Cultivating Hope in Adolescents Participating in an Academic Summer Outreach Program

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By
Brigitte Dawn Beale
UNIVERSITY OF DAYTON
Dayton, Ohio
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APPROVED BY:

Keri Brown Kirschman, Ph.D.
Chairperson, Thesis Committee

Carolyn Roecker Phelps, Ph.D.
Thesis Committee Member

Robert Weaver, Ph.D.
Thesis Committee Member

David W. Biers, Ph.D.
Chairperson, Department of Psychology
ABSTRACT

CULTIVATING HOPE IN ADOLESCENTS PARTICIPATING IN AN ACADEMIC SUMMER OUTREACH PROGRAM

Name: Brigitte Dawn Beale
University of Dayton

Advisor: Dr. Keri Brown Kirschman

Hope has been shown to be a critical construct within the emerging field of positive psychology (Linley & Joseph, 2004; Peterson & Seligman, 2004). Research within the positive psychology field has revealed a significant positive relationship between hope level and psychological adjustment (Ciarrochi, Heaven, & Davies, 2007; Valle, Huebner, & Suldor, 2006) as well as between hope and academic achievement (Snyder et al., 2002; Sun & Lau, 2006). There is also a body of research demonstrating that adolescents living in areas of lower socioeconomic status tend to have lower hope levels that have been found to relate to lower academic achievement and poor ability to adjust to psychological stressors (Bolland 2003). This study considered the Upward Bound Program as a hope intervention that may increase hope in adolescent students who are considered to be at higher risk of experiencing low-hope due to economic disadvantage. There were a total of 27 participants in the study. This study
measured changes in hope levels as well as psychological adjustment and academic achievement while participating in the Upward Bound program. Both Pearson correlation and paired t-tests were performed, revealing a significant correlation between hope and academic achievement as well as psychological adjustment in the areas of school problems, internalization problems, inattention and hyperactivity, personal adjustment, and the emotional symptoms index at the post-intervention measurement time. Participants in the study did not report increased levels hope post-intervention. Of note, the study found that participants in the Upward Bound program were of normal to above average hope at both the baseline measure and the post-intervention measure and followed a positive trend in the direction of the increased hope.

Overall, the study was limited by a number of factors including sample size, the time frame of the study, environment, and the possibility of other confounding factors. It is important to consider replication of this study with other samples as well increase the longevity of conducting study measurements in order to further develop the research surrounding hope in adolescents.
ACKNOWLEDGEMENTS

First, I would like to give a special thank you to my thesis chair, Dr. Keri Brown Kirschman, for her continued support of my research. I appreciate you always taking time to guide me through this project and for making this project a priority even in light of limited time. By working with you, I have gained a mentor that I could not find elsewhere in providing me personal and professional guidance that I will always retain.

Additionally, I would like to thank Dr. Carolyn Roecker Phelps and Dr. Roberta Weaver for the guidance and support they provided to me as members of my committee. Thank you for your dedication to see me through this project from beginning to end. The wealth of knowledge that has come from you has been invaluable and encouraged me to evaluate a number of aspects that I could not have conceived on my own. Ultimately, your support has assisted me in becoming a better researcher.

Finally, I would be remiss if I did not mention my friends and family for their support and believing that I could make the impossible possible. I must specifically acknowledge my grandmother, Laura Beale for her continued words of support and encouragement at all times. I must also mention TyAnn Stewart for taking time to be a role model to me and having relentless belief in my success. Last, but not least, I have to say thank you to Bernard McClellan for being that continued source of encouragement throughout this process. You all have been more than a blessing in my life.
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CHAPTER I

Introduction

Historically, the study of clinical psychology has focused on psychopathology. The wealth of psychological research on adolescents has concentrated primarily on negative outcomes such as teen pregnancy, eating disorders, and academic difficulties (Shogren, Lopez, Wehmeyer, Little, & Pressgrove, 2006). More recently, the field of positive psychology has emerged, shifting the focus from a deficit model to the perception of competencies and the enhancement of individual growth. Thus, positive psychology seeks to promote strengths and positive outcomes for adolescents.

The term positive psychology is an all-encompassing term that includes the study of positive emotions, positive character traits, and enabling institutions (Seligman, Steen, Park, & Peterson, 2005). As the positive psychology movement continues to grow, research emphasis increasingly focuses on promoting positive outcomes, as opposed to preventing negative outcomes with adolescents (Shogren et al., 2006). Positive psychology includes such themes as optimism, self-efficacy, and benefits-finding (Maddux, Snyder, & Lopez, 2004). Applied positive psychology is the utilization of positive psychology research in the facilitation of optimal functioning. Optimal functioning refers to a range of valued psychological processes and outcomes, one of which being hope (Linley
& Joseph, 2004). The current project focused on the positive psychology construct of hope and hope-related outcomes.

**Hope Model**

Snyder and colleagues define hope as "a positive motivational state that is built upon a sense of success that is interactive in nature involving agency and pathways" (Snyder et al., 1991, p. 570). Thus, there are two components of hope: pathway and agency. These components act together in order for the individuals to reach their goals. Pathway thinking includes thoughts about one's ability to pursue different means to reaching one's goals (Chang & Banks, 2007; Snyder, McDermott, Cook, & Rapoff, 1997). The adolescent thought process of "I will figure this out" and "I will reach my goals another way if this way does not work" exemplifies the pathway component of hope. The agency component of hope addresses thoughts of initiating and maintaining motivation for using pathway thinking (Lopez et al., 2004). It provides the motivation to begin and continue using a pathway in one's goal pursuits. Agency thinking is also important for realizing an alternate pathway to the goal when the preferred route is blocked. For example, when adolescents think to themselves "I can do it" or "I will not quit," they are using agency thinking. Both agency and pathway combine in a reciprocal and additive manner that is necessary for hopeful thinking (Snyder et al., 1991).

With the components of the hope model defined, it is relevant to conceptualize goals as they relate to the hope pathway with three defining
thoughts that often occur throughout the process (Edwards, Rand, Lopez, & Snyder, 2007). Initially, it is important to consider what an individual wants, or that person's goal. Goals typify high-hope thinking and must be of value in order for people to pursue them. Next, the adolescent must consider the strategy that needs to be utilized to get there. In essence, a goal is a possibility, but it can not be reached without a path to obtain it. Research has shown that high-hope individuals report positive and affirming self-talk about being able to find pathways to their goals. Additionally, having higher hope tends to be related to increased flexibility in maintaining pursuit of goals when preferred routes are blocked (Chang, 1998). Finally, the individual must consider how they will become motivated and sustain this motivation to reach the goal. Throughout adolescent development, this process is refined and developed to attain maximal goal directed behavior. Therefore, it is critical to study the construct of hope in adolescence and further develop this area of positive psychology (Jacoby, 2003).

Adolescent Development and Hope

Throughout childhood and adolescence, agency and pathway-type thinking emerge (Sun & Lau, 2006). The cognitive advancement that occurs during adolescent development enhances a child’s ability to utilize hopeful goal-directed thoughts and motivation. According to Piaget’s cognitive theory, adolescents are generally in the formal operational stage of development and have the ability to reason abstractly and plan more realistically for the future as compared to earlier stages in childhood (Inhelder & Piaget, 2008). Therefore,
adolescents are more likely to think about further education and career goals as opposed to younger children (Sun & Lau, 2006). It is therefore beneficial to equip adolescents who have advancing cognitive ability with skills to evaluate goal attainment, generate alternative pathways, and modify goal planning (Sun & Lau, 2006).

According to Snyder (2006), the cognitive building blocks of hope begin developing in infants and toddlers through sensations and perceptions, linkages, goals, and self-recognition. This foundation for hope is generally set by the age of two and is hypothesized to remain stable through development without the presence of any major childhood stressors. However, children at this age lack the skills to verbally and abstractly conceptualize and self-report hope. It is not until the age of seven or eight that children begin to understand and have the ability to report hopeful thinking. Even though hope levels are believed to remain constant over time, it is also believed that there is the possibility for increases in hope with treatment intervention and may even be a predictor of successful treatment outcomes with adolescents. However, there is a need for further research in this area to validate this idea (Snyder, 2006).

**Hope and Adolescent Adjustment**

Hope has been shown to be a critical factor in predicting psychological adjustment (Ciarrochi, Heaven, & Davies, 2007; Hagen, Myers, & Mackintosh, 2005). Although the research area of hope in children and adolescents is fairly new, several studies have demonstrated relationships between hope and healthy
psychological adjustment (McNeal et al., 2006). Measures of children’s hope correlate positively with self-reported competency, and children with higher levels of hope report feeling less depressed and more positively about themselves (Snyder, 2000). Hagen, et al. (2005) studied a sample of at-risk children and found that students with higher hope reported fewer internalizing and externalizing problems. All children in the study had a mother who was incarcerated at the time of recruitment. Participants in this study attended a one-week faith based residential summer camp and completed a number of measures, including the Children’s Hope Scale (CHS; Snyder, Hoza et al., 1997) via interview with trained camp personnel. Results of the study suggested hope to be a protective factor against potential stressors and predictive of more adaptive functioning. The study also found that hope was positively related to social support, in addition to adjustment. Overall, at-risk adolescents who had a positive social support network were likely to have higher hope and experience healthier psychological adjustment (Hagen et al., 2005).

Gilman, Dooley and Florell (2006) also studied adolescent levels of hope as a psychological indicator of adjustment. Specifically, they looked at the critical levels of hope associated with indicators of personal adjustment. The study utilized the CHS the BASC, and a number of other measures to examine these variables in a sample of 341 students between the sixth and twelfth grade. The results of these studies were consistent with previous studies and showed that the hope subscales were significantly and positively correlated with personal
adjustment. Additionally, the study demonstrated that the subscales were negatively correlated to indicators of psychological distresses (Gilman et al., 2006). Specifically, students who scored higher on indices of hope reported less personal distress, greater life satisfaction, and fewer problems in school.

When considered alone, research has shown that there is a stronger relationship between hope and psychological adjustment among adolescents compared to other positive psychology factors. Ciarrochi et al. (2007) evaluated the distinctiveness of the respective roles of hope, self-esteem, and positive attribution style on adolescent emotional well-being in a sample of Australian high school students. This study found that hope had a significantly greater affect upon psychological adjustment than self-esteem or positive attribution style in an adolescent sample. The research studies on the positive relationship between hope levels and psychological adjustment are even more notable given that studies have found that high-hope and low-hope children have experienced the same number of negative life events (Hagen et al., 2005). Thus, hope appears to be a protective factor against maladjustment when stressors are encountered (Snyder, 2005).

**Hope and Academic Achievement**

Hope has also been found to be related to academic achievement. In a study completed by Valle, Huebner, & Suldo (2006) it was found that high-hope students set overall higher academic goals and had higher expectations of success when compared to low-hope students. In addition, the research found
that low hope in adolescents is significantly related to a number of negative outcomes, one of which being decreased academic achievement (Valle et al., 2006). Gilman et al. (2006) found that when school maladjustment was assessed via the Behavioral Assessment System for Children (BASC II SRP-A; Reynolds & Kamphaus, 2004), fewer high-hope adolescents (3%) reported school maladjustment compared to average (6%) and low hope adolescents (20%). Specifically, both the agency and pathway subscales of hope were found to be negatively correlated to school maladjustment (Gilman et al., 2006).

Additionally, the overall results of the study suggested that efforts to elevate students' level of hope to a level greater than "average" may promote increased academic functioning among adolescent students.

The construct of hope can also be used to conceptualize academic motivation and as a result offers the ability to predict many criteria relevant to academic performance (Snyder et al., 1991). Snyder and colleagues (2002) found high-hope students conceptualized their goals more clearly than low hope students. It was hypothesized that high-hope students establish goals based upon previous performances and challenge themselves with slightly more difficult performance and study standards. High-hope students were also more likely to establish concrete markers to track their progress (Snyder et al., 2002). For example, these high-hope students also have the advantage of increased focus on their goals. Additionally, high-hope students find multiple ways to reach their
goals and are more willing to try new approaches. In contrast, low-hope students are less likely to be flexible in trying new approaches (Snyder et al., 2002).

**Adolescent levels of Hope in Low-Income Neighborhoods**

It is currently estimated that approximately 17.4 percent of the population below the age of eighteen is living in poverty (United States Bureau of the Census, 2000). Literature regarding adolescents living in high poverty inner-city neighborhoods often reflects an abandonment of hope making them susceptible to a number of risk factors (Bolland, 2003). These lower levels of hope have been associated with engagement in risk behaviors including violence, substance abuse, sexuality, and accidental injury. Stark and Boswell (2001) found a negative association between hope and depressive symptoms in a study of high-risk children living in the inner-city under poverty conditions. That is, children with low hope levels reported higher levels of depressive symptoms in the study sample.

Additionally, assessment of the relationship between low-hope and poverty by Bolland (2003) has resulted in several recommendations regarding this issue. Central to the current thesis, he argues that there is a need for prevention and intervention programs to address lack of hope in order for adolescents living in low income neighborhoods to be successful in achieving their goals.
Cultivating Hope

Given the previously noted findings regarding the benefits of higher hope levels in adolescents, researchers have proposed cultivating hope in order to improve outcomes for students (Bolland, 2003). Hope has been defined as a relatively stable factor but can change with targeted intervention efforts (Snyder, Hoza et al., 1997). Sun and Lau (2006) noted the importance of teaching adolescents hope via goal development, goal-directed thinking, and increasing motivation (Sun & Lau, 2006).

In addition, Snyder defined five major factors in teaching hope for teachers to utilize in a school setting to prevent the risks associated with low hope (Snyder, 2005, pp. 75-79):

1. Spending time and caring
2. Setting goals for the class
3. Creating pathways to class goals
4. Raising thinking related to successful goals
5. Teach hope and self-esteem will follow

The first hope lesson of spending time and caring is based upon previous research surveying high-hope and low-hope young adults regarding their childhoods. The retrospective study found that the participants who were of high-hope tended to report that they had adult caregivers who spent substantial amounts of time with them (Snyder, 1994). The second lesson of goal setting emphasizes the importance of having a specific order related to teaching goals
early in the class. This provides direction and sets forth expectations for the class from the beginning of the class. Building upon goal setting is the third lesson of creating pathways to class goals through teacher planning. Finally, raising agency thinking to pursue the class goal is needed (Snyder, 2005). Agency thinking focuses on initiating and increasing the motivation of students, as well as maintaining enthusiasm about teaching (Lopez et al., 2004). To do this, teachers must keep students enthused about learning and praise them in order to raise agency levels. The fifth lesson is “teach hope and self-esteem will follow.” This means that once a student has learned to be hopeful, that individual will also show increased self-esteem, both of which are related to better psychological adjustment and academic achievement (Snyder, 2005).

While taking steps to increase hope in students may be helpful, there are no published programs on building hope in the literature (Snyder, 2000). There may be programs that target youth and activate these steps without being labeled hope programs. In a large sample of inner-city adolescents who were recruited due to psychosocial risk factors (e.g., low SES, single parent home), hope levels improved following a six-week day camp intervention. The Aileycamp intervention focused upon teaching adolescents an art form (i.e., different styles of dance) and providing adult role models/dancers as teachers, as well as personal development classes (Brown Kirschman, 2007). Changes in adolescents’ hope following treatment in a mental health residential facility has also been examined. The study utilized a sample of 184 adolescents placed in a
residential treatment facility for six months and a control group consisting of 43 adolescents who did not complete six months of treatment. Results of this study found reported hope levels to increase over a period of six months in the group that received inpatient treatment for six months. Within this sample, improvements in hope were seen in both the agency and pathway thinking constructs of hope (McNeal et al., 2006).

Upward Bound

In addition to summer camps and residential treatment facilities fostering hope in children and adolescents, other programs have emerged that have the potential ability to impact hope in youth. The Upward Bound Program, designed for adolescents who come from low-income backgrounds who are recruited from schools that provide less than optimal secondary school preparation, may be such a program that embodies many of Snyder’s (2005) elements of a hope intervention.

According to the U.S. Department of Education (2004), the Upward Bound Program is a national program that began in 1967 to minimize the disparities of college attendance between high school students from low-income families and high-income families. It is a federally funded program designed to assist economically disadvantaged adolescents prepare for, enter, and succeed in college. Program guidelines require that at least two-thirds of each project’s participants are both low-income and potential first-generation college students.
Currently, there are approximately 52,000 students participating in over 700 Upward Bound programs across the country. Students typically enter the program while in ninth or tenth grade and may participate in the program through the summer following the twelfth grade. On average, students remain in the program for about 21 months (U.S. Department of Education, 2004). Students in the program participate in regularly scheduled meetings and programs throughout the academic year, including after school tutoring, Saturday enrichment classes, college counseling and various educational field trips. Additionally, these students participate in an intensive residential instructional program that meets daily for six weeks in the summer in which students take three to four classes based upon their current academic needs during the summer participation period. A typical day during the summer component of the program usually involves breakfast followed by morning classes, activities or free time in the afternoon until dinner time, then study tables or other programming in the evening hours. During the summer component of the program, class sizes are generally smaller than those in the public school setting, teachers make themselves available to provide individual support to students, and the residential staff spends a great deal of time providing social support for students. Thus, the goals of the Upward Bound program relate to the major lessons as outlined by Snyder (year) in teaching hope through a variety of concepts.

The present study looked at the effects of the six-week summer curriculum of the Upward Bound Program on levels of hope in adolescents considered at-
risk. For the purposes of this study, at-risk will be defined as an adolescent who has experienced living below the poverty level, being in a single parent home, or whose parents have not graduated from high school.

**Study Hypotheses**

The purpose of this study was to assess the impact of the Upward Bound Summer Academy on hope levels for adolescent participants. In accordance with Snyder's lessons of "teaching hope" (Snyder, 2005), it was predicted that the format of this program will increase hope in participating students. Further, hope was examined as it relates psychological adjustment and academic achievement.

The following hypotheses were studied as they relate to adolescent hope levels:

**Hypothesis 1**: Participant's means on the Children's Hope Scale will differ between Time 1 (pre-intervention) and Time 2 (post-intervention). Specifically, the participants will show an increase in their mean hope scores.

**Hypothesis 2**: Self-reported hope scores and psychological adjustment will be correlated in sample of at-risk youth. Adolescents who report higher hope levels will also report better psychological adjustment.

**Hypothesis 3**: Self-reported hope scores and academic achievement will be correlated in a sample of at-risk youth. Adolescents who report higher hope levels will also obtain higher academic achievement.
CHAPTER II

Methods

Participants

This study recruited 35 students from the University of Dayton Upward Bound Academy. Data from six participants was omitted because they did not complete the summer program with the Upward Bound Academy. Data from two additional participants were omitted because of student refusal to participate after parental consent. As a result, there were 27 participants and a 77% participation rate. Demographic information is listed in Table 1.

At the time of enrollment, all 27 participants were either currently attending one of the target schools or planned to attend one of the target schools in the fall. In addition, 21 (77.7%) of the participants were rising 9th graders and 6 (22.2%) were rising 10th graders. The mean GPA of the sample was 2.81 (SD=.66), pre-intervention and 2.56 (SD=.71), post-intervention. GPA was calculated based upon a four-point grading scale.

The average number of individuals reported per household was 3.7 (SD = 1.30), with a range from 2 to 6 individuals. Income was entered as either low income or not, and 22 (88.5%) of the participants lived in families considered to be low income (the Upward Bound Academy defines low income by the federal guidelines for poverty and is dependent on the number living in the household). The poverty guidelines are updated periodically in the Federal Register by the
U.S. Department of Health and Human Services under the authority of 42 U.S.C. 9902 (2) with low income guidelines beginning at $10,400 for a household with one individual and adding $3,600 for each additional individual in the home. Further, the average highest level of education for the parents of the participants as self reported was 11.06 (SD = 1.91). Within this group, 56% of parents had graduated from high school and 4% had obtained at least a bachelor's degree. The resulting 40% of the parents had not obtained a high school diploma.

The University of Dayton Upward Bound Academy recruits youth who are rising ninth and tenth grade students who attend designated target schools. These target schools are within the Dayton Public School District of Montgomery County, Ohio and were chosen based upon overall lower academic success rates in comparison to other comparable schools within the district. As a result, the State of Ohio has reported all of these schools to be in a state of academic emergency as described by the Dayton Great Schools report (Perkins, 2009). In addition to attendance at one of the target schools, other eligibility requirements for Upward Bound Program participants are being from a low-income home, and the first family member to attend college should post-secondary education be obtained. Students in the program must meet two out of the three aforementioned requirements to be admitted into the program.
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Measures

Hope Modules: From week two through week five, students were provided a one hour intervention developed for the purpose of this study that followed the guidelines for cultivating hope as outlined by Snyder (2005). These interventions were provided by either the researcher or by guest speakers. The titles of the modules were as follows:

Week 2: Making a Way Out of No Way: Perseverance
Week 3: Effective Leadership
Week 4 and 5: When Life Closes the Door
Week 5: College Student Panel

The material presented in Making a Way Out of No Way: Perseverance was presented in a manner to improve pathway hope. A guest speaker who works for the Department of Defense in Washington, D.C. and served as a role model presented material based upon the ideals of discipline, dedication, and determinism or “The Three D’s of Success.” Effective Leadership encouraged positive self-esteem and social support. This module utilized a lecture format that encouraged participation. Material from the lecture defined leadership and the major types of leadership. Students also learned the situations in which different types of leaders can be effective and how it relates to them. Additionally, students were given information regarding how to become an effective leader in their community. The When Life Closes the Door module incorporated the aspects of improving both agency and pathway hope. This
module was based upon the information presented in *Hope for the Journey: Helping Children Through Good Times and Bad* (Snyder, McDermott et al, 1997). The format for this module was more interactive and challenged students to consider goals broadly, as well as the goals they had for themselves. Students were placed in small groups for this module in which they were asked to set a goal for their group and were then given a challenge to problem solve ways to reach that goal. Students were to work through finding other ways to successfully reach the goal in a realistic manner. During this module participants also completed worksheets for The Three P’s of Problem-Solving (Appendix A) and a goal planning worksheet (Appendix B). The college student panel provided an interactive format for students and discussed real life experiences and challenges that were overcome to obtain their goals. The panel facilitated further social support as well as increase enthusiasm about reaching goals. Overall, participants appeared to show greater enthusiasm for those modules that were more interactive in nature.

**Demographic Information:** For the purposes of this study, demographic information for each student was compiled from Upward Bound student records that consisted of basic information including: gender, age, date of birth, cumulative grade point average, individual class grades, Individualized Education Plan presence, number of individuals living in the student’s home, parents’ highest level of education, and level of income status. This information was
obtained by the principle investigator from the student record database for the program.

*Children's Hope Scale* (CHS; Snyder, Hoza et al., 1997). The CHS is a six-item questionnaire used to evaluate hope levels in children aged eight to sixteen. This scale was developed based upon the assumption that the acquisition and usage of goal-directed thinking is critical for effective functioning in children and adolescents. The purpose of this measure is to identify children who need additional nurturing and education to improve their hopeful thinking, and to identify children who exhibit high hope and may be able to serve as models for other children (Snyder, Hoza et al., 1997).

The CHS has shown acceptable internal reliability across six samples of children, including children with sickle cell anemia, arthritis, and cancer. The Cronbach alphas have ranged from .72 to .86 (Edwards et al., 2007). Since the scale is only intended to measure overall hope, reliabilities for the individual components were not assessed. Convergent validity of the CHS was assessed in a variety of ways. First, scores on the CHS were correlated significantly and positively with knowledgeable observers' judgments of their hope levels and the beginning and end of a 1-month interval (r = .37 and .38). Next, CHS scores were positively correlated with scores of various measures of children's self-perceived competence and control, including self-perceptions in areas of scholastics, social acceptance, athletics, physical appearance, and behavioral conduct (Edwards, et
al., 2007). Finally, CHS scores correlated positively with an index of self-worth and correlated negatively with scores on an inventory of depression.

Response options are scored from 1 to 6 with higher scores being indicative of higher hope. Response options correspond with Likert scale values as follows: (1) none of the time, (2) a little of the time, (3) some of the time, (4) a lot of the time, (5) most of the time and (6) all of the time. The average level of hope on this measure is 25. Additionally, the odd numbered questions (1, 3, and 5) address agency, while the even numbered questions address pathway (2, 4, and 6) (Snyder, Hoza et al., 1997).

The Behavioral Assessment System for Children II: (BASC II SRP-A; Reynolds & Kamphaus, 2004), is an instrument used to assess self-reported feelings and behaviors in adolescents ages 12-21 (Kamphaus, VanDeventer, Brueggemann, & Barry, 2007). The BASC II SRP-A is a true or false and Likert scale survey composed of sixteen subscales with 176 items that measure both positive and negative dimensions of mental health. These sixteen subscales can be separated into two categories: the clinical scales and the adaptive scales. The clinical scales focus upon the level of distress being experienced and include: attitude to school, attitude to teachers, sensation seeking, atypicality, locus of control, somatization, social stress, anxiety, depression, attention problems, hyperactivity and sense of inadequacy. The adaptive scales focus on positive psychological adjustment and include: relations with parents, interpersonal relations, self-esteem, and self-reliance. From the subscales, five
composites are created: school problems, internalizing problems, inattention and hyperactivity, personal adjustment, and the emotional symptoms index (Reynolds & Kamphaus, 2004).

Psychometric data was based upon a normed sample of 3,400 adolescents that were matched by demographics such as age and ethnicity to United States Census information showed high internal consistency with alpha coefficients for the composite scales ranging from .85 to .96 for ages twelve to fourteen and .84 to .96 for ages fifteen to eighteen in the adolescent version of the BASC II. Test-retest reliability correlations were found to have a median correlation of .82 (Reynolds & Kamphaus, 2004). The validity of responses to the BASC II SRP-A are assessed via the F Index, L Index and V Index for the measure. The F Index measures the tendency of the respondent to be excessively negative about self-perceptions and emotions. The L index measures the tendency of an adolescent to give an extremely positive picture of themselves or “faking good.” These items include statements such as “I like everyone I meet.” (Reynolds & Kamphaus, 2003). Finally, the V index checks the general validity of the test by using nonsensical statement such as “Superman is a real person.”

For the purposes of this study, the composite scales (school problems, internalizing problems, inattention/hyperactivity, personal adjustment, and the emotional symptoms index) were examined. The school problems composite is a general measure of adaptation to school. The internalizing problems composite is a broad measure of internally directed distress.
Inattention/hyperactivity evaluates the need to consider a diagnosis of Attention Deficit Hyperactivity Disorder (ADHD). The personal adjustment composite assesses levels of interpersonal relationships, self-acceptance, and identity development. The emotional symptoms index is the most global indicator of emotional disturbance on the BASC. It evaluates for the presence of disturbances that affect the thoughts and feelings of the individual (Reynolds & Kamphaus, 2003).

The Adaptive scales measure levels of positive behaviors compared to same aged peers. T-Scores between 41 and 59 fall in the average range. T-Scores between 31 and 41 fall in the "at risk" range. T-Scores below 30 indicate clinically significant levels of deficits in adaptive behavior. The BASC was selected because of ability of the test to measure changes in psychological adjustment over shorter time periods, as little as one month (Reynolds & Kamphaus, 2003). The definitions for all of the subscales contained within the BASC-SRP as adopted from BASC can be found in Appendix C.

Procedure

Methodology was approved by the Institutional Review Board of the University of Dayton. For the purposes of this study, only University of Dayton Upward Bound participants were recruited. All participants in the University of Dayton Upward Bound Academy during the data collection period were given the opportunity to participate in the project. Initial study information was communicated to parents and adolescents during a welcome meeting for the
Upward Bound Summer Academy. Written consent (see Appendix D) was obtained from interested parents during the first day of the Upward Bound Summer Academy and written assent (see Appendix E) was obtained on Day 5 from the students before completing the study measures. Demographic information was obtained by reviewing the participant files in the Upward Bound office after written consent was obtained from parents. The participants were administered both the CHS and the BASC II SRP-A as a group during the first week of the program (pre-intervention).

Beginning the second week of the program, hope modules led by the principle investigator, as well as a number of guest speakers in one hour weekly seminars relating the constructs of hope to the program theme of the week in order to foster the lessons of hope. Students participated in discussions regarding leadership, goal setting, discipline and determination, as well as a college student panel presentation. Additionally, teachers were given two short stories from Hope for the Journey by Snyder, McDermott et al. (1997), “Developing Fertile Ground for Growing High-Hope Students” and “A Detailed Example of a Teacher Working with a Low-Hope Student: The Case of Marcia.” Both of these stories provide insight into teaching students insight in hope and assisting students who may have lower hope levels. Teachers were asked to consider these stories as they worked with students over the summer.

During the last week of the program (post-intervention) both the CHS and the BASC II SRP-A were re-administered to the group. Each collection period
was scheduled with students via the Program Coordinator. A classroom on campus was utilized so that students were in a neutral environment that was not distracting. Students spent approximately forty-five minutes completing the test measures during each collection period. After completion of the fall academic quarter, the demographic information of the participants was collected along with the current academic grades.
CHAPTER III

Results

Descriptive statistics were generated and are presented for demographic and study variables (Table 2). Additionally, correlation matrices were conducted between GPA and study variables and reported accordingly (Tables 3 and 4). Finally, the major study hypotheses were addressed via t-test and correlations.

Table 2: Descriptive Statistics for Upward Bound Study Participants (n = 27)

<table>
<thead>
<tr>
<th></th>
<th>Pre-Intervention (Mean)</th>
<th>Post-Intervention (Mean)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Hope (CHS)²</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total Hope</td>
<td>27.48 (SD = 5.22)</td>
<td>28.11 (SD = 4.76)</td>
</tr>
<tr>
<td>Agency Hope</td>
<td>13.74 (SD = 2.88)</td>
<td>13.93 (SD = 2.72)</td>
</tr>
<tr>
<td>Pathway Hope</td>
<td>13.74 (SD = 3.27)</td>
<td>14.19 (SD = 2.70)</td>
</tr>
</tbody>
</table>

| BASC Composites      |                         |                          |
| School Problems      | 49.08 (SD=7.93)         | 51.60 (SD=8.24)          |
| Internalizing Problems | 50.70 (SD=11.49)     | 53.08 (SD=11.85)         |
| Inattention/Hyperactivity | 53.67 (SD=10.29) | 54.40 (SD=8.35)          |
| Personal Adjustment  | 51.92 (SD=7.68)         | 52.40 (SD=9.05)          |
| ESI                  | 49.29 (SD=9.12)         | 50.00 (SD=10.41)         |

| GPA®                 | 2.81 (SD=.66)           | 2.56 (SD=.71)            |

a: Total hope scores range from 6 to 36 with higher scores indicating greater hope. A score of 25 or greater is considered "normal hope." Agency and pathway hope scores range between 1 and 18 with higher scores indicating greater hope.

b: T-scores for the BASC II SRP-A (Reynolds & Kamphaus, 2003) between 41 and 59 are considered to be within average range.

c. GPA is based upon fourth quarter grades for the quarter before entering the Upward Bound program (pre-intervention) and first quarter grades for the following school year after initial participation in the Upward Bound program (post-intervention).

To examine hypothesis one, a paired sample t-test was conducted to examine pre-post program changes in total hope, as well as both the agency and pathway components of hope. Results indicated that the effect of time was not significant for total hope ($t(1,27) = -0.489, p=.63$), agency hope ($t(1,27) = -0.40$,
p=.69) or pathway hope \( (t(1.27) = .43, p=.67) \). Mean total hope, agency, and pathway hope scores can be seen in Table 2.

The second hypothesis stated that hope scores and psychological adjustment would be correlated in this sample. That is, students who demonstrated higher levels of hope would report higher levels of psychological adjustment, and lower levels of psychopathology. All mean scores on the BASC II SRP-A (Reynolds & Kamphaus, 2003) for the sample were within normal limits. Pearson products-moment correlations were conducted to examine the relationship between hope scores and psychological adjustment composite scores in the areas of school problems, internalizing problems, inattention/hyperactivity, personal adjustment and the emotional symptoms index. Tables 3 and 4 provide correlation matrices of these values. Pre-intervention did not find significant correlations between hope and psychological adjustment variables. Post-intervention measures found total hope, agency hope, and pathway hope to all have significant negative correlations with measures of school problems, internal problems, inattention and hyperactivity, and the emotional symptoms index. Additionally, all hope factors had a significant positive correlation with personal adjustment following the intervention.

The third hypothesis stated that self-reported hope scores and academic achievement scores would be correlated in this sample. Pearson product-moment correlations were conducted to examine the relationship between pre-intervention hope and GPA before entering the program, and post-intervention
hope levels and GPA at the end of the fall quarter. Tables 3 and 4 provide correlation matrices of these values. Both total hope and agency hope had significant positive correlations with GPA at the pre-intervention measure. No significant correlations were found between hope and GPA in post-intervention time measurements.

Table 3: Pre-Intervention Correlations for Study Variables

<table>
<thead>
<tr>
<th>Factor</th>
<th>Pearson r values</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>1</td>
</tr>
<tr>
<td>1. Hope Total</td>
<td>1.00</td>
</tr>
<tr>
<td>2. Agency Hope</td>
<td>.83**</td>
</tr>
<tr>
<td>3. Pathway Hope</td>
<td>.87**</td>
</tr>
<tr>
<td>4. School Problems</td>
<td>-.21</td>
</tr>
<tr>
<td>5. Internalizing Problems</td>
<td>.18</td>
</tr>
<tr>
<td>6. Inattention/Hyperactivity</td>
<td>.10</td>
</tr>
<tr>
<td>7. Personal Adjustment</td>
<td>.10</td>
</tr>
<tr>
<td>8. Emotional Symptoms Index</td>
<td>.20</td>
</tr>
<tr>
<td>9. GPA</td>
<td>.45*</td>
</tr>
</tbody>
</table>

*p < .05

**p < 0.01
<table>
<thead>
<tr>
<th>Factor</th>
<th>Pearson r values</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>1</td>
</tr>
<tr>
<td>1. Hope Total</td>
<td>1.00</td>
</tr>
<tr>
<td>2. Agency Hope</td>
<td>.88**</td>
</tr>
<tr>
<td>3. Pathway Hope</td>
<td>.87**</td>
</tr>
<tr>
<td>4. School Problems</td>
<td>-.42*</td>
</tr>
<tr>
<td>5. Internalizing Problems</td>
<td>-.61**</td>
</tr>
<tr>
<td>6. Inattention/Hyperactivity</td>
<td>-.67**</td>
</tr>
<tr>
<td>7. Personal Adjustment</td>
<td>.56**</td>
</tr>
<tr>
<td>8. Emotional Symptoms Index</td>
<td>-.64**</td>
</tr>
<tr>
<td>9. GPA</td>
<td>-.13</td>
</tr>
</tbody>
</table>

*p < .05

**p < 0.01
CHAPTER IV

Discussion

Overview

This study was designed to examine hope levels in adolescents participating in an outreach program aimed to increase academic success in high school students. Previous research on hope in adolescents has shown correlations between hope and psychological adjustment (Gilman et al., 2006; Hagen et al., 2005) as well as with hope and academic achievement (Ciarrochi et al., 2007; Snyder et al., 2002). The goal of this study was to assess hope levels in a group of adolescents participating in the Upward Bound Summer Academy considered to be at risk of having lower hope levels. Study participants were students enrolled in schools the Upward Bound Academy recruited from, and generally lived in households that were of lower socioeconomic status (SES) and had parents who had not obtained a college degree.

It was predicted that hope levels would increase post-intervention. Additionally, the study looked for correlations between hope and psychological adjustment as well as between hope and academic achievement post-intervention. It was hypothesized that hope levels would change over time and would be significantly correlated with psychological adjustment as well as academic achievement. Limitations of the study and possible directions for future research of this study will be discussed.
Hypothesis 1

According to Bolland (2003), there is a need for prevention and intervention with adolescents of lower SES and lower hope to increase the opportunity for these students to be successful in obtaining their goals. It was anticipated that participant level of hope would change over the six week period of participation in the Upward Bound Summer Academy. Paired sample t-tests were performed with hope being the dependent variable. Results of descriptive statistics found mean participant hope scores to be of average to above average at both the pre-intervention and post-intervention measurement times. These findings were contradictory to research by Bolland (2003), which found that students of lower income households tended to exhibit lower levels of hope.

There was no significant difference in hope level for the participant group from the beginning of the Upward Bound Summer Academy (pre-intervention) to the end of the academy (post-intervention). It was anticipated that the experience would foster increases in the hope levels of students through teaching hope to students. Hope was emphasized through students being in classrooms with increased individual assistance, having goals set for each class, integrating motivational teaching into the program, and creating an overall supportive environment for students. When considered individually, both pathway and agency showed a trend in the hypothesized direction, although it failed to reach significant levels of change. Agency showed stronger correlations
with study variables in comparison to pathway even though there was no significant difference between the two indices. This trend suggests that programs such as Upward Bound may impact agency features of hope to a greater degree than pathway. Further research is needed to investigate this trend.

One possible explanation for this null result in differences of hope levels was that students participating in the program entered with total hope levels that were average or higher than average, making it more difficult to detect a significant level of change in hope level. It may also be possible that adolescents who desire to participate in the Upward Bound Academy have higher hope levels, in general. They may view these outreach programs as a conduit for them to find assistance in reaching their goals. As a result, high-hope youth may be more likely to participate in outreach programs such as Upward Bound or other similar programs. It is also possible that the sample may be more likely to have stronger social support, which encourages higher-hope in adolescents. This supports findings by Hagen et al. (2005) demonstrating that at-risk students with greater social support are more likely to participate in outreach programs. With these students, the intervention would be less likely to increase hope, given that these adolescents may already exhibit many of these traits. Additionally, study participants may have experienced an increase in their hope levels upon acceptance into the Upward Bound Academy as it was viewed by them as an opportunity to help them reach their goals.
In addition, it may be possible that the hope modules were not an effective intervention to increase hope in these students. Further, there were no benchmark criteria to evaluate the quality of the hope modules created for the program. Students may have only utilized modules that featured preferred guest speakers or modules that were more interactive. At the same time, students may not have seen value in modules that were not of interest to them and thus did not pay attention to them or take time to process the information presented. Furthermore, students maintained a busy schedule during the Upward Bound Summer Academy. As a result, they may have decided to focus more upon other academic expectations in the classroom instead of the hope modules.

Another factor that could have influenced student reports of hope was potential unrealistic expectations they may have of their abilities to meet academic and career goals. Students may have presented with unrealistic expectations about their goals at the beginning of the Upward Bound Summer Academy. As a result, hope scores may have been artificially inflated. As students progressed through the intensive academic summer program they may have been sufficiently challenged and thus, have had more realistic expectations of themselves and their occupational aspirations. Post-intervention hope scores may have, in part, been suppressed by this cognitive shift.

Finally, it is possible that hope scores may have been influenced by the timing of post-intervention data collection. Post-intervention measurements were taken the last week of the program as students were preparing to leave the
campus. In addition, the students were also preparing to spend less time with their friends from the program. Some of the students may have been saddened by this and it is possible that this suppressed hope scores.

**Hypothesis 2**

The second hypothesis predicted that there would be a significant correlation between hope scores and psychological adjustment scores. Pre-intervention, there were no significant correlations between hope and psychological adjustment scores. Post-intervention, however, total hope, agency hope, and pathway hope were found to have a significant negative correlation with the school problems, internalizing problems, inattention and hyperactivity, and the emotional symptoms index components of the Behavioral Assessment System for Children (BASC II SRP-A; Reynolds & Kamphaus, 2004). These results are consistent with findings by Hagen et al. (2005) that high-hope in at-risk adolescents is related to fewer externalizing and internalizing problems when provided a positive social support network. Additionally, total hope, along with the agency and pathway indices of hope had a significant correlation with personal adjustment at the post-intervention measurement. These findings support those found by Gilman et al. (2006) that hope subscales are significantly positively related to personal adjustment. Overall, these results support the research presented by Snyder (2000) of higher hope levels being related to healthy psychological adjustment.
At both measurement times, students self-reported psychosocial functioning was within normal limits via the BASC II SRP-A as compared to normative BASC data (Reynolds & Kamphaus, 2003). It is interesting to note that these scores were only related to hope scores at the post-intervention period, in light of no significant change in either measurement between the pre-intervention and post-intervention period. It must be considered that students took the measurements pre-intervention at the end of the week before attending a field trip off campus. It is possible that students may not have given answers that were representative of their true hope levels or psychological adjustment. They may have been distracted and thinking more about the upcoming weekend or the field trip. However, for the post-intervention measurements students took these surveys during normal class time midway through the last week. Additionally, it is possible that this occurred as a result of the increased social support students received from the staff and other students in the program encouraging and motivating one another. Further, it is also possible that participating in the hope modules had an effect upon hope and psychological adjustment.

**Hypothesis 3**

The last hypothesis anticipated that there would be a correlation between hope scores and academic achievement. A pearson products-moment correlation was performed in order to assess the relationship between these two factors. Results of the study showed significant positive correlations between
total hope, agency hope, and academic achievement (as measured by GPA) at the pre-intervention measurement. This finding supports research by Gilman and colleagues (2006) that found school adjustment is correlated with the hope subscales. In this study, of the two components of hope, only agency hope showed significant correlation with GPA measurements in the pre-intervention measurements. As a result, students participating in the Upward Bound Summer Academy may utilize agency thinking to a greater degree than pathway thinking. This may lead to them having a greater initiative and motivation to pursue their goals when compared to similar adolescents not participating in Upward Bound. Further, following the summer program, both overall hope and agency hope had significant negative correlations with the school problems composite of the BASC II SRP-A. Overall, further research is needed to confirm underlying causal relationships for these findings.

Despite correlations between hope and GPA prior to the intervention period, there were no significant correlations between hope level and GPA at the post-intervention measurement. This finding contradicts research by Ciarrochi et al. (2007) that showed hope to be a reliable predictor of school grades in a sample of students entering the first year of high school. In addition, this finding also contradicts Snyder's research that demonstrated hope to be a reliable academic predictor of academic achievement (Snyder et al., 1991); however it may be a finding unique to this study. Though there was an initial positive correlation between hope and GPA, these results did not remain stable over
time. Fall quarter student GPAs were used in measuring post-intervention academic achievement. This questions the ability of hope to reliably predict academic grades. However, there are a number of considerations that should be reviewed before dismissing the reliability of hope levels as a predictor of school achievement.

First, there was a time gap of approximately 12 weeks between post-intervention measurement of hope levels which occurred at the end of the summer academy and the measurement of GPA. It is possible that hope levels changed for the adolescents in the first quarter of the academic year following the Upward Bound Summer Academy. Hope was not measured during the academic year, and thus it is impossible to determine if these levels remained stable following the summer experience.

In addition, approximately 78% of the participants transitioned from a middle school environment to a high school environment in the fall after the summer academy. Such a change in environment may have created additional stressors for study participants. During this period, participants may have needed to focus more on adjusting to the new school environment and the increased academic demands of high school. Grades may have been lower as a result of this transition, and hope levels may have also been impacted. Additionally, it is possible that students experienced change in their hope levels related to other life stressors after the post-intervention measurement, resulting in a change in hope levels after the Upward Bound Summer Academy ended.
Longitudinal studies that examine normative changes in hope over the course of an academic year and during transitional periods are needed.

Study Limitations

Sample Size

Sample size was a major limitation of this study. Initial recruitment projections for the Upward Bound Academy were for 50 participants. At the beginning of the summer academy, only 35 students became actual University of Dayton Upward Bound Academy participants. From those 35 students, an additional 8 students were lost during the data collection period: 6 left the program prematurely and 2 students declined participation after informed consent was obtained from their parents. As a result, the number of participants was fewer than initially projected. With such a small number of participants, the actual power of the study becomes constrained, limiting the ability of the study to detect significant results. In addition, the smaller sample size raises concern that in terms of external validity, the study may not be representative of the lower SES adolescent population as a whole.

Further, another limitation of this study is that a control group was not utilized. This study did not examine hope levels of similar students participating in other outreach programs not receiving a hope intervention or similar students not participating in outreach programs at all. A control group would have provided additional participants to increase power, as well as provided a more desirable study design. For example, a control group would have provided the means to
better examine hope levels of typically developing adolescents as compared to the hope level of adolescents that experienced an intervention specifically targeting this construct.

**Time Frame**

Measurements from the CHS and the BASC II SRP-A were taken at the start and conclusion of a six week period during the summer. Achievement scores were assessed from the last quarter of the previous school year grades and the first quarter of the current school year. As a result, the academic data and psychosocial data were collected 12 weeks apart. Even though the CHS and the BASC II SRP-A are considered to show stable results over time, it is possible that these values did change after the summer academy ended as the result of other stressors that may become more prevalent during the academic school year. Giving adolescents an additional measure of hope closer to the time that GPA was collected would have provided useful information in assessing the validity of the aforementioned concern.

It should also be noted that data was collected during first summer for the University of Dayton Upward Bound Academy. As with any program in it's first year of existence, a number of unexpected challenges occurred requiring adjustments to be made in the program structure. Even though these types of issues are generally handled by the organization internally, students are often at least aware that there is tension occurring in the program and may experience some frustrations if things do not run as smoothly as they would have expected.
As a result, there is the potential for hope scores to be effected in the short term with the possibility of change being limited. In addition, the experience that participants had during the University of Dayton's first summer academy may not have been representative of other Upward Bound participants nationally.

Environment

During the six-week summer academy, all participants lived on campus during the week and returned home on the weekends. Though the environment was held constant during the week, the home environment was not controlled. It is likely that student experiences at home varied greatly and could have influenced the amount of change seen in hope levels. For example, even if the Upward Bound Academy was successful in increasing hope levels, if students return to environments that were not supportive on weekends they may have experienced things that weakened agency or pathway thinking. This may have contributed to participants exhibiting less of an increase in hope during the measurement period.

Additionally, at the conclusion of the Upward Bound Summer Academy all students returned to living in their respective home environments full-time, as opposed to just over the weekend. Changes in environment that may have occurred effecting hope levels could not be assessed during this time, and it may have affected the unexpected findings regarding post-intervention hope and GPA in this study. Though the demographics of the group members are similar, there is no way to predict consistency across home environments. The actual
experiences, as well as their perceptions of these experiences, can vary vastly, and may in turn affect hope levels or academic achievement.

Further, the study did not consider other sources of social support in outside environments with study participants. The study assessed relationships with parents and teachers through self-report from the students. However, it did not consider the social support in other elements of the home or school environment (e.g., coaches, preachers). Parents were not surveyed on their parenting styles, the level of support they provide to their adolescent, or their beliefs of future success for their child. Further, academic school year teachers working with Upward Bound participants were not surveyed to assess the support they provide to students during the academic school year. Students were asked questions about their current perceptions of school and teachers during the summer intervention period, but this was not assessed during the academic year. As a result, the level of support and encouragement for these adolescents from teachers during the academic school could not be assessed.

Other Factors

There are a number of additional factors that may contribute to the levels of hope experienced by adolescents that were not considered in this study. According to Sun and Lau (2006), there are other factors that contribute to increasing hope levels in adolescents, including self-efficacy, optimism, resilience, and persistence in pursuing goals. A number of these factors may have played a role in the cultivation of hope for study participants. However,
due to the study constraints, these things were not considered as part of the measures.

Additionally, this study did not consider other factors that may effect psychological adjustment or academic achievement. Ciarrochi et al. (2007) noted that hope had a greater effect than self-esteem or positive attribution style to these factors. However, it cannot be determined if self-esteem or positive attribution style played a role in effecting psychological adjustment or academic achievement in this sample. It is possible that there was a change in self-esteem or positive attribution style that may have influenced hope levels in study participants. Individual members of the group may have experienced life changes or transitions that changed their outlook, as well as effecting hope levels.

**Future Directions**

Future studies should examine the impact that outreach programs such as Upward Bound have on adolescent hope with a larger sample size and a control group. Currently, there are numerous outreach programs in existence with a variety of foci and themes for their participants. It would be beneficial for these programs to know how effective they are in providing positive outcomes for the students that utilize them. From this, outreach programs can increase their effectiveness by being more intentional and focusing on those intervention strategies that are most beneficial for adolescents participating in these
programs. Additionally, repeating the study with similar students not participating in any outreach programs would also be beneficial.

Subsequently, it would be important to consider other age groups as well as students in other academic grades in school. Longitudinal, cross-sectional, or cross-sequential designs to examine the construct of hope and its effect on psychosocial functioning and academic achievement across the span of adolescence is needed. Adolescence is a period of life when a number of changes occurring from year-to-year. It is important to consider these changes and how they relate to hope levels as well as other factors of performance. By collecting data from various times throughout adolescence, it may be possible to pin-point times that are more critical in having an effect upon changing hope and look to increase programming to meet this need.

Additionally, widening the scope of positive psychology factors considered would be important to assess appropriate areas of focus for outreach programs. It would be important to also consider how other factors influence hope. Assessment of factors like self-efficacy, optimism, and resiliency are critical in determining where to focus intervention efforts. Additionally, it is important to consider the role that self-esteem and positive attribution have upon students. Looking at these factors may also aid future efforts to assist adolescents in having positive outcomes.
The examination of hope is in its infancy. Programs interested in promoting achievement in children and adolescents in at-risk situations may benefit from injecting hope, examining outcomes, and monitoring levels for longer periods of time following the intervention. While this study failed to produce significant results, it did raise a number of questions that are worth further evaluation in the area of adolescent hope. Additionally, this study introduces the idea of creating hope modules in order to cultivate hope and increase hope related thinking in at-risk adolescents. Overall, continuing research in this area may be beneficial for outreach programs as well as for the students they serve.
Appendix A: The Three P's of Problem Solving Adapted from *Hope for the Journey: Helping Children Through Good Times and Bad* (Snyder, McDermott, Cook & Rapoff, 1997)

The Three P's of Problem-Solving

In order to be successful in reaching our goals it is critical that one sets goals that are realistic and attainable first. They must also be motivated to want to achieve those goals. Finally, one must use their problem solving abilities to create alternate pathways to that goal if their direct pathway to that goal becomes blocked.

P1: What is the problem?

P2: What are all your possibilities?

P3: Pick one and try it out.
Appendix B: Goal Planning Worksheet

Reaching My Goals
The Goals of _____________________________

1. What is my top goal to accomplish at Upward Bound this summer?
________________________________________________________________________

2. What do I need in order to get there?
________________________________________________________________________
________________________________________________________________________

3. What are other things I can do to reach this goal?
________________________________________________________________________
________________________________________________________________________
________________________________________________________________________

4. What are my top three goals for this upcoming school year?
   a. __________________________________
   b. __________________________________
   c. __________________________________

5. Why do I want to accomplish these goals?
   a. __________________________________
   b. __________________________________
   c. __________________________________

6. What are all the different ways that I can reach these goals?
   a. __________________________________
   b. __________________________________
   c. __________________________________

7. What are my top five goals to reach by graduation from high school?
   a. __________________________________
   b. __________________________________
   c. __________________________________
   d. __________________________________
   e. __________________________________
8. Why do I want to accomplish these goals?
   a. ___________________________________________
   b. ___________________________________________
   c. ___________________________________________
   d. ___________________________________________
   e. ___________________________________________

9. What are all the different ways that I can reach these goals?
   a. ___________________________________________
   b. ___________________________________________
   c. ___________________________________________
   d. ___________________________________________
   e. ___________________________________________
Appendix C: The Children's Hope Scale (CHS)

Directions: The six sentences below describe how children think about themselves and how they do things in general. Read each sentence below carefully. For each sentence, please think about how you are in most situations. Place a check inside of the circle that describes YOU the best. For example, place a check () in the circle () above "None of the time," if this describes you. Or, if you are this way "All of the time," check this circle. Please answer every question by putting a check in one of the circles. There are no right or wrong answers.

1. I think I am doing pretty well.

<table>
<thead>
<tr>
<th>None of the time</th>
<th>A little of the time</th>
<th>Some of the time</th>
<th>A lot of the time</th>
<th>Most of the time</th>
<th>All of the time</th>
</tr>
</thead>
<tbody>
<tr>
<td>O</td>
<td>O</td>
<td>O</td>
<td>O</td>
<td>O</td>
<td>O</td>
</tr>
</tbody>
</table>

2. I can think of many ways to get the things in life that are most important to me.

<table>
<thead>
<tr>
<th>None of the time</th>
<th>A little of the time</th>
<th>Some of the time</th>
<th>A lot of the time</th>
<th>Most of the time</th>
<th>All of the time</th>
</tr>
</thead>
<tbody>
<tr>
<td>O</td>
<td>O</td>
<td>O</td>
<td>O</td>
<td>O</td>
<td>O</td>
</tr>
</tbody>
</table>

3. I am doing just as well as other kids my age.

<table>
<thead>
<tr>
<th>None of the time</th>
<th>A little of the time</th>
<th>Some of the time</th>
<th>A lot of the time</th>
<th>Most of the time</th>
<th>All of the time</th>
</tr>
</thead>
<tbody>
<tr>
<td>O</td>
<td>O</td>
<td>O</td>
<td>O</td>
<td>O</td>
<td>O</td>
</tr>
</tbody>
</table>

4. When I have a problem, I can come up with lots of ways to solve it.

<table>
<thead>
<tr>
<th>None of the time</th>
<th>A little of the time</th>
<th>Some of the time</th>
<th>A lot of the time</th>
<th>Most of the time</th>
<th>All of the time</th>
</tr>
</thead>
<tbody>
<tr>
<td>O</td>
<td>O</td>
<td>O</td>
<td>O</td>
<td>O</td>
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</tr>
</tbody>
</table>

5. I think the things I have done in the past will help me in the future.

<table>
<thead>
<tr>
<th>None of the time</th>
<th>A little of the time</th>
<th>Some of the time</th>
<th>A lot of the time</th>
<th>Most of the time</th>
<th>All of the time</th>
</tr>
</thead>
<tbody>
<tr>
<td>O</td>
<td>O</td>
<td>O</td>
<td>O</td>
<td>O</td>
<td>O</td>
</tr>
</tbody>
</table>

6. Even when others want to quit, I know that I can find ways to solve the problem.

<table>
<thead>
<tr>
<th>None of the time</th>
<th>A little of the time</th>
<th>Some of the time</th>
<th>A lot of the time</th>
<th>Most of the time</th>
<th>All of the time</th>
</tr>
</thead>
<tbody>
<tr>
<td>O</td>
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<td>O</td>
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</tbody>
</table>
## Appendix D: Behavioral Assessment System for Children Scale Definitions

adopted from the Behavior Assessment System for Children (BASC II)

(Reynolds & Kamphaus, 2003)

<table>
<thead>
<tr>
<th>Scale</th>
<th>Definition</th>
</tr>
</thead>
<tbody>
<tr>
<td>Anxiety</td>
<td>Feelings of nervousness, worry, and fear</td>
</tr>
<tr>
<td>Attitude to School</td>
<td>Feelings of alienation, hostility</td>
</tr>
<tr>
<td>Attitude to Teachers</td>
<td>Feelings of resentment and dislike of teachers; beliefs that teachers are unfair, uncaring, or overly demanding</td>
</tr>
<tr>
<td>Atypicality</td>
<td>Tendency toward mood swings, bizarre thoughts, or obsessive-compulsive thoughts and behaviors often considered “odd”</td>
</tr>
<tr>
<td>Depression</td>
<td>Feelings of unhappiness, sadness, and dejection; a feeling that nothing goes right</td>
</tr>
<tr>
<td>Interpersonal Relations</td>
<td>Perception of having good social relationships and friendships with peers</td>
</tr>
<tr>
<td>Locus of Control</td>
<td>Belief that rewards and consequences are controlled by external events or other people</td>
</tr>
<tr>
<td>Relations with Parents</td>
<td>Positive regard toward parents and a feeling of being esteemed by them</td>
</tr>
<tr>
<td>Self-Esteem</td>
<td>Feelings of self-esteem, selfrespect, and self-</td>
</tr>
<tr>
<td>Condition</td>
<td>Description</td>
</tr>
<tr>
<td>----------------------------</td>
<td>---------------------------------------------------------------------------------------------------------------------------------------------</td>
</tr>
<tr>
<td>Self-Reliance</td>
<td>Confidence in one’s ability to solve problems</td>
</tr>
<tr>
<td>Sensation Seeking</td>
<td>Tendency to take risks, to like noise, and to seek excitement</td>
</tr>
<tr>
<td>Sense of Inadequacy</td>
<td>Perceptions of being unsuccessful in school, unable to achieve one’s goals, and generally inadequate</td>
</tr>
<tr>
<td>Social Stress</td>
<td>Feelings of stress and tension in personal relationships; a feeling of being excluded from social activities</td>
</tr>
<tr>
<td>Somatization</td>
<td>Tendency to be overly sensitive to, experience or complain about relatively minor physical problems and discomforts</td>
</tr>
</tbody>
</table>
Appendix E: Informed Consent

Informed Consent To Participate In A Research Project (Revised 2/12/02)

Project Title: Thoughts about the Future

Investigator(s): Brigitte Beale and Keri Brown Kirschman, PhD (faculty advisor)

Description of Study: During the first week of the Upward Bound Academy at the University of Dayton your child will be asked to participate in two surveys that ask your child questions about their thoughts about the future as well as a survey that asks about their attitudes and behaviors. Your child will answer these surveys again during the last week of the Upward Bound Academy at the University of Dayton and one last time four months later during Saturday sessions of the Upward Bound program. Background information such as your child’s age, gender, grades in school, your educational background, and estimates of family income will be obtained from your child’s Upward Bound paperwork you completed. The academic information from the file will be reviewed again in the fall after the first academic quarter of the school year has been completed.

Adverse Effects and Risks: It is not anticipated that your child will have any negative effects as a result of his or her participation in this project. To our knowledge, there have been no adverse effects that have occurred in similar research investigating levels of hope in adolescents. It is possible that the student may experience boredom and or eye fatigue from answering so many questions. As a result, breaks will be given if needed.

Duration of Study: This study surveys will take approximately 30-40 minutes to complete on each of three occasions. Specifically, your child will be asked to complete two questionnaires during the Upward Bound Summer Academy: at the beginning of the academic program and again at the conclusion of the summer academy. In addition, your child will answer the same items in the Fall during the Saturday academy. Therefore, your child’s total time involvement will be 1.5 to 2.0 hours.

Confidentiality of Data: Your child’s name will be kept separate from the surveys that your child completes. The demographic information will be collected from Upward Bound paperwork. Your child will be
identified on these forms with a study identification number. The sheet that identifies your child to the ID number will be kept in a locked filing cabinet. Only the investigators named above will have access to the locked filing cabinet. Your child’s name will not be revealed in any document resulting from this study.

Contact Person:

Parents or students may contact Brigitte Beale, at 937.229.2713 or via e-mail at bealebrd@notes.udayton.edu or Keri Brown Kirschman, Ph.D. at the University of Dayton in St. Joseph Hall Room 301, 937.229.5404 or by e-mail at kirschke@notes.udayton.edu if they have questions or concerns during or after the study. Questions about your child’s legal rights as a research participant can be directed to Jon Nieberding, at 937.229.4053 or jon.nieberding@notes.udayton.edu

Consent to Participate:

My child may participate in this study. I understand that my child’s participation is voluntary and his or her participation will not impact his or her status in the Upward Bound academy. The investigator named above has adequately answered any and all questions I have about this study, the procedures involved, and my child’s participation. I understand that the investigator named above will be available to answer any questions about research procedures throughout this study. I also understand that I may voluntarily terminate my child’s participation, or that my child can decide not to participate in this study at any time without loss of benefit. I also understand that the investigator named above may terminate my participation in this study if s/he feels this to be in my best interest.

<table>
<thead>
<tr>
<th>Signature of Parent</th>
<th>Name (printed)</th>
<th>Date</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
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</tbody>
</table>

Student’s Name

<table>
<thead>
<tr>
<th>Witness</th>
<th>Date</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
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</tbody>
</table>
Appendix F: Assent of Student

Student Informed Assent To Participate In A Research Project
(Revised 2/12/02)

Project Title: Thoughts about the Future: Assessing the Effect of Intervention on Hope Level in Adolescents

Investigator(s): Brigitte Beale and Keri Brown Kirschman, PhD (faculty advisor)

Description of Study:
During the first week of the Upward Bound Academy at the University of Dayton you will participate in two surveys that ask you questions about your thoughts about the future as well as a survey that asks about your attitudes and behaviors. You will answer these surveys again during the last week of the Upward Bound Academy at the University of Dayton and one last time in the Fall during the Saturday academy.

The purpose of this study is to better understand teenagers views of the future and how that might impact their grades and behaviors.

In addition, the researcher named above will look at the paperwork your parents completed for Upward Bound and get some background information about you and your family. For example, your date of birth, your gender, your ethnicity, your parents educational background, and your grades in school. Some background information from the file will be reviewed again in the fall after the first academic quarter of the school year has been completed.

Adverse Effects and Risks:
It is not anticipated that you will have any negative effects as a result of your participation in this project. To our knowledge, there have been no adverse effects that have occurred in similar research investigating levels of hope in adolescents. It is possible that you may experience boredom and or eye fatigue from answering so many questions. If you need a break from reading the forms, or if you'd like a researcher to read the forms to you, you make indicate this at any time.
Duration of Study: This study will take approximately 20-30 minutes on each of three occasions to complete. You will answer 2 surveys two times during the academic academy and once again during the school year.

Confidentiality of Data: Your name will be kept separate from the forms that you complete. You will be identified on these forms with a study identification number. The sheet that identifies you to the ID number will be kept in a locked filing cabinet. Only the investigators named above will have access to the locked filing cabinet. Your name will not be revealed in any document resulting from this study.

Contact Person: Parents or students may contact Brigitte Beale, at 937.229.2713 or via e-mail at bealebrd@notes.udayton.edu or Keri Brown Kirschman, Ph.D. in SJ 301, 937.229.5404 or by e-mail at kirschke@notes.udayton.edu if they have questions or problems after the study. Questions about your legal rights as a research participant can be directed to Jon Nieberding, at 937.229.4053 or jon.nieberding@notes.udayton.edu

Consent to Participate: I have voluntarily decided to participate in this study. The investigator named above has adequately answered any and all questions I have about this study, the procedures involved, and my participation. I understand that the investigator named above will be available to answer any questions about research procedures throughout this study. I also understand that I may voluntarily stop my participation in this study at any time. I also understand that the investigator named above may end my participation in this study if s/he feels this to be in my best interest.

Signature of Student Date

Student’s Name (printed)

Witness Date
Appendix G: Parent Debriefing Form
PARENT DEBRIEFING FORM

Information about the Study
Thoughts about the Future: Assessing the Effect of Intervention on Hope Level in Adolescents

Thank you for allowing your child to participate in our study. By participating in the study, your teen has helped us understand more about hope and how programs such as Upward Bound might impact student’s feelings of hope about their academic future. In addition, we hope to better understand how hope might be related to students' grades and their overall psychological adjustment.

The first survey your child completed was called the Children’s Hope Scale and it asked questions regarding your child’s thoughts about their goals and his or her ability to reach their goals. The second survey your child answered was to understand more about his or her behavior and feelings. As we noted before, your information was not identified by name on these forms, only by a study identification number.

For further information about this area of psychological research, you may read the two articles or look at the web site cited below. In addition, if you would like the overall findings from this study, please feel free to e-mail Brigitte Beale at bealebrd@notes.udayton.edu, and a summary of the findings will be given to you upon project completion.

References


http://www.authentichappiness.sas.upenn.edu/Default.aspx
Contact Information
Participants may contact Brigitte Beale, at 937.229.2713 or via e-mail at bealebrd@notes.udayton.edu or Dr. Keri Brown Kirschman, 301 St Joseph Hall, 937.229.5404 (kirschke@notes.udayton.edu) if you have questions or problems after the study. Questions about your child’s legal rights as a research participant can be directed to Jon Nieberding, at 937.229.4053 or jon.nieberding@notes.udayton.edu Thank you for your participation.
Appendix H: Student Debriefing Form

STUDENT DEBRIEFING FORM

Information about the Study

Thoughts about the Future: Assessing the Effect of Intervention on Hope Level in Adolescents

Thank you for participating in our study. By participating in the study, you have helped us understand more about hope and how programs such as Upward Bound might impact your feelings of hope about the future.

The first survey you completed was called the Children’s Hope Scale and it asked questions regarding your thoughts about your goals and your ability to reach your goals. The second survey your child answered was to understand more about your behavior and feelings. As we noted before, your information was not identified by name on these forms, only by a study identification number.

For further information about positive psychology, you may look at the website listed below. Hope is considered to be contained within the field of positive psychology. In addition, if you would like the overall findings from this study, please feel free to e-mail Brigitte Beale at bealebrd@notes.udayton.edu, and a summary of the findings will be given to you upon project completion.

References
http://www.authentichappiness.sas.upenn.edu/Default.aspx

Contact Information
Participants may contact Brigitte Beale, at 937.229.2713 or via e-mail at bealebrd@notes.udayton.edu or Dr. Keri Brown Kirschman, 301 St Joseph Hall, 937.229.5404 (kirschke@notes.udayton.edu) if you have questions or problems after the study. Questions about your child’s legal rights as a research participant can be directed to Jon Nieberding, at 937.229.4053 or jon.nieberding@notes.udayton.edu Thank you for your participation.
References


