

Koralek (1999) offers strategies to promote resiliency, including use of a daily schedule, routines, and transitions. An effective schedule that states the sequence and times of each day's events from the children's arrival until they depart matches the developmental skills of the children, and is flexible so teachers can adopt it to respond to daily events, circumstances, and individual needs. Children gain independence and a sense of competence through personal care routines such as brushing teeth, eating, hand washing, and resting. These routines can be individual or group experiences that occur daily. Teaching staff should plan a consistent approach for carrying out group routines. Transitions are the times between scheduled events such as preparing to go outside after lunch. These transition times can be unsettling times for children who may be coping with high levels of stress or have a temperament that resists change. A child might feel frustrated that they hadn't finished an art project, or bored because they have nothing to do while waiting for lunch. Involving children in carrying out routines and transitions is another strategy for a well-planned daily program.

A well-planned daily program that supports development and learning for the whole group as well as for individual children, that promotes attachment, self-control, and initiative includes: 1) active and quiet times; 2) small group, individual, and large group activities; 3) child-initiated and adult-directed activities; and 4) indoor and outdoor play times.

Summary

The purpose of this study was to investigate the protective factors present among low-income preschool children. Low-income children located in Rusk County Head Start Programs were asked parental permission to be a part of the study. The Devereux Early Childhood Assessment tool was used to measure the performance of behaviors the children demonstrated. The end result after one month of observing the children by Head Start teaching staff, was that the majority of these low-income children performed typical in initiative, self-control, attachment, and the total protective factors.

The implications for kindergarten teachers and early childhood teachers who currently provide services for children who live in poverty were addressed with teaching and classroom strategies that foster and promote positive protective factors.

Recommendations

The results of this study were based on a small, rural sample. To further the study it is recommended that it be conducted on a larger scale with more demographic diversity. It is also recommended that a comparative study be done to determine if Head Start Programs foster and support protective factors in low-income children versus a group of low-income children without those support services.

Another expansion of the study would be to assess these children again one year later in kindergarten to compare the protective factors between the two time periods.

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APPENDIX A

National Head Start Income Guidelines

2002 HHS Poverty Guidelines

Size of Family Unit	Contiguous States and D.C	Alaska	Hawaii
1	\$8,860	\$11,080	\$10,200
2	11,940	14,930	13,740
3	15,020	18,780	17,280
4	18,100	22,630	20,820
5	21,180	26,480	24,360
6	24,260	30,330	27,900
7	27,340	34,180	31,440
8	30,420	38,030	34,980
For each additional person, add	3,080	3,850	3,540

U.S. Department of Health and Human Services (2002).

APPENDIX B

Parent Letter



Indianhead Community Action Agency

209 East 3rd Street South
P.O. Box 40
Ladysmith, WI 54848

Phone: (715) 532-5594
Fax: (715) 532-7808

JEROME DRAHOS
Executive Director

GERALD BOOTH
Chairman

Dear Parent or Guardian:

Your child's Head Start Center has an opportunity to take part in a study about the protective factors present among Head Start preschool children. Protective factors are certain characteristics that give children the ability to thrive with the everyday stresses of life. The ICAA Head Start Director and Policy Council have fully approved this project. I am asking for your permission for your child to be included in this study.

A-37 item check list will be filled out by the Head Start teaching staff after observing your child for one month, rating how often certain behaviors are observed. (Examples include: sharing with other children, showing patience, and cooperating with others) The time frame for this observation will be March 1, 2003 to April 1, 2003. Then, completed forms will be sent to me. I will make a list of your child's protective factors. Your child's name will not be mentioned or identified in any way in my report; completed questionnaires will remain in your family folder located at each Head Start Center, where all other confidential information is stored. You may also choose to stop participation at any time.

There are no risks involved for your child or yourself by participating in this study. ICAA Head Start children, will benefit from this study because teaching strategies could be improved to foster and strengthen these protective factors. A copy of the completed thesis will be in each Head Start center participating in the study for parents and staff to read if desired.

If you have questions about this study, please contact me at the ICAA main office at 532-5594 x137 or my research advisor, Dr. Helen Swanson at 715.232-2784. Please fill out both forms on the next couple of pages and return one of the copies to your child's Head Start Center by February 1, 2003, and keep the parent copy for your records.

Sincerely,

Laura Volbrecht
Health/Mental Health Services Coordinator

Sincerely,

Carol Spangler
Head Start Director

Sincerely,

Helen Swanson, Ph.D.
Research Advisor
Professor of Psychology
University of Wisconsin Stout
Menomonie, WI 54751

Protective Factors Study (Laura Volbrecht, project coordinator)

Parent Copy

I do/do not (circle one) agree to allow my child to participate in this study.

Signature: _____

Date: _____

Child's Name: _____

Head Start Center: _____

Questions or concerns about the research study can be addressed to:

Laura Volbrecht
ICAA Health and Mental Health Coordinator
PO Box 40 Ladysmith, WI 54848
715.532.5594 x137

Helen Swanson, Ph.D.
Research Advisor
Professor of Psychology
University of Wisconsin Stout
Menomonie, WI 54751
715.232.2784

Questions or concerns about the rights of research subjects can be addressed to:

Sue Foxwell
Human Protections
Administrator
UW-Stout Institutional Review Board for the
Protection of Human Subjects in Research
11 Harvey Hall
Menomonie, WI 54751
715.232.1126

Protective Factors Study (Laura Volbrecht, project coordinator)**Head Start Copy**

I do/do not (circle one) agree to allow my child to participate in this study.

Signature: _____

Date: _____

Child's Name: _____

Head Start Center: _____

Please return to your Head Start Center by February 1, 2003

Questions or concerns about the research study can be addressed to:

Laura Volbrecht
ICAA Health and Mental Health Coordinator
PO Box 40 Ladysmith, WI 54848
715.532.5594 x137

Helen Swanson, Ph.D.
Research Advisor
Professor of Psychology
University of Wisconsin Stout
Menomonie, WI 54751
715.232.2784

Questions or concerns about the rights of research subjects can be addressed to:

Sue Foxwell
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Administrator
UW-Stout Institutional Review Board for the
Protection of Human Subjects in Research
11 Harvey Hall
Menomonie, WI 54751
715.232.1126

APPENDIX C

DECA Assessment Form
The Devereux Early Childhood Assessment
 (for children ages 2 through 5 years)

Paul A. LeBuffe ■ Jack A. Naglieri



Child's Name _____ Gender _____ DOB _____ Age _____
 Site/Program _____ Classroom _____
 Person Completing this Form _____ Relationship to Child _____ Date of Rating _____

This form describes a number of behaviors seen in some young children. Read the statements that follow the phrase: *During the past 4 weeks, how often did the child...* and place a check mark in the box underneath the word that tells how often you saw the behavior. Please answer each question carefully. There are no right or wrong answers. If you wish to change your answer, put an ✕ through it and fill in your new choice as shown to the right. Please do not skip any items.

Never	Rarely	Occasionally	Frequently	Very Frequently
<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Item #	During the past 4 weeks, how often did the child...	Never	Rarely	Occasionally	Frequently	Very Frequently
1	act in a way that made adults smile or show interest in her/him?	<input type="checkbox"/>				
2	do things for himself/herself?	<input type="checkbox"/>				
3	choose to do a task that was challenging for her/him?	<input type="checkbox"/>				
4	listen to or respect others?	<input type="checkbox"/>				
5	control her/his anger?	<input type="checkbox"/>				
6	respond positively to adult comforting when upset?	<input type="checkbox"/>				
7	participate actively in make-believe play with others (dress-up, etc.)?	<input type="checkbox"/>				
8	fail to show joy or gladness at a happy occasion?	<input type="checkbox"/>				
9	touch children/adults inappropriately?	<input type="checkbox"/>				
10	show affection for familiar adults?	<input type="checkbox"/>				
11	have temper tantrums?	<input type="checkbox"/>				
12	keep trying when unsuccessful (act persistent)?	<input type="checkbox"/>				
13	handle frustration well?	<input type="checkbox"/>				
14	have no reaction to children/adults?	<input type="checkbox"/>				
15	use obscene gestures or offensive language?	<input type="checkbox"/>				
16	try different ways to solve a problem?	<input type="checkbox"/>				
17	act happy or excited when parent/guardian returned?	<input type="checkbox"/>				
18	destroy or damage property?	<input type="checkbox"/>				
19	try or ask to try new things or activities?	<input type="checkbox"/>				
20	start or organize play with other children?	<input type="checkbox"/>				
21	show patience?	<input type="checkbox"/>				
22	ask adults to play with or read to him/her?	<input type="checkbox"/>				
23	have a short attention span (difficulty concentrating)?	<input type="checkbox"/>				
24	focus his/her attention or concentrate on a task or activity?	<input type="checkbox"/>				
25	share with other children?	<input type="checkbox"/>				
26	fight with other children?	<input type="checkbox"/>				
27	become upset or cry easily?	<input type="checkbox"/>				
28	say positive things about the future (act optimistic)?	<input type="checkbox"/>				
29	trust familiar adults and believe what they say?	<input type="checkbox"/>				
30	accept another choice when her/his first choice was unavailable?	<input type="checkbox"/>				
31	seek help from children/adults when necessary?	<input type="checkbox"/>				
32	ask other children to play with him/her?	<input type="checkbox"/>				
33	cooperate with others?	<input type="checkbox"/>				
34	calm herself/himself down when upset?	<input type="checkbox"/>				
35	get easily distracted?	<input type="checkbox"/>				
36	make decisions for himself/herself?	<input type="checkbox"/>				
37	show an interest in what children/adults are doing?	<input type="checkbox"/>				

APPENDIX D

DECA Individual Profile Sheet

Parent Rating										Teacher Rating									
Rater's Name:					Date:					Rater's Name:					Date:				
Z-Scores	Initiative	Attachment	Total Protective Factors	Behavioral Concerns	Z-Scores	Initiative	Attachment	Total Protective Factors	Behavioral Concerns	Z-Scores	Initiative	Attachment	Total Protective Factors	Behavioral Concerns	Z-Scores	Initiative	Attachment	Total Protective Factors	Behavioral Concerns
72	44 & Above	32	105 & Above	19 & Above	72	42 & Above	31 & Above	101 & Above	26 & Above	72	42 & Above	31 & Above	101 & Above	26 & Above	72	42 & Above	31 & Above	101 & Above	26 & Above
70	43	30	103-104	16-17	69	41	29	98-100	24-25	69	39	27	97	22-23	68	40	28	96	21
69	42	29	101-102	15	68	40	28	96	20	66	39	27	95	20	65	38	94	19	
68	41	28	100	14	64	37	26	93	18	64	37	26	93	18	63	36	92	17	
66	41	27	99	13	62	35	25	90	16	62	35	25	88	16	61	35	88	16	
65	40	26	97-98	12	61	35	25	88	15	60	34	24	86-87	15	60	34	86-87	15	
64	39	25	95	11	59	34	24	85	14	58	33	23	84	14	58	33	84	14	
63	38	24	94	10	57	33	23	83	13	57	32	22	82	13	56	32	81	12	
62	37	23	93	9	56	32	22	81	12	55	31	22	80	12	55	31	80	12	
61	36	22	92	8	54	30	21	78	11	54	30	21	77	11	53	30	77	11	
60	35	21	91	7	53	30	21	77	10	52	29	20	75-76	10	52	29	75-76	10	
59	34	20	89-90	6	51	28	20	74-75	9	51	28	20	73-74	9	50	27	71-72	8	
58	33	19	88	5	49	27	19	72	8	49	27	19	71-72	8	48	26	70	7	
57	32	18	87	4	48	26	18	69-70	7	48	26	18	67-68	7	47	25	66	6	
56	31	17	86	3	47	25	17	66	6	46	24	17	64-65	6	46	24	64-65	6	
55	30	16	85	2	46	24	16	63	5	45	23	16	61	5	44	23	61	5	
54	29	15	84	1	44	23	15	60	4	44	23	15	60	4	43	22	59	4	
53	28	14	83	0	43	22	14	57	3	43	22	14	57	3	42	21	57-59	3	
52	27	13	82	0	42	21	13	55	2	41	21	13	55	2	41	21	55	2	
51	26	12	81	0	41	20	12	53-56	1	40	20	12	53-56	1	40	20	53-56	1	
50	25	11	80	0	40	19	11	52	0	39	19	11	52	0	39	19	52	0	
49	24	10	79	0	39	18	10	51	0	38	18	10	51	0	38	18	51	0	
48	23	9	78	0	38	17	9	50	0	38	18	10	51	0	38	18	51	0	
47	22	8	77	0	37	16	8	49	0	37	16	8	49	0	36	15	48	0	
46	21	7	76	0	36	15	7	48	0	35	14	7	47-48	0	35	14	47-48	0	
45	20	6	75	0	35	14	6	47	0	34	13	6	46-46	0	34	13	46-46	0	
44	19	5	74-75	0	34	13	5	46	0	34	13	6	46-46	0	34	13	46-46	0	
43	18	4	73	0	33	12	4	45	0	33	12	5	45-45	0	33	12	45-45	0	
42	17	3	72	0	32	11	3	44	0	32	11	4	44-43	0	31	11-12	44-43	0	
41	16	2	71	0	31	10	2	43	0	31	11-12	3	43-43	0	31	11-12	43-43	0	
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38	13	0	68	0	28	7	0	40	0	28	8	0	40-40	0	28	8	40-40	0	
37	12	0	67	0	27	6	0	39	0	27	7	0	39-39	0	27	7	39-39	0	
36	11	0	66	0	26	5	0	38	0	26	6	0	38-38	0	26	6	38-38	0	
35	10	0	65	0	25	4	0	37	0	25	5	0	37-37	0	25	5	37-37	0	
34	9	0	64	0	24	3	0	36	0	24	4	0	36-36	0	24	4	36-36	0	
33	8	0	63	0	23	3	0	35	0	23	3	0	35-35	0	23	3	35-35	0	
32	7	0	62	0	22	2	0	34	0	22	2	0	34-34	0	22	2	34-34	0	
31	6	0	61	0	21	1	0	33	0	21	1	0	33-33	0	21	1	33-33	0	
30	5	0	60	0	20	1	0	32	0	20	1	0	32-32	0	20	1	32-32	0	
29	4	0	59	0	19	0	0	31	0	19	0	0	31-31	0	19	0	31-31	0	
28	3	0	58	0	18	0	0	30	0	18	0	0	30-30	0	18	0	30-30	0	
27	2	0	57	0	17	0	0	29	0	17	0	0	29-29	0	17	0	29-29	0	
26	1	0	56	0	16	0	0	28	0	16	0	0	28-28	0	16	0	28-28	0	
25	0	0	55	0	15	0	0	27	0	15	0	0	27-27	0	15	0	27-27	0	
24	0	0	54	0	14	0	0	26	0	14	0	0	26-26	0	14	0	26-26	0	
23	0	0	53	0	13	0	0	25	0	13	0	0	25-25	0	13	0	25-25	0	
22	0	0	52	0	12	0	0	24	0	12	0	0	24-24	0	12	0	24-24	0	
21	0	0	51	0	11	0	0	23	0	11	0	0	23-23	0	11	0	23-23	0	
20	0	0	50	0	10	0	0	22	0	10	0	0	22-22	0	10	0	22-22	0	
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13	0	0	43	0	3	0	0	15	0	3	0	0	15-15	0	3	0	15-15	0	
12	0	0	42	0	2	0	0	14	0	2	0	0	14-14	0	2	0	14-14	0	
11	0	0	41	0	1	0	0	13	0	1	0	0	13-13	0	1	0	13-13	0	
10	0	0	40	0	0	0	0	12	0	0	0	0	12-12	0	0	0	12-12	0	
9	0	0	39	0	0	0	0	11	0	0	0	0	11-11	0	0	0	11-11	0	
8	0	0	38	0	0	0	0	10	0	0	0	0	10-10	0	0	0	10-10	0	
7	0	0	37	0	0	0	0	9	0	0	0	0	9-9	0	0	0	9-9	0	
6	0	0	36	0	0	0	0	8	0	0	0	0	8-8	0	0	0	8-8	0	
5	0	0	35	0	0	0	0	7	0	0	0	0	7-7	0	0	0	7-7	0	
4	0	0	34	0	0	0	0	6	0	0	0	0	6-6	0	0	0	6-6	0	
3	0	0	33	0	0	0	0	5	0	0	0	0	5-5	0	0	0	5-5	0	
2	0	0	32	0	0	0	0	4	0	0	0	0	4-4	0	0	0	4-4	0	
1	0	0	31	0	0	0	0	3	0	0	0	0	3-3	0	0	0	3-3	0	
0	0	0	30	0	0	0	0	2	0	0	0	0	2-2	0	0	0	2-2	0	
0	0	0	29	0	0	0	0	1	0	0	0	0	1-1	0	0	0	1-1	0	
0	0	0	28	0	0	0	0	0	0	0	0	0	0-0	0	0	0	0-0	0	
0	0	0	27	0	0	0	0	0	0	0	0	0	0-0	0	0	0	0-0	0	
0	0	0	26	0	0	0	0	0	0	0	0	0	0-0	0	0	0	0-0	0	
0	0	0	25	0	0	0	0	0	0	0	0	0	0-0	0	0	0	0-0	0	
0	0	0	24	0	0	0	0	0	0	0	0	0	0-0	0	0	0	0-0		