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AFTER SCHOOL PROGRAMS: RESILIENCY THROUGH RECREATION

By

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B.A. May 2007, Virginia Wesleyan College, Norfolk, Virginia

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ABSTRACT

AFTER SCHOOL PROGRAMS: RESILIENCY THROUGH RECREATION

Aaron L. Johnston Old Dominion University, 2009 Director: Dr. Edwin Gómez

The purpose of this study was to examine a resiliency based after school intervention program and its effects on the development of at risk youth in a public middle school. A middle school was chosen from the Norfolk Public School System in Norfolk, Virginia. Undergraduate college students led multiple resiliency-based activities during the immediate after school hours, concluding with an educational session. Data were collected by administers via pre test and post test. Confirmatory factor analysis (CFA) was used to determine the unidimensionality of the resiliency traits. The CFA provided for six traits. Results did not confirm an increase in resiliency scores from pre to post test. Of the six dimensions, only the "relationship" dimension showed a significant difference between boys and girls. The results of the present study were discussed in reference to the previous research on after school programs and their benefits. Conclusions on the effects of a resiliency based after school program were then reported and possible areas of future research were proposed.

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CHAPTER I

INTRODUCTION

After school programs, in general, have been increasing across the United States (US). In 1994, only 30% of all elementary and combined schools, grades 1-6, offered after-school programs (National Center for Education Statistics, 1996). A more recent survey found that by 2002, that number has almost doubled (Le Menestrel, 2002). No definitive numbers were found on how many after school programs there currently are in the US. Perhaps this is due to the fact that several researchers, practitioners, and policy makers have different criteria for what constitutes an after school program (Apsler, 2009). For example, after school programs were defined according to when they were offered (e.g., 2:30-4:30 p.m. or 5:00-7:00 p.m.), what was available for activities (e.g., educational, recreational, behavioral activities), and the outcomes which were focused on (e.g., physical fitness, baby sitting, academic achievement, delinquency).

Halpern (1999) provided some reasons as to why these programs for at risk youth have been on the rise. One reason is that parents often feel that public playgrounds and streets around their house are not as safe as they once were. Parents and guardians feel more comfortable with having their child in a safe program. Another reason for the increased popularity of after school programs is that parents feel when children are involved in these type of programs, the children can be more productive (e.g., getting homework done, supervised social activities, social opportunities) and less stressed than they would be at home. Additionally, children need more help than what they currently receive during normal school hours, which most after school programs offer. Lastly, Halpern felt that after school programs give economically disadvantaged children opportunities to have access to developmentally enriching activities.

At-Risk Students

Historically, after school programs were formalized and expanded in the 1960s as a result of growing juvenile justice populations and criticisms of the ineffectiveness of the system to reduce crime and rehabilitate juvenile offenders (Pogrebin, Poole, & Regali, 1984). After school programs have evolved to serve various purposes such as a babysitting for single parent families, an opportunity to increase physical activity in youth, and a place to further a child's education. As such, one of the primary reasons that after school programs were developed was to target and enrich the lives of at-risk youths.

At-risk youths are those that run a high risk of delinquent behavior, early sexual experimentation, and generally have a difficult time adjusting to the demands of society, and are highly susceptible to unprotected sex, transmission of STDs, unplanned pregnancy, and dropping out of school (Daud & Carruthers, 2008; Manlove, 1998). Although there has been a general increase in after school programs, there is a need for more research in after school programs. According to Apsler (2009), "... no consensus exists in the field, no formal typological scheme grounded in theory has emerged" (p. 2).

This is not to say that theory has not been used in previous studies. After an extensive review of the literature, self-efficacy was one of the more common theories that were explored. For example, self-efficacy measures were investigated in after school programs to determine the role that self-efficacy had on fruit and vegetable consumption (Geller, Dzewaltowski, Rosenkranz, & Karteroliotis, 2009). Self-efficacy theory and social cognitive theory was also used in an after school program with Native American

Youths (Rinderknecht & Smith, 2004). Both studies focused on health indicators and health behaviors. There were no other studies that specifically tested a theory, or used a theory-based approach in the after school program in a recreation setting. This study incorporated the use of resiliency theory in the development of activities in a recreationbased after school program.

Resiliency Theory

Resiliency is a very important concept in childhood development. According to Wolin and Wolin (1993), resiliency refers to traits or characteristics that enhance an individual's ability to cope with, adjust to, and respond to problems. Wolin and Wolin identified seven traits or characteristics that capture the essence of resiliency. These seven traits included insight, independence, relationships, initiative, creativity, humor, and values orientation. Although measures have been used in the past to quantify resiliency in a recreation context (Allen, Cox & Cooper, 2006; Hurtes & Allen, 2001), the measures have not been subjected to a stringent validity and reliability analysis. Each of these traits will be elaborated upon in the literature review. If these traits, or characteristics, are targeted during a youth's development, they can potentially improve a youth's life skills. One environment in which resiliency can be instilled is in after school programs.

Statement of the Problem

Parents believe that urban neighborhoods are not safe enough for their children, or that their children need to utilize their free time more constructively through academics or the fostering of a positive social life amongst their peer groups (Halpern, 1999). The offering of after school program can provide children with a safe setting for, and assistance in, their academic work, as well as build strong positive relationships with peers and administrators. In addition, after school program administrators see these programs as an opportunity to help develop traits or characteristics that children will be able to transfer to other areas of their life. However, the literature regarding use of resiliency theory in conjunction with comprehensive in-school and after-school programming is nonexistent. There is little evidence on effectiveness of such programs, especially with respect to resiliency indicators. This study investigated the effectiveness of a resiliency-based programming at a middle school.

Statement of the Purpose

The purpose of this study was to examine a resiliency based after school intervention program and its effects on the development of at-risk youth in a public middle school. In addition, this study compared boys to girls on the impact of an after school program designed to increase resiliency. Furthermore, the resiliency traits, which mentioned in the literature, were tested to see if they are indeed reliable constructs measuring resiliency. As such, the Resiliency Attitudes and Skills Profile (RASP) will be assessed in terms of its construct validity and reliability.

Significance of the Study

There is literature addressing after school programs and the benefits a participant can acquire from these experiences (Barnett, 2008; Daud & Carruthers, 2008). However, previous studies on after school programs have not used resiliency theory as an underlying rationale for its programming efforts. An after school resiliency-based intervention program and the potential beneficial effects it has upon youth could provide useful information for both parents who are possibly thinking of enrolling their child(ren) in after school programs, as well as provide an alternative framework for professionals in education, childcare, and community recreation.

Research Hypotheses

Hypothesis 1. The Resiliency Attitudes and Skills Profile will demonstrate item validity scores (communalities) higher than 0.75, or factor loadings higher than 0.60 to be considered valid indicators of any given construct, and a Cronbach's alpha of 0.60 to assess overall reliability for items measuring each of the constructs hypothesized to represent resiliency in the literature.

Hypothesis 2. The subjects will have higher scores on the Resiliency Attitudes and Skills Profile (RASP) on the post test than the scores on the pre test. The null hypothesis states that there will be no difference in RASP scores between the pre test and the post test, $H_0: \mu_p = \mu_t$. The alternate hypothesis states that there will be significant differences in RASP scores between the pre test and the post tests, $H_1: \mu_p \neq \mu_t$. *Hypothesis 3.* The Resiliency Attitudes and Skills Profile (RASP) scores for middle school boys will be compared with those of the middle school girls. The null hypothesis states that there will be no differences in RASP scores between the post test scores for boys and the post test scores for girls, $H_0: \mu_b = \mu_g$. The alternate hypothesis states that there are significant differences in RASP scores between boys and girls, $H_1: \mu_b \neq \mu_g$. *Delimitations*

 This study is delimited to only sixth graders at a local public middle school in Norfolk, Virginia. The school was very convenient in its proximity to the researcher, and was not randomly selected. 2. All possible variables measuring the success of school program are not being examined, only resiliency measures were examined in this study.

Limitations

- The outcomes of this study cannot be generalized to all middle school students because (a) this study was only conducted with sixth grade students at a local public school, and (b) this middle school in Norfolk, VA may not be representative of other middle schools in Virginia or the US.
- 2. Self-administered surveys may not be entirely appropriate, especially given the nature of the respondent answering the RASP (e.g., the students are not adults and may not take the survey seriously, they may have difficulty reading it, English may not be their first language, or students may simply be bored).
- 3. Because the after school program had an open enrollment (e.g., students are not obligated to go, it is voluntary), some participants of the after school program may have participated in the program or attended the program more than other participants (frequency of attendance was not available at the time of data analysis).
- 4. The effect that the in school portion of this program may have on the participants was not separated out from the after school portion in the database.
- 5. There were either five or six sub groups where the undergraduate practitioners led the activities, thereby leaving the possibility of inconsistent leadership (e.g., some undergraduate practitioners were better at leading, programming, and facilitating activities).

6. This year long program ran for eight weeks the first academic semester and twelve weeks the second academic semester. Between the two semesters there was a period of six weeks of no after school programming, due to Old Dominion University's holiday break.

Definitions of Terms

- *Resiliency* is defined in this study as the ability to "bounce back" from a problem or a situation through life. Allen, Stevens, Hurtes, and Harwell (1998) defined resiliency as characteristics that enhance an individual's ability to cope with, adjust to, and respond to problems.
- *At risk youth* is defined for the purpose of this study as adolescents who may be under the poverty line and may be exposed to aspects of negative youth development such as gangs, drugs, family apathy, and violence.
- After school programs is defined for the purpose of this study as a professionally moderated program held at a public school during the immediate hours after school is released, and has intentionally based programming. Responsive Advocacy for Life and Learning in Youth (RALLY) is the title of the after school program for this study.
- *Intervention programs* are defined as programs that seek to change a targeted behavior via the application of the lesson plan and its facilitation.
- *Recreation programming* is defined as planning (e.g., creating objectives, activities, modifications, mechanism for feedback) for recreation experiences.

- *Benefits-based programming* is defined as the use of theory and predetermined benefits in programming in order to ensure the receipt of targeted benefits in recreation settings.
- Prevention Practitioners were the leaders of the in-school portions, as well as the after-school portion. These individuals, normally students affiliated with Old Dominion University, led groups of students in recreation and educational activities that promoted resiliency.

CHAPTER II

LITERATURE REVIEW

There are four main themes covered in this review: (a) youth development, (b) after school programs, (c) resiliency, and (d) benefits based programming. More specifically, this review introduces the after school program Responsive Advocacy for Life and Learning in Youth (RALLY). Each of these topics is discussed in the sections which follow.

Youth Development

Positive youth development encompasses a strength based conception of adolescence (Lerner, Lerner, Almerigi, & Theokas, 2005). Some youth development specialists (Gambone, Klern, & Connell, 2002; Leffert et al., 1998; Witt, 2002) have indicated that, in addition to academic competence, youth need opportunities for appropriate physical development, and for emotional, civic, and social competence. Kelley (2003) stated that high rates of boredom, alienation, and disconnection from meaningful challenges are signs of a deficiency in positive youth development. This negative youth development could cause problem behavior such as drug use, premature sexual involvement, and minor delinquency.

Catalano, Berglund, Ryan, Lonczak, and Hawkins (2002) researched several after school programs. They began with a database of 161 positive youth development programs and ultimately designated 25 programs as effective. The selected programs focused on school age children and addressed one or more of fifteen youth development constructs. Some of these constructs included bonding, resilience, self determination, self efficacy, clear and positive identity, and the recognition of positive behavior. The programs were implemented in school, family, and community settings, with school components used in twenty two of the twenty five programs. Catalano et al. (2002) concluded their review with an optimistic assessment that promotion and prevention programs that addressed positive youth development constructs were making a difference in well evaluated studies. The results indicated improvements in interpersonal skills, quality of peer and adult relationships, and academic achievement, as well as reductions in problem behaviors such as school misbehavior, alcohol and drug use, high risk sexual behavior, and violence.

MacDonald and Valdivieso (2000) summarized the central mission of youth development in the following manner: "...what we want our children to acquire is a rich array of social and intellectual knowledge, attitudes, and competencies that will enable them to be caring people and productive citizens" (p. 72). Further, youth development is dependent on support from family, community, and other institutions such as organized recreation and camp programs (Witt, 2002). Additionally, it was noted that welldesigned and well-implemented youth centered programs that consciously use a model or framework for positive youth development have positive outcomes for young people (Nicholson, Collins, & Hollmer, 2004).

Youth Development and Gender Differences

The array of actual and potential changes in early adolescence makes early adolescence a potentially stressful time for both boys and girls. Some examples of actual and potential changes include a changing body, new schools, more responsibility, and high expectations for coping with complex pressures (Benson, 1990; Benson, Williams, & Johnson, 1987; Crockett & Peterson, 1987). As children enter adolescence, they become intellectually more capable of sophisticated and reflective thinking about themselves. As a result, a child in early adolescence creates a perception of their self identity. Perceptions of self identity also help to develop self esteem. Harter defined global self esteem as "how much one likes, accepts or respects the self as a person" (1990, p. 366) and noted that self esteem depends on how the individual, as well as other important people in the individual's life, evaluates himself or herself on a variety of domains considered important in society. As an example, academic performance influences global self esteem primarily for people who think it is important that they do well in school. Research indicates that, among adolescents, physical appearance is the largest contributor to global self esteem, with peer acceptance as the next most influential domain (Harter, 1990; Koff, Rierdan & Stubbs, 1990; Richards, Boxer, Petersen & Albrecht, 1990).

After School Programs

According to Biddle and Goudas (1996), although about 80% of adolescents are estimated to spend at least thirty minutes per day being active, less than half are active for at least sixty minutes per day. Additionally, only two thirds of adolescent boys and one third of adolescent girls reported participation in the recommended twenty minutes of sustained moderate to vigorous physical activity three times a week. The authors concluded that after school programs provide an opportunity to increase levels of physical activity for adolescent youth.

Simmons and O'Neal (2001) predicted that 50 to 60% of children who were born in the nineteen nineties will spend some time living with single parents, normally their mothers. The more single parent families there are, the greater the chance that single

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parents will need someone to help watch or care for their child(ren). After school programs typically provide that extra help for single parent families, as well as offer socialization and physical activity for the children within the program.

According to Miller (2001), schools have historically provided many after school services such as tutoring, extracurricular clubs, sports, and homework. Additionally, Miller stated that schools often promote after school programs as an effective strategy for enhancing student academic achievement. McLaughlin (2001) examined community based programs and organizations that make significant contributions to youth's learning and development. McLaughlin found that of those youths who participated in community based programs, 26% were more likely to receive recognition for better grades and 20% were more likely to rate their chances of going to college as very high. With most after school programs historically providing an educational component, these two studies indicate that after school programs are generally academically beneficial for youth.

After School Programs, Benefits, and its Demand

The demand for these types of programs also depends on where one lives. For example, in Seattle, 35% of the school aged population participates in after school programs (Halpern, 1999). According to Halpern, the growing community interest in after-school programs has been due to the following four public beliefs: (a) public spaces such as streets and playgrounds are no longer safe for children; (b) it is stressful and unproductive for children to be left on their own during after-school hours; (c) many children need additional time and individual attention for academic work beyond what regular school hours can provide; and (d) economically disadvantaged children, or those under the poverty line, need opportunities for developmentally enriching activities.

In recent years, after-school programs have been created in the U.S. primarily to increase physical activity for youth due to overwhelming concerns with the issue of childhood obesity. The percentage of adolescents who are at-risk for becoming overweight continues to increase (Eaton et al., 2006), and by 2010, it is expected that the number of overweight children will increase significantly worldwide, with almost 50% of children in North America and 38% of children in the European Union categorized as overweight (Wang & Lobstein, 2006). Although after school programs may not be entirely oriented to the issue of weight loss, and how to keep the weight off, an intended outcome or goal of current after school programs is to promote healthy life styles through recreational activities, and thereby inadvertently addressing the issue of obesity without the stigma attached to programs targeted at obese children.

Roffman, Pagano, and Hirsch (2001) conducted a study that explored the effects of an after school program on youth participating in the Boys and Girls Club of America. Roffman et al. found that, on average, the boys in their sample had significantly higher rates of "getting into trouble" than the girls, and indicated that low income minority males may express socioemotional problems through externalized negative behaviors.

In addition, the girls reported self-esteem levels relatively higher than the boys, and these reported levels did not decline with age. Both genders were asked to rate the extent to which staff influenced their decision to participate in the program. Girls rated the staff as a reason for participation a bit higher than the boys, suggesting that girls may create stronger relationships easier than boys with older role model figures.

Resiliency Theory

Resiliency is defined as characteristics that enhance an individual's ability to cope with, adjust to, and respond to problems (Wolin & Wolin, 1993; Allen et al., 1998). Rutter (1987) defines resilience as a "positive role of individual differences in people's response to stress and adversity" (p. 316). Newman (2002) feels that resiliency is a quality that helps victims of child maltreatment resist and recover from adversities. Additionally, Newman defined resiliency as a positive adaptation where difficulties (e.g. familial, personal, or environmental) are so extreme that the society otherwise would expect a person's cognitive or functional abilities to be impaired. Rutter (1987) and Bates (1986) have discussed the personality dimension of resiliency in terms of the emotional and behavioral disorders resulting from societal reactions to children with adverse temperamental characteristics. Their concerns are twofold: first individual differences intervene in coping with stress and risk; and second, adverse experiences occurring in early development may alter the course of psychological development.

Resilience theory is a multifaceted concept that has been addressed by social workers, psychologists, sociologists, and educators over the past few decades. Resilience theory addresses the strengths that people and systems demonstrate in order to enable them to rise above adversity (Kaplan, Turner, Norman, & Stillson, 1996). Kaplan, et al. also stated that the emergence of resilience theory is associated with a reduction in emphasis on pathology and an increase in emphasis on strengths within the social sciences. O'Leary (1998) echoes this sentiment in the following manner:

Psychologists have recently called for a move away from vulnerability/deficit models to focus instead on triumphs in the face of

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adversity ... This call for a focus on strengths parallels that of a number of other investigators in child development..., medical sociology..., and education... The potential theoretical, empirical and policy significance of the proposed paradigm shift from illness to health, from vulnerability to thriving, from deficit to protection and beyond ought not to be underestimated. The precedent for this paradigm shift is growing in the scientific literature. (p. 426)

Allen, Cox, and Cooper (2006) conducted a study on an outcome based day camp and the resiliency of disadvantaged youths. The day camp was typical, operating Monday through Friday from 8:30 a.m. until 5:00 p.m. for eight weeks. This program offered activities in numerous program areas such as journal keeping, drama programs, initiative games and problem solving activities, and education and artistic activities. These camps were led by a certified school district teacher, two full time staff members, two junior leaders, four volunteers, and three part time staff members. By using the RASP (Hurtes, 1999), the authors found that an outcome based camp had a greater change from pre test to post tests, as compared to a traditional day camp (Allen et al., 2006).

Pierce and Shields (1998) carried out a similar study that sought to develop resiliency factors in high risk preadolescent youth through a community based after school program called "Be a Star." These programs were held once a week and lasted 90 minutes during the school year from September through May. The average number of sessions a child attended was 22.3 sessions, totaling an average of 33.5 hours. The authors used a questionnaire as their instrument to focus on the following project goals: school bonding, family bonding, pro-social norms, self-concept, locus of control, self-control, consequential decision making, positive outlook, emotional awareness, assertiveness, confidence, cooperation, refusal skills, and attitudes toward drugs and alcohol.

It was noted by Pierce and Shields that in the first two years, results/outcomes were very inconsistent, especially with the younger children. However, in the third year of the program, very noticeable differences between the older aged treatment and comparison groups emerged. Pierce and Shields reported that in every case, the treatment groups had higher scores than the comparison groups, showing the program having a positive effect.

Two scales for measuring resiliency were found in the literature. The first scale, the Resiliency-Values Personal Profile (RVPP) was created by leading resiliency researchers (Mothner, 2001). However, the RVPP was not empirically tested; it was used as a tool for generating discussion on issues related to resiliency. The second scale, the Resiliency Attitudes and Skills Profile (RASP) was created by recreation researchers. Currently, the RASP has only been used within a recreation setting (Allen et al., 2006; Hill et al., 2007; Hurtes & Allen, 2001), and is further discussed below. *Resiliency Attitudes and Skills Profile (RASP)*

Wolin and Wolin (1993) identified seven resiliency traits that were later operationalized in the Resiliency Attitudes and Skills Profile (RASP), first developed by Hurtes (1999) in his dissertation, and later published in *Therapeutic Recreation Journal* (Hurtes & Allen, 2001). Hurtes and Allen operationalized the seven resiliency traits (see Table 1) in their study. Hill, Gómez and Jeppesen (2007) provided the following as definitions of the seven resiliency traits.

Insight. Insight is the ability to read a person's verbal or body gestures, as well as decipher any given situation appropriately. An insightful individual can modify behavior based on his or her surroundings. This trait underscores an individual's understanding of his or her environment.

Independence. Independence is the ability to separate oneself from risk factors or negative consequences. This trait considers the issue of self-assessment and reflection, rather than catering to others. An independent individual is less likely to make a decision based on peer pressure, and can say "no" without feeling pressured or feeling a need to conform. This trait addresses the notion of an individual's ability to make sound decisions in the future, based on this sense of independence in the present.

Relationships. The relationships trait refers to the ability to establish and maintain healthy relations with peers, family, and role models. Adolescents often struggle with establishing and maintaining healthy relationships because they seek approval from peers, parents, and teachers. Adolescents typically receive different messages from these subgroups of individuals in terms of what is deemed socially acceptable, and must "juggle" expectations in order to maintain healthy relationships. There is obvious overlap between relationships and independence, and at times they could be at odds, thus connoting that the resiliency traits may not be mutually exclusive, and if they are, there seems to be a high degree of potential correlation.

Initiative. Initiative is the ability to take charge of one's life, while being very proactive in making and adapting to changes that commonly occur. Individuals with

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initiative are self-determined (e.g., motivated, make positive outcomes happen). Often, individuals with high initiative tend to do well leading and inspiring others. Initiative promotes the ability to overcome daily challenges by seeking new solutions. Individuals with initiative see challenges as opportunities.

Creativity. Creativity involves the generation of opinions and alternatives to cope with hardships. Creativity allows individuals to look for alternatives to an unhealthy approach to problem solving. For example, rather than using unhealthy and illegal drugs to cope with stress, one could exercise as a healthier alternative. Creative individuals tend to think ahead and create a variety of positive decision making solutions to their problems. The creativity trait also allows an individual to entertain oneself, if needed, versus seeking others for entertainment, thus insight and initiative can be assumed to be positively correlated with creativity.

Humor. Humor is the capability to laugh and find joy in one's current surroundings. Humor has often been described as natural therapy. Individuals with a healthy sense of humor can often use laughter as a coping mechanism. This enables individuals to look at the "lighter side" of life and helps individuals to cope with daily challenges that may present themselves.

Values orientation. Values orientation is making decisions that include the desire to live a good life according to strongly held beliefs and making one's decisions based on one's value system, rather than following others. This trait allows individuals to look beyond a quick and easy decision. Individuals making a valued decision are doing so because the decision is based on their belief system, morals, or strongly held ethics. The Responsive Advocacy for Life and Learning in Youth (RALLY) program is a two component program that has an in school counseling portion and an after school activity program. The RALLY program was developed by Gil G. Noam and Corinna A. Hermann in 1994. The first RALLY program was in cooperation with the W. H. Taft Middle School in Allston-Brighton, Massachusetts. Other site locations included Bronx, New York; San Francisco, California; Honolulu, Hawaii; and Tacoma, Washington. RALLY addresses the problems of at-risk children and youth with the assumption that the human capacity for change and recovery is a developmental capacity and can be best supported by a strong developmental orientation. Noam and Hermann (2002) stated six overarching goals of the RALLY prevention and intervention model. They are described as follows:

- to improve students' academic performance and keep them from pathways of school failure and dropout;
- to reinforce children's strength and resilience by connecting the diverse and often fractured worlds of family, community, school, and after-school, which includes the development of replicable procedures and strategies for linking university, school, and health services in support of at-risk youth;
- to reduce the likelihood of students engaging in self-destructive activities, including drug and alcohol addiction, gang participation, teenage pregnancies, suicide, and depression;
- 4. to establish a variety of relationship opportunities, including mentoring, that have been shown to support resilience;

- to reduce the stigma of participation in prevention and intervention activities,
 by involving all children in a cluster of a school, rather than targeting a group of special needs children; and
- to support development in places where youth live their daily lives, using specialized clinical institutions and residential schools as backups rather than as places for early referral.

This program created the role of the "Prevention Practitioner" who leads the activities during the after school component. RALLY promotes healthy development so that children can develop resilience and strong academic and interpersonal skills (Noam, Winner, Rhein, & Molad, 1996). This program utilizes the concept of benefits based programming (Kraus, 1997) as well as the resiliency traits into a complete after school program by having the prevention practitioners program activities which focus on the improvement of specific resiliency traits.

Summary

The previous sections addressed the role of after school programs and how they have changed according to societal needs. Youth development and the various reasons for interest in youth development were also discussed. The theoretical paradigm that was used to inform the potential for after school programs' role in the development of our youth was resiliency theory. This theory manifests itself in the conceptualization of the RALLY program. Additionally, the RASP was discussed as an instrument which could be used to assess resiliency in youths who participate in recreation benefits-based after school programs.

CHAPTER III

METHODOLOGY

Introduction

The purpose of this chapter is to describe the methodological procedures for the investigation and testing of the hypotheses found in Chapter 1. The methodology section will discuss aspects of the study such as research design, sample, instrumentation, operational definitions, data collection procedures, and data analysis procedures.

Variables

Variables for Research Hypothesis 1. Forty items will be tested for validity and reliability from the RASP and subjected to a confirmatory factor analysis and reliability analysis.

Variables for Research Hypothesis 2. The dependent variable is the RASP scores of the students. The independent variable is the time the test was taken.

Variables for Research Hypothesis 3. The dependent variable is the RASP scores of the students. The independent variable is gender.

Research Design

This research utilized a quasi-experimental research design with a pre-test and post-test. A quasi-experimental design was used because there was no control group and no randomization in the selection process for the respondents. The pre-test was given prior to the intervention of the after school program. It is a quantitative study and a convenience sample was used.

Sample

The target population was sixth grade students at a local public middle school in Norfolk, Virginia totaling nearly 366 students. A convenience sample of 145 students was taken from this target population. All of the students were enrolled in the Fall Semester of 2007 and the Spring Semester of 2008. The students who were available for this research were the students who returned both the parent consent and student assent forms (see Appendix C and D). Participation was voluntary throughout the entire process and responses were anonymous.

Instrumentation

Resiliency was measured in this study by the Resiliency Attitudes and Skills Profile (RASP) developed from Hurtes and Allen's (2001) work. It is a 40-item survey with all of the questions pertaining to aspects of resiliency. Subjects indicated the extent of agreement on a Likert scale, ranging from 1 (strongly disagree) to 6 (strongly agree). This study utilized the child/student version only (see Appendix A). The entire survey is scored on a 6 point Likert scales, ranging from strongly disagree to strongly agree. The following are sample questions from the Student RASP that outline each trait:

1) "Once I set a goal for myself, I do not let anything stop me from reaching it" is an example of an item measuring the *initiative* trait;

 "I notice small changes in facial expressions" is an example of an item measuring the *insight* trait;

3) "My sense of humor makes it easier to deal with tough situations" is an example of an item measuring the *humor* trait;

4) "My friends know they can count on me" is an example of an item measuring the *relationships* trait;

5) "It is OK if I do not see things the way other people do" is an example of an item measuring the creativity trait;

6) "Lying is unacceptable" is an example of an item measuring the *values* orientation trait; and

7) "I stand up for what I believe is right" is an example of an item measuring the independence trait.

A simple demographics sheet was created to use throughout this study as well (see Appendix B). The survey forms asked for age, gender, and the last four digits of their home phone number for coding purposes. The information was not used to match a student's information to his or her name in order to maintain anonymity. After approval by the Human Subject Review Committee from the Darden College of Education at Old Dominion University, the data collection process began.

Data Collection Procedures

Participants in the RALLY program had the option to choose whether or not they complete the questionnaires through a process of informed consent in which they were given letters describing the research, potential risks and benefits, and the voluntary nature of the study. They were asked to sign a form indicating their consent to participate (see Appendix E). Deciding not to participate in the research did not impact their participation in the RALLY program. Norfolk Public Schools dictated the number of 6th grade classes that participated in the RALLY programming. This project utilized a quasi-

experimental design because all 6th graders completed the questionnaires, regardless of whether or not they participated in RALLY.

Prevention practitioners were present in the sixth grade classrooms and after school. At the beginning of the programming, students, caregivers, and teachers were given the opportunity to complete pre-assessments. These pre-assessments were proctored by Old Dominion University (ODU) faculty involved with this study. Furthermore, the ODU faculty proctored the post assessments and satisfaction surveys for the students, caregivers, prevention practitioners and teachers. Completion of the assessments took no longer than 30 minutes per trial. Through after school activities, participants were exposed to a variety of interventions that promoted academic and socioemotional success.

Programming Procedures

The after school program was designed to motivate and allow the youth to be physically active, while simultaneously programming for each of the seven resiliency traits. Over the span of an academic year, two undergraduate courses were dedicated to the after school program: *Youth Development through Recreation* (RTS 301) and *Recreation Facilitation* (RTS 302). Within these two classes, the undergraduate ODU student leaders planned activities that targeted the seven the resiliency traits, whereby one trait was designated for a specific week, determined beforehand by the instructor of the course. As part of the two courses, class time was set aside for the ODU student leaders to practice and finalize the programs they had been planning, and to complete their "Daily Activity Plan," which was a form to assist with the planning and implementation of the activities during the after school program (see Appendix E).

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The RALLY program consisted of an in school portion as well as an after school portion. This study specifically sought to analyze the effects of the after school portion, which was run by students and faculty from the Recreation and Tourism Studies Program at Old Dominion University. The after school program ran from 2:45 p.m. and concluded with the after school buses departing at 4:45 p.m. The program began with a sign-in process that included a brief snack, which normally consisted of milk and some sort of crackers. After the brief snack and sign in period, a large group activity, consisting of all participating sixth graders, was led by ODU student leaders/prevention practitioners and supervised by the after school program director.

After the large group activity, the ODU student leaders would break down into smaller individual groups in which they would lead the activity that they planned in one of the ODU courses. Approximately 40 minutes were given to the ODU student leaders for their planned activities. To conclude the program, a twenty minute period was set aside for the middle school students to engage in any homework they may have had. This period was also an opportunity for the ODU student leaders to help out with any questions the sixth graders may have in regards to their homework. The students would then file out to the school buses to conclude the after school program session.

The RASP was utilized in this study as the instrument. ODU representatives of the program were given permission to utilize the first half of a math class, prior to the start of the program, to administer the RASP to randomly chosen middle school students. The ODU representatives helped the students understand the questions asked, but did not help the students answer the questions. The math teachers also allowed the ODU representatives to use a day of their classes to administer the RASP at the end of the yearlong program.

The data were cross referenced with the after school program attendance sheets to filter out the data sets of the students who did not attend the after school portion of the program. The data were also filtered for those last four numbers of the students' phone numbers that did not have a pre-test and post-test match. The Statistical Package for the Social Sciences (SPSS) 15.0 was used to run quantitative analyses. A p-value of 0.05 was used to determine statistical significance among the variables.

Data Analysis

Data analysis was analyzed through t-tests, factor analyses, and basic descriptive statistics. Data were collected and entered into SPSS by a graduate student from the Department of Educational Counseling and Instruction at ODU. The following include a rationale for the use of t-tests and factor analysis.

Factor analysis. Factor analysis is appropriate for the reduction of data into a manageable (composite) item or to assess a construct (factor/dimension). Summated scales are only valid to the extent that the items measure one and only one construct. This attribute is formally recognized in the factor analytic literature as unidimensionality (Anderson & Gerbing, 1982, 1988; Burt, 1976; Cook & Campbell, 1979). Unidimensionality, therefore, is defined as the existence of a latent trait or construct underlying a set of measures. The unidimensionality of each construct must be assessed prior to using the construct in subsequent analyses (Hunter, Gerbing, & Boster, 1982). Unidimensionality is assessed via the two modalities of internal consistency and external consistency or parallelism (Hunter & Gerbing, 1982; Spearman, 1904). While the term

"consistency" is often associated with the issue of reliability, a theoretical, historical, and mathematical relationship ties the concept to validity (Ghisselli, 1964).

Validity and reliability. Conceptually, validity is defined as the extent that items measure *what* they purport to measure, and nothing else (Borsboom, Mellenbergh, & van Heerden, 2004). An item is reliable to the extent that it measures *whatever* it measures consistently (Dyer, 1995; Rust & Golombok, 1989). These definitions are given to drawthe reader's attention to a particular relationship between reliability and validity. *What* is measured is always an issue of validity and it is accounted for in both reliability and validity measures (Ghisselli, 1964; Thurstone, 1935; Tryon, 1957; Tryon & Bailey, 1970). In the factor analytic literature, the validity and reliability of each item can be assessed with communalities (Nunnally, 1967; Thurstone, 1935).

Communalities/factor loadings. Nunnally (1967), Thurstone (1935), and Hunter (1980) noted that communalities in factor analysis are *item reliabilities* that represent how much of the underlying common factor variance is accounted for by each item. Mathematically, the communality (h^2) is equal to the squared factor loading. Guadagnoli and Velicer (1988) concluded that factors are well defined when they have factor loadings of .60 or higher. Communalities and factor loadings are the parameters that need to be estimated to utilize the cluster analytic approach to factor analysis. Additionally, "each communality equals the variance explained by the hypothetical factor" (Nunnally, p. 350).

T-test (dependent samples). The dependent samples t-test was used to compare the mean scores between pre and post tests. This test is appropriate when comparing two groups and their respective means, and there is a relationship between the two groups. In

this study there is a relationship between pre and post test scores, as the RASP was taken by the same student at two different time periods.

T-test (independent samples). The independent samples t-test was used to compare the means scores between boys and girls. This test is appropriate when comparing two groups and their respective means, and there is not a relationship between the two groups. In this study there is no relationship between being a boy and being a girl, and the associated test scores from the RASP for each group.

CHAPTER IV

RESULTS AND DISCUSSION

Descriptive statistics were run to give an overview of the participants of this study. Frequency and mean statistics were run to show the frequency and means of the different reporting constructs (noted as traits in the analysis). Factor and reliability analyses were run to determine the validity and reliability of the instrument utilized. The comparison in means of two groups was found by running *t*-tests, using a *p*-value of 0.05 or less as the criterion for significance. Included below is a description of the sample, preliminary analyses, research question analyses, and a summary of the findings *Descriptive statistics*

The open after school program was accessible to every one of the approximately 366 sixth graders at a middle school in Norfolk, VA, of which 145 were selected for the study. After ensuring that "last four" digits were matched for pre and post tests, the total number of participants in this study was 88 giving this study a 60.7% response rate. Of the 88 participants, 52% were girls. Two sets of pre test and post tests were returned incomplete for the gender category.

Factor and Reliability Analyses of RASP Traits

Prior to exploring any relationships in the data, confirmatory factor analyses (CFA) with Varimax Rotation were performed to determine if the variables within the RASP constructs (i.e., the constructs representing each of the hypothesized resiliency traits) were valid and reliable. The sampling adequacy was evaluated by running the Kaiser-Meyer-Olkin (KMO) measure (adequate at >0.60) and Bartlett's Test of Sphericity (significant at p<0.05) on each of the construct. Each construct, which
displayed values of KMO of more than 0.60 and a significant Bartlett's Test of Sphericity (p<0.05) value, was accepted as meeting the minimum requirements for sampling adequacy in order to perform validity and reliability analyses (Tabacknick & Fidell, 1996). Once validity of the items was assessed, they were subjected to a reliability analysis (Chronbach's alpha >0.60). On this basis, some items were removed from the constructs during the CFA (validity check), while others were removed during the reliability analysis to ensure a stronger (more reliable) scaled variable (construct).

Items which exhibited factor loadings greater than 0.60 for each of the constructs were retained as measures of separate constructs. In Table 2, factor loadings are only reported for items passing both validity and reliability checks.

RASP components. Table 1 indicates that there were 40 items which were used to measure seven dimensions/subscales (i.e., insight, creativity, relationships, initiative, humor, independence, and values). However, two of the dimensions were combined later in subsequent analyses (see Table 2). Because the RASP was conceptualized as a multidimensional measure of resiliency (Hurtes, 1999; Hurtes & Allen, 2001; Wolin & Wolin, 1993), the approach taken for this analysis involved two validity "checks." The first check was to confirm the internal validity of the subscales (dimensions) of the RASP, and the second check was to test the external validity by noting that the items loading high on the subscale/trait it was supposed to load on, did not load higher on other scales when entering all the "confirmed" subscales into a final exploratory factor analysis.

Table 1. RASP- Original 40 Items

Items	M	<u>SD</u>
Items for the Creativity Trait (CRE)		
CRE1. I can imagine the consequence of my actions	4.61	1.29
CRE2. I come up with new ways to handle difficult decisions	4.52	1.28
CRE3. I come up with different ways to let out my feelings	4.50	1.45
CRE4. I can entertain myself	4.59	1.45
Items for the Insight Trait (INS)		
INS5. I learn from my mistakes	5.01	1.14
INS 6. I notice small changes in facial expressions	4.51	1.39
INS 7. I know when I am good at something	5.29	1.08
INS 8. I can change my behavior to match the situation	4.71	1.14
INS 9. I can tell if it was my fault when something goes wrong	4.74	1.32
INS 10. I can sense when someone is not telling the truth	4.64	1.32
INS 11. I can tell what mood someone is in just by looking at	4.86	1.28
nin/ner		
HUM12. I use my sense of humor to make it easier to deal	4.52	1.42
With lough situations	4 53	1 37
HUM14 I use laughter to help me deel with stress	4 79	1 46
HUM 15. Loon about myself up when in a had mood	3.90	1.10
nom 15. I can cheel mysen up when in a bau mood	5.90	1.50
Items for the Independence Trait (IND)		
IND16. I can deal with whatever comes in the future	4.50	1.32
IND 17. I say "no" to things that I don't want to do	4.77	1.54
IND 18. I know it's OK if I don't see things the way other people do	4.98	1.18
IND 19. I know it's OK if some people don't like me	5.03	1.29
IND 20. I am comfortable making my own decisions	5.22	1.07
IND 21. I control my own life	4.64	1.46
IND 22. I avoid situations where I could get into trouble	4.68	1.33
IND 23. I share my ideas and opinions even when they are	4.88	1.23
different from other people's		
Items for the Relationship Trait (REL)		
REL24. I have friends who know they can count on me	5.20	1.05
REL 25. I have family who is there when I need them	5.14	1.25
REL 26. I avoid people who could get me into trouble	4.66	1.35

REL 27. I choose my friends carefully	4.80	1.37	
REL 28. I am good at keeping friendships going	5.18	0.98	
REL 29. I have friends that will back me up	5.26	1.11	
REL 30. I can be myself around my friends	5.47	0.89	
REL 31. I make friends easily	4.99	1.31	
Items for the Initiative Trait (INI)			
INI32. I try harder the next time after my work is criticized	4.74	1.28	
INI33. I don't let anything stop me from reaching a goal I set for myself	4.75	1.32	
INI34. I can change my surroundings	4.31	1.40	
INI35. I try to figure out things that I don't understand	4.90	1.19	
INI36. I don't give up when something bad happens to me	4.72	1.43	
Items for the Values Orientation Trait (VAL)			
VAL37. I am prepared to deal with consequences of my actions	4.34	1.48	
VAL38. I know lying is unacceptable	4.64	1.39	
VAL39. I try to help others	4.92	1.16	
VAL40. I stand up for what I believe is right	5.28	1.05	

Theoretically, if the validity of each of the items measuring the subscales hold (internal validity), then when put in with the other subscales, those same items should not load higher on other scales (external validity), to do so would violate the tenets of validity (Gómez, personal communication, March 6, 2009).

Once the validity had been assessed, each subscale was then subjected to a reliability analysis. If the subscale was found to be reliable, then a new "composite variable" was created. Assuming all subscales passed the validity and reliability checks, the composite variables can then be subjected to an overall factor analysis of the RASP construct, with the subscales (composite variables) used as items for the RASP construct. In the following analyses, the subscales will be referred to as "traits." The reported factor

Items	M	<u>SD</u>	<u>h</u>
Items for the Insight & Creativity Trait (IN	$CT. \alpha = 0.$	78) ^a	
CRE2. I come up with new ways to handle difficult decisions	4.52	1.28	0.65
CRE3. I can come up with different ways to let out my feelings	4.50	1.45	0.63
INS6. I notice small changes in facial expressions	4.51	1.39	0.62
INS9. I can tell if it was my fault when something goes wrong	4.74	1.32	0.63
INS10. I can sense when someone is not telling the truth	4.64	1.32	0.66
INS11. I can tell what mood someone is in just by looking at him/her	4.86	1.28	0.62
Items for the Humor Trait (HUMT, α =	0.60)		
HUM12. I use my sense of humor to make it easier to deal with tough situations	4.52	1.42	0.77
HUM14. I use laughter to help me deal with stress	4.79	1.46	0.68
Items for the Independence Trait (INDI	$\alpha = 0.67$)	
IND19. I know it's OK if some people don't like me	5.03	1.29	0.71
IND23. I share my ideas and opinions even when they are different from other people's	4.88	1.23	0.74
Items for the Relationship Trait (RELT)	; α= 0.80)		
REL24. I have friends who know they can count on me	5.20	1.05	0.77
REL28. I am good at keeping friendships going	5.18	0.98	0.70
REL29. I have friends that will back me up	5.26	1.11	0.73
REL30. I can be myself around my friends	5.47	0.89	0.72
REL31. I make friends easily	4.99	1.31	0.66
Items for the Initiative Trait (INIT, o	x= 0.70)		
INI32. I try harder the next time after my work is criticized	4.74	1.28	0.67
INI33. I don't let anything stop me from reaching a goal I set for myself	4.75	1.32	0.79
INI36. I don't give up when something bad happens to me	4.72	1.43	0.71
Items for the Values Orientation Trait (VA	$LT, \alpha = 0.$	62)	
VAL38. I know lying is unacceptable	4.64	1.39	0.84
VAL39. I try to help others	5.28	1.05	0.64
^a -Insight items were combined with Creativity items due to sim	ilar loadin	gs	

Table 2. RASP – Items after Validity & Reliability Checks

loadings and alpha reliability are found in Table 2. The components and validity and reliability assessment of the insight/creativity, relationships, initiative, humor, independence, and values traits are each discussed in turn.

Creativity trait (CRET). In the questionnaire, CRET was measured using four items. Initially, a factor analysis was performed. Two of the items had factor loadings sufficient to consider them as measuring CRET and two items (i.e., "I can entertain myself.") exhibited a factor loading of 0.42 and was therefore excluded from the scale analysis of the RASP construct. After the deletion of the items, an additional factor analysis resulted in a KMO of 0.65, which revealed adequate sampling and a significant Bartlett's Test of Sphericity result (p = 0.0001), which confirmed that the items were valid measures of CRET. The two remaining items measuring CRET are listed in Table 2 as Items CRE2 and CRE3, and had factor loadings of 0.65 0.63 respectively. A factor loading represents the correlation of the item with the underlying construct, in this case CRET. Thus, one can see a very strong relationship between the items and the underlying support construct they are measuring.

A reliability analysis of the items resulted in a Chronbach's alpha of 0.78, which was interpreted as a moderate level of reliability that the items consistently measured CRET. In addition, consequent deletion of any item would not improve the scale reliability, thus the three items measuring resiliency's creativity trait were retained. Based on sample scores, CRET items were provided evidence of validity and reliability.

Insight Trait (INST). The initial factor analysis of the seven items intended to measure the insight trait of RASP resulted in a KMO of 0.76 and a significant result of Bartlett's Test of Sphericity (p = 0.0001). However, the factor loadings component

matrix revealed two dimensions of the insight trait. Further analysis showed that Item INS5 ("I learn from my mistakes") was loading approximately equal on both dimensions. Although this constitutes a case of invalidity, the item was retained in order to assess the full subscale to see if the double loading was due to the influence of the stronger variables (Items INS7 and INS8) in the second dimension, which may unduly influence Item INS5. Assuming a two dimensional trait/subscale, the items were assessed for reliability.

A test of reliability resulted in a Chronbach's alpha of 0.78 and therefore suggested a high reliability. However, Items INS5, INS7 and INS8, which were eliminated due to inappropriate factor/item interpretation, were removed from INST. Therefore, the four items used in the measurement of insight were Items INS6, INS9, INS10, and INS11, with factor loadings of 0.62, 0.63, 0.66, and 0.62, respectively. Chronbach's alpha was recalculated and yielded a 0.78, still suggesting high reliability.

Humor Trait (HUMT). The initial factor analysis of the four items intended to measure the humor trait of the RASP resulted in a KMO of 0.66 and a significant result of Bartlett's Test of Sphericity (p = 0.0001). Two of the items had factor loadings sufficient to consider them as measuring HUMT and two items (i.e., "I can cheer myself up when in a bad mood") exhibited a factor loading of 0.55 and was therefore excluded from the scale analysis of the RASP construct.

After the deletion of the items, an additional factor analysis resulted in a KMO of 0.61, which revealed adequate sampling and a significant Bartlett's Test of Sphericity result (p = 0.0001), which confirmed that the items were valid measures of HUMT. The

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three remaining items measuring HUMT are listed in Table 2 as Items HUM12 and HUM14, and had factor loadings of 0.77 and 0.68 respectively.

A reliability analysis of the items resulted in a Chronbach's alpha of 0.60, which was interpreted as a moderate level of reliability that the items consistently measured HUMT. Consequent deletion of any item would not improve the scale reliability, thus the two items measuring resiliency's humor trait were retained. HUMT items were found to be valid and the scale reliable.

Independence trait (INDT). The first factor analysis of the eight items included in INDT resulted in a KMO of 0.76 and a significant level of Bartlett's Test of Sphericity (p = 0.0001), confirming good sampling adequacy and valid factor measures. The factor loadings component matrix, however, demonstrated that there were two dimensions of INDT. One of the items (i.e., "I say 'no' to things that I don't want to do") had a factor loading below the critical value of 0.60 (0.54) and was removed from the analysis.

Three separate reliability analyses were performed on (a) the full subscale, (b) the first dimension (four items), and (c) the second dimension (three items). Chronbach's alphas for those analyses were 0.72, 0.65, and 0.50, respectively. Because the second dimension's Chronbach's alpha was below 0.60, and it did not make substantive sense, only the one dimension was explored. The final INDT scale (See Table 2) consisted of Items IND19 and IND23 from Table 1, and had corresponding factor loadings of 0.71 and 0.74 respectfully. A reliability analysis of the items resulted in a Chronbach's alpha of 0.64, which was interpreted as a moderate level of reliability that the items consistently measured INDT. Deletion of items IND16, IND17, IND18, IND20, IND21, and IND22

improved the scale reliability, thus the six items measuring resiliency's independent trait were not retained.

Relationship trait (RELT). The initial factor analysis of the RELT items resulted in a KMO value of 0.80 and a significant Bartlett's Test of Sphericity (p = 0.0001). The exploration of the factor loadings component matrix revealed two dimensions. Similar to the previous analysis, one item was dropped due to the factor loading (0.55) of one item (i.e., "I have family who is there when I need them") not meeting the criterion set a priori. Also, similar to the previous analysis, the second dimension did not make substantive sense, so it was not included in the analysis.

Due to these deletions, this left five items, Items REL24, REL28, REL29, REL30 and REL31, in Table 2, with factor loadings of 0.77, 0.70, 0.73, 0.72, and 0.66. The Chronbach's alpha for the reliability analysis on RELT was a 0.81, which was interpreted as a high level of reliability that the items measure RELT. Consequent deletion of any item would not improve the scale reliability, thus the four items measuring resiliency's relationship trait were retained. REKT items were found to be valid and the scale reliable.

Initiative trait (INIT). The initial factor analysis of the INIT items resulted in a KMO value of 0.76 and a significant Bartlett's Test of Sphericity (p = 0.0001). The exploration of the factor loadings component matrix revealed a unidimensional structure. No items were dropped from the analysis. Items INI32, INI33, and INI36, (see Table 2) had factor loadings of 0.67, 0.79, and 0.71, respectively. The Chronbach's alpha for the reliability analysis on INIT was a 0.70, which was interpreted as a high level of reliability that the items measure INIT. Deletion of the items INI34 and INI35 would improve the

scale reliability, thus the three items measuring resiliency's initiative trait were retained (see Table 2).

Values orientation trait (VALT). The initial factor analysis of the four items intended to measure the values orientation trait of the RASP resulted in a KMO of 0.68 and a significant result of Bartlett's Test of Sphericity (p = 0.0001). Two of the items had factor loadings sufficient to consider them as measuring VALT and two items (items VAL37 and VAL40) exhibited a factor loading of 0.52 and was therefore excluded from the scale analysis of the RASP construct. The two remaining items measuring VALT are listed in Table 2 as items VAL38 and VAL39, and had factor loadings of 0.84 and 0.64.

A reliability analysis of the items resulted in a Chronbach's alpha of 0.62, which was interpreted as a moderate level of reliability that the items consistently measured VALT. Consequent deletion of any item would not improve the scale reliability, thus the three items measuring resiliency's values orientation trait were retained. VALT items were found to be valid and the scale reliable.

Resiliency Attitudes and Skills Profile (RASP). As a final step in the factor analysis, the seven subscales were converted to items (composite measures) measuring the RASP. Factor analysis and reliability analysis were performed on the seven subscale items of the RASP (e.g., items from the INST, CRET, HUMT, INDT, RELT, INIT, and VALT subscales). The initial factor analysis resulted in a KMO value of 0.86 and a significant result (p = 0.0001) of the Bartlett's Test of Sphericity, which confirmed that all components represented a valid measure of the RASP construct.

A principle components factor analysis was run with Varimax rotation. The hypothesis was that there would be seven factors (traits) identified after the rotation process. Furthermore, factor loadings were assessed in terms of parsimony (i.e., they load only on the hypothesized factor, otherwise they would be discarded), and that they still meet the criterion of greater than 0.60 in order to be retained. Every hypothesized trait "held" in the analysis. While some traits lost items due to the cross loading of items on other traits, the majority of the traits were empirically sound. Furthermore, two items were "borderline" items. The first item (Item REL31, "I make friends easily" in RELT) had a 0.56 factor loading, and the other item (Item VAL39, "I try to help others" in VALT) had a factor loading of 0.54. Because the external validity measure is a more stringent test of validity, it was decided by the researcher to relax the 0.60 criterion.

Additionally, two previously hypothesized traits (insight and creativity) were combined to represent one larger trait having aspects of both of the previous traits. This was due to much cross loading between the two subscales. Thus the analysis supports the notion of six resiliency traits, rather than seven. Table 2 presents factor loadings for only those items that held in the final RASP factor analysis and reliability analysis. A subsequent reliability analysis for the RASP resulted in a Cronbach's alpha value of 0.86. In addition, it was confirmed that all 20 items contribute to the measure of the overall construct of the RASP a measure of resiliency. The value of Cronbach's alpha if any of the components were deleted would not have increased. Thus, all six components were retained as valid and reliable factor measures in the RASP construct and were summed and averaged to make "composite" variables for the remaining analyses. Table 3 demonstrates the factor loadings for the subscales/traits and the Chronbach's alpha for the RASP based on the six traits, whereas Table 1 considers the individual item's factor loadings on the RASP.

Items	M	<u>SD</u>	<u>h^b</u>
RASP Construct (RASP, α =	0.75)		
Initiative & Creativity Trait	4.64	0.93	0.76
Humor Trait	5.28	0.80	0.63
Independence Trait	4.74	1.06	0.62
Relationship Trait	4.65	1.21	0.71
Initiative Trait	4.94	1.07	0.70
Values Trait	4.79	1.04	0.63

Table 3. Components of RASP construct (N = 176)

Means of Constructs by Gender.

Table 4 shows the RASP score means between gender and time taken. For the overall RASP scores, the girls had a higher mean score on the pre test with a score of 4.92, whereas the boys scored a 4.76 average on the pre test. As for the post tests, the girls' mean score was 4.88, and the boys mean score was 4.77. The mean score for girls dropped, whereas the boys gained 0.01. As for the overall sample, the average RASP score for the preliminary testing was 4.85. As for the second testing, the average RASP score was 4.82 giving a negative change of 0.03.

Gender	M	<u>SD</u>	N
Pre T	Test RASP Scores (PRE)		•
Bovs	4.76	0.75	41
Girls	4.91	0.57	45
Both	4.85	0.67	86
Post 1	Fest RASP Scores (POST)		
Boys	4.77	0.83	41
Girls	4.90	0.59	45
Both	4.82	0.73	86
Tot	al RASP Scores (TOT)		
Boys	4.77	0.78	82
Girls	4.90	0.59	90
Both	4.83	0.69	172

Table 4. Means of RASP Scores by Gender

Comparison of means (two tailed t-test).

A t-test (dependent samples) was performed to compare the means of the pre-test and the post-test to determine if there were differences between the RASP scores. The pre-test RASP scores for boys (M = 4.85, SD = 0.66) were not significantly different than the RASP scores for the girls (M = 4.82, SD = 0.72), with t (87) = 0.47, p = 0.64. Additionally, the subscales were examined if there were any differences between pre-post scores on the different resiliency characteristics – there were no significant differences among any of the subscales.

Another t-test (independent samples) was performed to compare the means of the boys and girls who were participants in the RALLY program. The data met the

assumptions of performing an independent samples t-test, and the *n* of boy respondents (n=41) is similar to the *n* for girls (n=45). The boys (M = 4.76, SD = 0.78) were not significantly different in their *overall* RASP scores than the girls (M = 4.90, SD = 0.59), with t (170) = -1.23, p = 0.22. Similarly, boys (M = 4.76, SD = 0.75) were not significantly different in their *pre-test* RASP scores than the girls (M = 4.92, SD = 0.57), with t (84) = -1.08, p = 0.28. Lastly, boys (M = 4.77, SD = 0.83) were not significantly different in their *post-test* RASP scores than the girls (M = 4.88, SD = 0.62), with t (84) = -1.23, p = 0.50. Analyses on the subscales between boys and girls and their respective average scores was also performed and the only subscale that noted a significant difference between boys (M = 5.12, SD = 0.97) and girls (M = 5.43, SD = 0.56), with t (170) = -2.62, p = 0.01, was the *relationship trait* for resiliency.

Discussion

The identified RASP dimensions in the present study (INST, HUMT, INDT, RELT, INIT, and VALT), besides demonstrating clear statistical validity and reliability, also confirm previous research on resiliency. The results of the present study are aligned with previous research on the dimensions of resiliency. As Wolin and Wolin (1985) initially suggested, the seven resiliency traits all measured general resiliency, as operationalized by the RASP (Hurtes, 1999; Hurtes & Allen, 2001). However, this study found support for combining the "insight" and "creativity" traits into one concept, as they were found to be somewhat related. The RASP was confirmed to incorporate the dimensions of insight, creativity, humor, independence, relationships, initiative, and values. Thus, the present study can be regarded as a confirmation of this structure

providing a more detailed cross-sectional research from a specific group (middle school children) in a community setting.

Within the RASP, the strongest component was demonstrated to be the "insight and creativity" trait. This provides an additional confirmation of the importance of creating programming to challenge youths to "think" and come up with creative solutions to problems designed through their recreation (e.g., puzzles, group work to come up with a creative solution).

With respect to the RASP as a measure itself, half of the items used to measure resiliency did not hold up to the various iterations of validity tests, and reliability analyses. As such, a recommendation would be to extend the RASP and incorporate more items to measure each trait. In addition, students may be more apt to fill it out if there is a better design to the layout that facilitates ease of answering.

The results of the present study with respect to the actual scores at pre and posttesting were somewhat surprising, but not entirely unexpected. It is hoped that these preliminary findings will echo those of Pierce and Shields (1998) who found that benefits accrued to participants in their "Be a Star" program after the third year, and that the first two years findings were inconsistent. Furthermore, one should pause to think of the role that "exposure" plays in the program. The RALLY program is offered in accordance with ODU's academic schedule, and as an after school program. The RASP and resiliency based programming is typically used in more in-depth environments, such as in the case of Allen, Cox and Cooper (2006) who offered a program for 10.5 hours a day, 5 days a week, and for 8 weeks. That is a very different model than what is offered at

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RALLY and time deepening, or longer exposure to leisure education may play a role in the resiliency of a participant.

CHAPTER V

CONCLUSIONS

As stated in the last chapter, findings from this study are comparable to those alluded to in Pierce and Shields' (1998) study. This study was the first year of the program and showed no significant improvements upon the students, but may show more of a latent impact in future years. When considering aspects outside of RALLY that are related to the middle school, it was found in our study that attendance offenses, rule violations, conflict indicators, fights, and law violations saw a 25% decrease in total violations for the academic year that RALLY was instituted, as compared to the previous academic year. The formal statistics provided in this current study may not show such an impact, but others more affiliated with the program would disagree from a qualitative perspective.

Analysis of Hypotheses

Research Hypothesis #1: The Resiliency Attitudes and Skills Profile will demonstrate item factor loadings higher than 0.60 to be considered for inclusion as an item measuring any given trait and a Cronbach's alpha of 0.60 to assess overall reliability for items measuring each of the constructs hypothesized to represent resiliency in the literature. Factor and reliability analyses were run to determine the validity and reliability of the questions. The questions that did not meet the criteria were not used. There is no "formal" rejection/acceptance, per se, however, this study does provide support for the constructs identified in the literature as resiliency traits, and provides support for the continuing use of the RASP, but with suggestions for future modifications. Research Hypothesis #2: The subjects who have participated in the after school program will score higher on the Resiliency Attitudes and Skills Profile (RASP) on the post test than the scores on the pre test. The mean score of the pre test was not significantly higher than the mean score of the post test.

$$H_0$$
: $\mu_p = \mu_t$. Fail to reject H_0

 $H_1: \mu_p \neq \mu_t.$

Research Hypothesis #3: The Resiliency Attitudes and Skills Profile (RASP) scores of the males participating in the after school program will be higher than the scores of the females participating in the after school program. The mean RASP score was higher for the females than the males.

$H_0: \mu_b = \mu_g$ Fail to reject H_0

 H_1 : $\mu_b \neq \mu_g$.

Minor differences were found throughout the study, but nothing significant. Through the data analysis of the six traits, the Relationships construct was the only one to be significantly different between the boys and girls. Studies such as those by Gambone, Klern, and Connell (2002), Leffert et al. (1998), and Witt (2002) indicate that youth need opportunities. These opportunities include physical development and competencies in the academic, emotional, and social realms. The RALLY program provided youth with the opportunity to spend four hours a week being active through recreation activities in addition to socializing among their peers and studying through homework sessions with undergraduate college students. RALLY also supports the "Central Mission of Youth" stated by MacDonald and Valdivieso (2000), "...what we want our children to acquire is a rich array of social and intellectual knowledge, attitudes, and competencies that will enable them to be caring people and productive citizens."

Implications. Although the quantitative data does not necessarily provide the support for effectiveness of the program, there are many reasons for its continuance. From relationships and friendships that were built among the students in this program to the decrease in infractions during the academic year in the school, after school programs like RALLY can offer students and alternative to risky behaviors. School administrators can benefit tremendously from the proper implication of an after school program. After school programs, if done correctly, can serve to bridge different community members by involving them in a program as volunteers or advocates. Even though RASP scores did not improve significantly, the fact that the constructs held means that, empirically speaking, the notions of resiliency are in the minds of youth and through recreation programming this could further be fostered in a constructive, fun manner.

Further studies need to assess the RASP in order to develop a content analytic approach, and derive at a consensus as to its validity and reliability. Furthermore, it is quite possible that the differences between gender was due to either not enough variance between the two groups, or not enough variance within each group – larger sample sizes would be warranted. The fact that the only real significant difference was found in the relationship sub-dimension may indicate that efforts need to be focused on the other six traits.

Future Studies. Future research should include solely an after school program component to fully see the role of recreation and resiliency. As stated previously, this particular study had both an afterschool portion as well as an in school portion. Because

of how the RASP was administered (during Math classes at the beginning and end of the year) and data was entered, more communication is needed between the in-school and afterschool components/coordinators. As an example, the database did not include tracking according to (a) attending/not attending the after school program, and (b) the number of times that the student participated in the afterschool program. By the time it was suggested this information be included, it was impossible to get it because of the turn around time. This information would have been helpful in order to have an actual control group, which would better focus the intervention, at least statistically and empirically.

If I were to conduct the study again, or continue the current study, I would recommend that researchers approach the study qualitatively. For example, observational approaches could be utilized in order to document "evidence" of the seven traits. Furthermore, personal interviews (one on one with participants and non-participants) or focus group sessions (with students, teachers, and parents) could be conducted in order to further assess the impact of the program, as well as provide a feedback loop for future programming.

There should also be input from the prevention practitioners (undergraduate students). Although the activities that were used to reflect the seven resiliency traits were based on the literature and practitioner input, prevention practitioners could serve a pivotal role as a validity check on the intervention itself. For example, perhaps the activity did not go as well as intended or the prevention practitioner did not feel the youths were "getting" the intended outcome of the activity. This would be very beneficial as a self-correction (internal validity) measure.

The instrument itself needs further validation. As was suggested by one of the faculty members on the committee, perhaps the use of 0.40 for factor loadings, especially given the low N, would have given a different set of results or analyses. However, because of the low N, the more conservative measure of 0.60 was used.

REFERENCES

- Allen, L., Cox, J., & Cooper, N. (2006). The impact of a summer day camp on the resiliency of disadvantaged youths. *Journal of Physical Education, Recreation, & Dance, 77*(1), 17-23.
- Allen, L., Stevens, B., Hurtes, K., & Harwell, R. (1998). *Benefits-based programming of recreation services*. Ashburn, VA: National Recreation and Parks Association.
- Anderson, J. C. & Gerbing, D. W. (1982). Some methods for respecifying measurement models to obtain unidimensional construct measurement. *Journal of Marketing Research*, 19, 453–460.
- Anderson, J. C. & Gerbing, D. W. (1988). Structural equation modeling in practice: A review and recommended two-step approach. *Psychological Bulletin*, 103(3), 411–423.
- Apsler, R. (2009). After-school programs for adolescents: A review of evaluation research. *Journal of Adolescence*, 44(173), 1-8.
- Barnett, L. (2008). Predicting youth participation in extracurricular recreational activities: Relationships with individual, parent, and family characteristics. *Journal of Park and Recreation Administration*, 26(2), 28-60.
- Bates, J. (1986). The measurement of temperament. In the study of temperament: Changes, continuities and challenges (eds. R. Plomin & J. Dunn). Hillsdale, NJ: Lawrence Erlbaum.
- Benson, P. L. (1990). The troubled journey: A portrait of 6^{th} -12th grade youth. Minneapolis: Search Institute.
- Benson, P.L., Williams, D.L., & Johnson, A. L. (1987). The quicksilver years; The hopes and fears of early adolescence. San Francisco: Harper & Row.
- Biddle, S. & Goudas, M., (1996). Analysis of children's physical activity and its association with adult encouragement and social cognitive variables. *Journal of School Health*, 66, 75-78.
- Borsboom, D., Mellenbergh, G. J., & van Heerden, J. (2004). The concept of validity. *Psychology Review*, 111(4), 1061–1071.
- Burt, R. S. (1976). Interpretational confounding of unobserved variables in structural equation models. *Sociological Methods and Research*, *5*, 3–52.
- Catalano, R. F., Berglund, M. L., Ryan, J. A., Lonczak, H. S., & Hawkins, J. D. (2002). Positive youth development in the United States: Research findings on

evaluations of positive youth development programs. Prevention & Treatment, 5(15).

- Cook, T. D. & Campbell, D. T. (1979). Quasi-experimentation: Design and analysis issues for field settings. Boston: Houghton.
- Crockett, L.J., & Peterson, A.C. (1987). Pubertal status and psychosocial development: Findings from the early adolescence study. *Peabody Journal of Education*, 64(4).
- Daud, R., & Carruthers, C. (2008). Outcome study of an after-school program for youth in a high-risk environment. *Journal of Park and Recreation Administration*, 26(2), 95-114.
- Dyer, C. (1995). Beginning research in psychology: A practical guide to research methods and statistics. Cambridge, MA: Blackwell Publishers.
- Eaton, D. K., Kann, L., Kinchen, S., Ross, J., Hawkins, J., & Harris, W. A. (2006). Youth risk behavior surveillance—United States, 2005. Morbidity & Mortality Weekly Report, 55(SS-5), 1–108.
- Gambone, M., Klem, A., & Connell, J. (2002). Finding out what matters for youth: Testing key links in a community action framework for youth development. Philadelphia: Youth Development Strategies, Inc. And Institute for Research and Reform in Education (<u>http://www.ydsi.org/YDSI/pdf/Whatmatters.pdf</u>)
- Geller, K. S., Dzewaltowski, D. A., Rosenkranz, R. R., & Karteroliotis, K. (2009). Measuring children's self-efficacy and proxy efficacy related to fruit and vegetable consumption. *Journal of School Health*, 79,(2), 51-57.
- Ghisselli, E. E. (1964). Theory of psychological measurement. New York: McGraw-Hill.
- Guadagnoli, E. & Velicer, W. F. (1988). Relation of sample size to the stability of component patterns. *Psychological Bulletin*, 103, 265–275.
- Halpern, R. (1999). After-school programs for low-income children: Promise and challenges. *The Future of Children*, 9, 81–95.
- Harter, E. (1990). Gender differences in social networks. *Journal of Early Adolescence*, 10, 472-495.
- Hill, E., Gomez, E., & Jeppesen, G. (2007). Adolescent resiliency: A multidisciplinary approach. *Therapeutic Recreation*, 15, 60-74.
- Hunter, J. E. (1980). Factor analysis. In P. R. Monge, & J. N. Cappella (Eds.), *Multivariate techniques in human communication research* (pp. 229–357). New York: Academic Press.

- Hunter, J. E. & Gerbing, D. W. (1982). Unidimensional measurement, second order factor analysis, and causal models. In B. M. Staw&L. L. Cummings (Eds.), *Research in organizational behavior: An annual series of analytical essays and critical reviews* (pp. 267–320). Greenwich, CT: JAI Press, Inc.
- Hurtes, K. (1999). The development of a measure of resiliency in youth for recreation and other social services. Unpublished doctoral dissertation, Clemson University.
- Hurtes, K., & Allen, L. (2001). Measuring resiliency in youth: The resiliency and attitudes skills profile. *Therapeutic Recreation Journal*, 35(4), 333-347.
- Kaplan, C., Turner, S., Norman, E., & Stillson, K. (1996). Promoting resilience strategies: A modified consultation model. *Social Work in Education*, 18(3), 158-168.
- Kelley, T. M. (2003). Health Realization: A principle-based psychology of positive youth development. *Child and Youth Care Forum*, 32(1), 47-72.
- Koff, E., Rierdan, J. & Stubbs, M.L. (1990). Gender, body image, and self-concept in early adolescence. *Journal of Early Adolescence*, 10, 56-68.
- Kraus, R. (1997). *Recreation & leisure in modern society* (5th Ed.). Menlo Park, CA: Addison-Wesley Educational Publishers Inc.
- Leffert, N., Benson, P., Scales, P., Sharma, A., Drake, D., & Blyth, D. (1998). Developmental assets: Measurement and prediction of risk behaviors among adolescents. *Applied Developmental Science*, 2(4), 209-230.
- Le Menestrel, S. (2002). A view from the field: What do after school staff need and how do they get it? Washington, DC: Academy for Educational Development, Center for Youth Development and Policy Studies.
- Lerner, R., Lerner, J., Almerigi, J., & Theokas, C. (2005). Positive youth development: A view of the issues. *Journal of Early Adolescence*, 25(1), 10-16.
- MacDonald, G. B., & Valdivieso, R. (2000). Measuring deficits and assets: How we track youth development now, and how we should track it. In *Youth development: Issues and challenges*. Philadelphia: Public/Private Ventures (http://www.ppv.org/indexfiles/pubsindex.html).
- Manlove, J., (1998). The influence of high school dropout and school disengagement on the risk of school age pregnancy. *Journal of Research on Adolescence*, 8(2), 187-220.

- McLaughlin, M., (2001). Community; Collaborations between schools and community based organizations can help students develop lasting academic and life skills. *Educational Leadership*, 58(7), 14-18.
- Miller, B., (2001). The promise of after school programs. *Educational Leadership*, 58(7), 6-12.
- Mothner, H. D., (2001). A personal assessment instrument for understanding student resiliency. *Education*, 116(1), 83-93.
- National Center for Education Statistics. (1996). Schools serving family needs: Extendedday programs in public and private schools. Washington, DC: Government Printing Office.
- Newman, T. (2002). Promoting resilience: A review of effective strategics for child care service. Exeter, United Kingdom: Center for Evidence Based Social Sciences.
- Nicholson, H., Collins, C., & Holmer, H. (2004). "Youth as people" The protective aspects of youth development in after-school settings. *The Annals of the American Academy of Political and Social Science, 591*, 55-71.
- Noam G., Winner K., Rhein A., & Molad B. (1996). The Harvard RALLY Program and the prevention practioner: Comprehensive, school-based intervention to support resiliency in at-risk adolescents. *Journal of Child and Youth Care Work*, 11, 32-47.
- Noam G., & Hermann, C. (2002). Where education and mental health meet: Developmental prevention and early intervention in schools. *Development and Psychopathology*, 14, 861-875.
- Nunnally, J. C. (1967). Psychometric theory. New York: McGraw-Hill.
- O'Leary, V. E. (1998). Strength in the face of adversity: Individual and social thriving. Journal of Social Issues, 54(2), 425-446.
- Pierce, L., & Shields, N. (1998). The be a star community based after school program: Developing resiliency factors in high risk preadolescent youth. *Journal of Community Psychology*, 26(2), 175-183.
- Pogrebin, M. R., Poole, E. D., & Regoli, R. M. (1984). Constructing and implementing a model juvenile diversion program. *Youth and Society* 15(3), 305–324.
- Richards, M.H., Boxer, A.M., Petersen, A.C., & Albrecht, R. (1990). Relation of weight to body image in pubertal girls and boys from two communities. *Developmental Psychology*, 26, 313-321.

- Rinderknecht, K. & Chery, S. (2004). Social cognitive theory in an after-school nutrition intervention for urban native american youth. *Society for Nutrition Education*, *36*(6), 298-304.
- Roffman, J. G., Pagano, M. E., & Hirsch B. J. (2001). Youth functioning and experiences in inner-city after-school programs among age, gender, and race group. *Journal of Child and Family Studies*, 10(1), 85-100.
- Rust, J. & Golombok, S. (1989). Modern psychometrics: The science of psychological assessment. New York: Routledge.
- Rutter, M. (1987). Psychosocial resilience and protective mechanisms. *American Journal* of Orthopsychiatry, 57(3), 316-331.
- Simmons, T. & O'Neil, G., (2001). Households and families: 2000. Census 2000 Brief. Washington, DC: U.S. Bureau of the Census.
- Spearman, C. (1904). General intelligence, objectively determined and measured. *American Journal of Psychology*, 15, 201–293.
- Thurstone, L. L. (1935). The vectors of mind: Multiple-factor analysis for the isolation of primary traits. Chicago: University of Chicago Press.
- Tryon, R. C. (1957). Reliability and behavior domain validity: Reformulation and historical critique. Psychological Bulletin, 54, 229–249.
- Tryon, R. C. & Bailey, D. E. (1970). Cluster analysis. New York: McGraw-Hill.
- Wang, Y., & Lobstein, T. (2006). Worldwide trends in childhood overweight and obesity. International Journal of Pediatric Obesity, 1, 11–25.
- Witt, P., (2002). Youth development: Going to the next level. *Parks & Recreation*, 37(3), 52-29
- Wolin, J., & Wolin, S. (1993). The resilient self. How survivors of troubled families rise above adversity. New York Villard Books.

Appendix A Student RASP Gender: Male or Female Age: _____ Last four digits of your home phone # ______

The following items relate to your opinions of yourself and your personal characteristics. Please read each statement and indicate, by circling a number, the extent to which you agree or disagree with each statement. There are no right or wrong answers, so please be as honest as possible!

	STRONGLY DISAGREE					STRONGLY AGREE
1. When my work is criticized, I try harder the next time.	1	2	3	4	5	6
2. I can deal with whatever comes in the future.	1	2	3	4	5	6
3. Once I set a goal for myself, I don't let anything stop me from reaching it.	1	2	3	4	5	6
4. I learn from my mistakes.	1	2	3	4	5	6
5. I notice small changes in facial expressions.	1	2	3	4	5	6
6. I can imagine the consequences of my actions.	1	2	3	4	5	6
7. I know when I'm good at something.	1	2	3	4	5	6
8. I'm prepared to deal with the consequences of my actions.	1	2	3	4	5	6
9. I say "no" to things that I don't want to do.	1	2	3	4	5	6
10. I can change my behavior to match the situation.	1	2	3	4	5	6

	STRONGLY DISAGREE					STRONGLY AGREE
11. My sense of humor makes it easier to deal with tough situations.	1	2	3	4	5	6
12. My friends know they can count on me.	1	2	3	4	5	6
13. I can change my surroundings.	1	2	3	4	5	6
14. My family is there for me when I need them.	1	2	3	4	5	6
15. When something goes wrong, I can tell if it was my fault.	1	2	3	4	5	6
16. It's OK if I don't see things the way other people do.	1	2	3	4	5	6
17. Lying is unacceptable.	1	2	3	4	5	6
18. I avoid people who could get me into trouble.	1	2	3	4	5	6
19. It's OK if some people do not like me.	1	2	3	4	5	6
20. I am comfortable making my own decisions.	1	2	3	4	5	6

	STRONGLY DISAGREE					STRONGLY AGREE
21. I can sense when someone is not telling the truth.	1	2	3	4	5	6
22. When I'm faced with a tough situation, I come up with new ways to handle it.	1	2	3	4	5	6
23. I can come up with different ways to let out my feelings.	1	2	3	4	5	6
24. I choose my friends carefully.	1	2	3	4	5	6
25. I look for the "lighter side" of tough situations.	1	2	3	4	5	6
26. I control my own life.	1	2	3	4	5	6
27. I can tell what mood someone is in just by looking at him/her.	1	2	3	4	5	6
28. I try to help others.	1	2	3	4	5	6
29. I stand up for what I believe is right.	1	2	3	4	5	6
30. I try to figure out things that I don't understand.	1	2	3	4	5	6

	STRONGLY DISAGREE					STRONGLY AGREE
31. I'm good at keeping friendships going.	1	2	3	4	5	б
32. I have friends who will back me up.	1	2	3	4	5	6
33. Laughter helps me deal with stress.	1	2	3	4	5	6
34. I avoid situations where I could get into trouble.	1	2	3	4	5	6
35. I can be myself around my friends.	1	2	3	4	5	6
36. When I'm in a bad mood, I can cheer myself up.	1	2	3	4	5	6
37. When something bad happens to me, I don't give up.	1	2	3	4	5	6
38. I share my ideas and opinions even if they are different from other people's.	1	2	3	4	5	6
39. I can entertain myself.	1	2	3	4	5	6
40. I make friends easily.	1	2	3	4	5	6

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THANK YOU FOR PARTICIPATING!



Appendix B

RALLY Program

STUDENT DEMOGRAPHIC DATA SHEET

What is your age?:	What is your ge	nder?:
younger than 10	Male	Female
10		
11		
12		
13		
older than 10		

What are the last four digits of your home phone number?:

Please check one answer for each question:

What is your Race: _____African American or Black _____American Indian _____Asian ____Caucasian or White (non-Hispanic) _____Latino/a or Hispanic ____Other (please describe)

Outside of school, who do you live with most of the time? Please select the one that best describes you:

- I live with my two parents (natural/biological or adopted)
- I live with my mother and a stepparent
- I live with my father and a stepparent
- I live with my mother in a one-parent family
- I live with my father in a one-parent family
- I live with my mother half of the time and my father the other half of the time
- I live with my grandparent/s
- I live with other relatives (not my parents or grandparents)
- I live with foster parents

_____ I live with another adult (guardian)

Is English the language you speak most at home?:	Yes	No
If not, what language do you speak most at home?:		

Appendix C

Parent Consent Form

June 1, 2007





This school year, your 6th grader will participate in Responsive Advocacy for Life and Learning in Youth (RALLY). The program is a "during and after-school" program that targets the needs of our youth. Our goal is to determine the impact of a new and exciting program on your child's social and academic achievement. To do so, we are asking for you and your child's participation in completing surveys relating to RALLY. We have enclosed a "Consent/Permission for Child's Participation" form for you to sign and the "Assent" form for your child to sign. Your child may participate in RALLY even if he or she does not complete the surveys.

Please carefully read the attached "Consent/Permission for Child's Participation" and "Assent" forms. They provide important information for you and your child. If you have any questions pertaining to the attached forms or to the research study, please feel free to contact Drs. Tammi Milliken or Eddie Hill at the numbers below.

After reviewing the attached information, please send a signed copy (to school) of the "Consent/ Permission for Child's Participation" and "Assent" forms to your child's homeroom teacher if you (and your child) are willing to participate in the study. If you forget, we will have extra copies at Blair. An additional copy will be provided for you if desired. Even if you give consent/permission, your child will complete the surveys only if he/she is willing to do so. Either way, your child will still be able to participate in the RALLY program activities.

We thank you in advance for taking the time to consider you and your child's participation in this study.

Sincerely,

Dr. Tammi F. Milliken Assistant Professor Old Dominion University Educational Leadership and Counseling Human Services Program Norfolk, VA 23529-0196 (757) 683-3850 phone tmillike@odu.edu Eddie Hill, Ph.D. Assistant Professor Old Dominion University Department of ESPER Spong Hall, Room 115 Norfolk, VA 23529-0196 (757) 683-4881 phone ehill@odu.edu

Appendix D

CONSENT/PERMISSION FOR CHILD'S PARTICIPATION DOCUMENT

The purposes of this form are to provide information that may affect decisions regarding you and your child's participation and to record the consent of those who are willing to participate in this study.

<u>TITLE OF RESEARCH</u> :	Examining the Impact of an In-Class and Afterschool Intervention on Resiliency and Academic Performance at Blair Middle School: The Responsive Advocacy for Life and Learning in Youth (RALLY) Model
RESEARCHERS:	Dr. Tammi Milliken, Assistant Professor, Old Dominion University Dr. Eddia Hill, Assistant Professor, Old Dominion
University	Dr. Eddle Hill, Assistant Professor, Old Dominion

DESCRIPTION OF RESEARCH STUDY: Prevention programming has long been considered beneficial to students. By being conducted during school and through afterschool activities, RALLY is a new approach to serving youth. This program targets areas of social and academic performance. A variety of in-class activities such as life-skills training character education and academic assistance will be used. In the

areas of social and academic performance. A variety of in-class activities such as meskills training, character education, and academic assistance will be used. In the aftershool component, techniques such as cooperative recreational activities will be used. Leading the programming will be RALLY prevention practitioners. These are handselected, undergraduate and graduate students from Old Dominion University's Human Services and Recreation Programs.

The goal of the research is to assess the impact of the RALLY program. If you decide to participate in this study, you and your child will be asked to complete surveys two times. You would complete the survey at the beginning and at the end of the school year. You and your child's participation will take approximately thirty minutes each time. The surveys will help us determine what you and your child liked about the program and how children may have improved from participation in RALLY. The surveys will ask questions such as: "My Child doesn't let anything stop him/her from reaching a goal once he/she sets it for himself/herself." Names will not be used on the surveys, instead, we will use a code (i.e., last four digits of home phone numbers) to match the answers from the pre-test to the post-test.

EXCLUSIONARY CRITERIA: In order for your child to participate in this study, your child must be enrolled in the 6^{th} grade at Blair Middle School.

<u>RISKS</u>: There are no identified risks for this study. However, as with any research, there is some possibility that you or your child may be subject to risks that have not yet been identified.

BENEFITS: There are no direct benefits to your child for participating in this study. However, parents and students that participate will have access to a summary of results about how participation in RALLY impacts children's perspective on healthy activity and resiliency.

COSTS AND PAYMENTS: The researchers are unable to give you or your child any payment for participating in this study. Likewise, participation in the study is free of charge.

<u>NEW INFORMATION</u>: You will be contacted if new information is discovered that would reasonably change your decision about your or your child's participation in this study.

<u>CONFIDENTIALITY</u>: Participants will be assigned a code number so that you or your child's name will not be attached to responses. Only researchers involved in the study or in a professional review of the study will have access to data sheets. All data and participant information will be kept in a locked and secure location.

WITHDRAWAL PRIVILEGE: Your child's participation in this study is completely voluntary. It is okay to refuse your child's participation. Even if you agree now, you and your child may withdraw from the study at any time by not completing surveys, but still remain in RALLY. In addition, your child may withdraw at any time if he or she so chooses.

<u>COMPENSATION FOR ILLNESS AND INJURY</u>: Agreeing to your child's participation does not waive any of your legal rights. However, in the event of harm arising from this study, neither Old Dominion University nor the researchers are able to give you any money, insurance coverage, free medical care, or any other compensation. In the event that your child suffers harm as a result of participation in this research project, you may contact Drs. Tammi Milliken (757) 683-3850, Eddie Hill at (757) 683-4881 or the Office of Research at (757) 683-3460.

VOLUNTARY CONSENT: By signing this form, you are saying 1) that you have read this form or have had it read to you, and 2) that you are satisfied and understand this form, the research study, and its risks and benefits. The researchers will be happy to answer any questions you have about the research. If you have any questions, please feel free to contact Drs. Tammi Milliken (757) 683-3850 or Eddie Hill at (757) 683-4881.

If at any time you [or your child] feel pressured to participate, or if you have any questions about your rights or this form, please call the Old Dominion University Office of Research (757-683-3460).

Note: By signing below, you are telling the researchers YES, that you agree to participate in the study and that you will allow your child to participate in this study. Please keep one copy of this form for your records.

Your child's name (please print):	
Your child's birth date:	
Your name (please print):	
	Relationship to child (please check one): Parent:
	Legal Guardian:
Your Signature:	

Date:

INVESTIGATOR'S STATEMENT: I certify that this form includes all information concerning the study relevant to the protection of the rights of the participants, including the nature and purpose of this research, benefits, risks, costs, and any experimental procedures.

I have described the rights and protections afforded to human research participants and have done nothing to pressure, coerce, or falsely entice the parent to allowing this child to participate. I am available to answer the parent's questions and have encouraged him/her to ask additional questions at any time during the course of the study.

Experimenter's Signature: _____

Date: _____

Appendix E

RTS 495/595 RALLY Individual Activity Plan

Facilitators: _____ Date: Oct. 18, 2007 ____ Week: 1___

Name of Activities (and page number if used from Training Wheels©): **"How Do You Like Your Neighbors"** (File O' Fun # 26), **"Hog Call"** (Training Wheels, pg. 46), **"Crumpled Confessions"** (File O' Fun #30)_____

Resiliency & Character Trait/s: Relationships, Self-Commitment

Please make sure to **<u>TYPE</u>** your information below.

Objectives:

By completing the three activities, the students will be able to connect with each other and build relationships as well as develop a sense of self-commitment through teamwork, creativity, humor, and social skills. Additionally, these activities will help create a more comfortable and welcoming environment for the group individuals.

Materials Needed:

Square place markers 15 pencils and 15 pieces of paper Blindfolds

Time needed: 30 minutes all together (10 min per activity)

Activity Name and Steps (1, 2, 3 etc.):

"How Do You Like Your Neighbors"

Specific Objective: For "It" to get a seat as players move and for students to become acquainted by learning names.

1. Fairly designate an individual to be "It" first.

2. Explain that students are not to push or shove other players in order to remove him or her from a seat.

3. Seat players in a circle formation (there should be enough for everyone except for "It" individual).

4. Whoever is "It" now approaches one of the players and asks, "Who are your neighbors?"
5. The approached player says the first name of the person seated to the right and to the left.

6. "It" then says, "How do you like your neighbors?" (The player has three possible replies: "All right, "All wrong," and "All mixed up.")

7. If the reply is "All right," then the whole circle shifts one seat to the right. If the reply is "All wrong," then the circle shifts to the left. If the reply is, "All mixed up," then everyone scatters and finds a new seat in the circle.

8. During the shifting, "It" attempts to get a seat, and the person left without a seat becomes "It."

Activity Name and Steps (1, 2,3 etc.):

"Hog Call"

Specific Objective: For each player to find his or her "kin" while sharing some laughs.

1. Have group stand shoulder to shoulder facing facilitator.

2. With animal cards, go down the line and give each student the identity of an animal (make sure you have pairs of every animal you assign).

3. Do not let students share what animal they were assigned with anyone.

4. Tell group they must find animals within their "kin" or animals that are the same as they are.

- 5. Have everyone put on blindfolds (assist if necessary).
- 6. Remind students to put on their "bumpers" up to avoid collisions.
- 7. Everyone must now make the sound of their animal in order to find other like animals.

Activity Name and Steps (1, 2, 3 etc.):

"Crumpled Confessions"

Specific Objective: To guess "who" wrote each confession and help students get to know one another.

- 1. Give each student a piece of paper and pencil.
- 2. Ask them to write a "weird" or "crazy" thing they did as a child.

3. Once each person has written something, have them crumple up their piece of paper and toss it into the center of the circle.

4. One at a time, have each individual select a crumpled piece of paper from the center, read it out loud, and then try to guess who wrote the confession.

Debriefing/Processing questions & activities (at least four):

1. What difficulties did you have with any of the activities and why were they difficult?

2. Did you use any specific strategies to complete any of the activities?

3. What could be done differently in the activities for next time? How would it help?

4. Was there anything in particular you really liked about any of these activities?

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EDUCATION

MS in Physical Education, Recreation and Tourism Studies emphasis 08/2007 – 05/2009 Old Dominion University, Norfolk, VA

MA in Recreation and Tourism Studies Virginia Wesleyan College, Norfolk, VA 08/2003 - 05/2007

08/2008-05/2009

PROFESSIONAL EXPERIENCE

VILLAGE COORDINATOR, VILLAGE ONE Virginia Weslevan College, Norfolk, Virginia

- Participate in on-call duty rotation.
- Supervise nine resident assistants.
- Council, resolve, and assist with the colleges arbitration system.

PREVENTION PRACTITIONER DIRECTOR

Old Dominion University, Norfolk, Virginia

- Founded Responsive Advocacy for Life and Learning in Youth after school program.
- Supervised 50 undergraduate prevention practitioners.

BUILDING SUPERVISOR, BATTEN STUDENT CENTER 05/2005 – 08/2007 Virginia Wesleyan College, Norfolk, Virginia

- Provided leadership for approximately 50 undergraduate staff members.
- Assist Director of Batten Student Center with management responsibilities.
- Train student workers.

EVENTS COORDINATOR, BATTEN STUDENT CENTER

Virginia Wesleyan College, Norfolk, Virginia

- Coordinated the basketball and volleyball games and other functions as needed.
- Lead a staff of four employees every game.
- Organized set up and break down of games.
- Performed general supervision of games.

PRESENTATIONS

Hill, E., Milliken, T., Gregory, N., Byrd. R., & Johnston, A. Examining the Impact of an In and After-school Intervention for 6th Graders on Resiliency and Character: the Responsive Advocacy for Life and Learning in Youth (RALLY) Model. Communities of Research: Discovery, Innovation & Entrepreneurship: Research Expo, Ted Constant Center, Norfolk, VA (2008).

07/2007 - 05/2008

05/2005-05/2007