



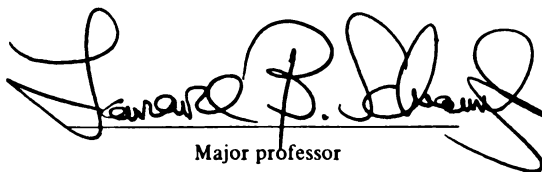


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**AN EVALUATION OF THE IMPACT OF AN INTERVENTION PROGRAM  
ON THE PERCEIVED SELF-COMPETENCE OF "AT-RISK" PREADOLESCENT BOYS**

**By**

**Brian Alexander Gilmore**

**A THESIS**

**Submitted to  
Michigan State University  
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**Department of Family and Child Ecology**

**1994**

## ABSTRACT

### AN EVALUATION OF THE IMPACT OF AN INTERVENTION PROGRAM ON THE PERCEIVED SELF-COMPETENCE OF "AT-RISK" PREADOLESCENT BOYS

By

Brian Alexander Gilmore

The purpose of this study was to evaluate the impact of a specific summer intervention program utilizing a therapeutic adventure design for "at-risk" preadolescent boys. More specifically, changes in perceived and actual competence were measured using Harter's Self-Perception Profile For Children and the parallel test, the Teacher's Rating Scale of Child's Actual Behavior. These instruments measured competence as a multidimensional construct and provided information for the intervention treatment's effect upon separate competence subscales (Physical Appearance, Scholastic Competence, Athletic Competence, Social Acceptance, and Behavioral Conduct). Research was an exploratory investigation utilizing a pre-test, post-test, follow-up design. Significant changes were found only for the experimental group's perceived competence follow-up scores ( $p=.02$ ) with the domain specific scores of Athletic Competence ( $p=.007$ ) and Physical Appearance ( $p=.02$ ) showing strongest increases when compared to initial pretest scores.

#### DEDICATION

This paper is dedicated to the memory of Dr. Maurice LaBelle. As a teacher, advisor, and friend, he inspired me to discover a passion for knowledge and pursuit of academic excellence. His inspiration, wit, and friendship will not be forgotten.

## ACKNOWLEDGMENTS

My sincerest thanks goes out to the many persons who aided and supported me throughout my theses preparation, research, and writing. Dr. Larry Schiamberg provided continuous assistance from beginning to end. Throughout the difficulty of completing my work in Colorado, his constant contact and concern made me feel as if he was right next door. This project especially reflects the high standard of advise and support he provided as my guidance committee chairperson. My deepest thanks also to Dr. Marjorie Kostelnik, Dr. Joanne Keith, and Dr. Donald Melcer. Each was invaluable in the suggestions they made, the resources they pointed me to, and the genuine interest they took in the completion of my degree. Thank you to the staff and boys of the Mayhew program, particularly Al Cantor and Dave Bird. Also a big thanks to my parents whose unselfish love and support for my success and happiness is truly felt in all my accomplishments. Finally, thank you to Carmen and K.L. This is just one of the many journeys we will share.

## TABLE OF CONTENTS

|                                                                                            | Page |
|--------------------------------------------------------------------------------------------|------|
| LIST OF TABLES.....                                                                        | vii  |
| LIST OF FIGURES.....                                                                       | ix   |
| <br>CHAPTER                                                                                |      |
| I. INTRODUCTION.....                                                                       | 1    |
| Statement of the Problem.....                                                              | 1    |
| Youth At Risk.....                                                                         | 4    |
| Factors Of Risk.....                                                                       | 4    |
| Therapeutic Adventure Programs.....                                                        | 9    |
| The Evolution of Outward Bound.....                                                        | 9    |
| Program Design and Intent.....                                                             | 11   |
| Purpose of this Research: An Ecological<br>Perspective.....                                | 13   |
| Significance and Generalizability.....                                                     | 17   |
| II. REVIEW OF LITERATURE.....                                                              | 19   |
| Introduction.....                                                                          | 19   |
| Empirical Research On "At-Risk" Populations....                                            | 21   |
| Emotionally Disturbed Youth.....                                                           | 21   |
| Psychiatric Patients.....                                                                  | 23   |
| Juvenile Delinquents.....                                                                  | 27   |
| Summary.....                                                                               | 29   |
| Empirical Research On The Theoretical Foundation<br>Of Therapeutic Adventure Programs..... | 31   |
| New Environment.....                                                                       | 34   |
| Small Group Experience.....                                                                | 37   |
| Challenging Activities Involving Risk.....                                                 | 42   |
| Debriefing/ Reflection or Processing.....                                                  | 54   |
| Summary.....                                                                               | 59   |
| Research Questions.....                                                                    | 60   |
| III. METHODOLOGY.....                                                                      | 61   |
| Description of Sample.....                                                                 | 61   |
| The Treatment/ Intervention Program.....                                                   | 63   |
| Definitions and Measurement of Variables.....                                              | 67   |
| Research Design.....                                                                       | 71   |

| CHAPTER                                                                                                     | PAGE |
|-------------------------------------------------------------------------------------------------------------|------|
| Hypotheses.....                                                                                             | 73   |
| Procedures.....                                                                                             | 74   |
| IV. RESULTS.....                                                                                            | 79   |
| V. DISCUSSION AND IMPLICATIONS.....                                                                         | 89   |
| Findings For Perceived Competence.....                                                                      | 89   |
| Findings For Actual Competence.....                                                                         | 92   |
| Future Implications.....                                                                                    | 94   |
| APPENDIX A. Self-Perception Profile For Children .....                                                      | 101  |
| APPENDIX B. Teacher's Rating Scale Of Child's Actual<br>Behavior.....                                       | 105  |
| APPENDIX C. Cover Letter Explaining Purpose Of<br>Teacher's Rating Scale Of Child's Actual<br>Behavior..... | 106  |
| APPENDIX D. Sample Of Island Phase Report.....                                                              | 107  |
| BIBLIOGRAPHY.....                                                                                           | 110  |

## LIST OF TABLES

| TABLE                                                                                                                  | PAGE  |
|------------------------------------------------------------------------------------------------------------------------|-------|
| 1. GARLAND'S THEORY OF SMALL GROUP DEVELOPMENT.....                                                                    | 40,41 |
| 2. DEMOGRAPHIC INFORMATION FOR SAMPLE OF 42 BOYS.....                                                                  | 62    |
| 3. MODEL OF RESEARCH DESIGN.....                                                                                       | 72    |
| 4. QUESTIONNAIRE RESPONSE FROM SAMPLE OF 42 BOYS..                                                                     | 78    |
| 5. MEANS AND STANDARD DEVIATIONS FOR CHANGES IN CHILDRENS' PERCEIVED COMPETENCE: COMPOSITE SCORES.....                 | 80    |
| 6. MEANS AND STANDARD DEVIATIONS FOR CHANGES IN CHILDRENS' PERCEIVED COMPETENCE: DOMAIN SCORES.....                    | 80    |
| 7. MEANS AND STANDARD DEVIATIONS FOR CHANGES IN CHILDRENS' PERCEIVED COMPETENCE: COMPOSITE SCORES.....                 | 82    |
| 8. MEANS AND STANDARD DEVIATIONS FOR CHANGES IN CHILDRENS' PERCEIVED COMPETENCE: COMPOSITE SCORES.....                 | 82    |
| 9. MEANS AND STANDARD DEVIATIONS FOR CHANGES IN COUNSELOR'S RATING OF CHILD'S ACTUAL COMPETENCE: COMPOSITE SCORES..... | 84    |
| 10. MEANS AND STANDARD DEVIATIONS FOR CHANGES IN COUNSELOR'S RATING OF CHILD'S ACTUAL COMPETENCE: DOMAIN SCORES.....   | 84    |
| 11. MEANS AND STANDARD DEVIATIONS FOR CHANGES IN PARENT'S RATING OF CHILD'S ACTUAL COMPETENCE: COMPOSITE SCORES.....   | 86    |
| 12. MEANS AND STANDARD DEVIATIONS FOR CHANGES IN PARENT'S RATING OF CHILD'S ACTUAL COMPETENCE: DOMAIN SCORES.....      | 86    |

| TABLE |                                                                                                                         | PAGE |
|-------|-------------------------------------------------------------------------------------------------------------------------|------|
| 13.   | MEANS AND STANDARD DEVIATIONS FOR CHANGES IN<br>TEACHER'S RATING OF CHILD'S ACTUAL COMPETENCE:<br>COMPOSITE SCORES..... | 88   |
| 14.   | MEANS AND STANDARD DEVIATIONS FOR CHANGES IN<br>TEACHER'S RATING OF CHILD'S ACTUAL COMPETENCE:<br>DOMAIN SCORES.....    | 88   |

## LIST OF FIGURES

| FIGURE |                                                                      | PAGE |
|--------|----------------------------------------------------------------------|------|
| 1.     | THE OUTWARD BOUND PROCESS.....                                       | 32   |
| 2.     | THE ADVENTURE THERAPY PROCESS.....                                   | 33   |
| 3.     | THE ADVENTURE EXPERIENCE PARADIGM.....                               | 51   |
| 4.     | QUESTION FORMAT FOR THE SELF-PERCEPTION PROFILE<br>FOR CHILDREN..... | 69   |

## CHAPTER I

### INTRODUCTION

What is truth? It depends on whose viewpoint you are using. From one point of view, there is nothing either true or false, good or bad, painful or pleasurable, ugly or beautiful, but thinking makes it so. ...the size of your perspective determines what truth is, within that frame of reference.

2150 A.D., Thea Alexander

#### Statement Of The Problem

The human self-concept is a complex and continuously active system of subjective beliefs about the self, which guides behavior in ways that are consistent with the perceived self (Brody, 1984). An interdependency exists between thought and actions. Perceptions of self are thought to influence the ways in which individuals act, which in turn influence the ways in which they perceive themselves (Shavelson, 1987). This relationship between self-image and human behavior provides human ecology practitioners with the opportunity to assist individuals in developing more positive self-concepts through intervention programs designed to foster growth of self-competence. Such a strategy represents a major theme of social welfare programs today, providing the conditions

necessary to help children acquire attitudes of self-acceptance based on positive feelings of competence (Brody, 1984). The concept of competence is especially important for "at-risk" youth (Garbarino, 1982, 1986), those children vulnerable to adverse developmental outcomes such as substance abuse, teen pregnancy, delinquency, or school failure and dropout. Competence can be considered as the effective functioning in relevant environments involving the interplay between individuals and their social contexts. Ford & Lerner (1992) describe a competent individual as a person capable of adjusting their behavior, thought, and emotions to meet new problems and demands or to change the context in order to better fit personal objectives. Many human developmental theorists (i.e. Garbarino, Bronfenbrenner, Ford, and Lerner) see context as being influential in all aspects of development and what it means to be a human being. Bronfenbrenner (1986) indicates that although the family is the principal context in which human development takes place, it is but one of several settings in which human development occurs. Others include neighborhoods, communities, schools, peer groups, and extracurricular activities. Individuals and their environments are mutually shaping systems, each changing over time and each adapting in response to changes in the other (Garbarino, 1982; Ford & Lerner, 1992). Child adaptation and development in the

context of one environment strongly influences adaptation and development in other contexts. Contexts of development affect individual outcomes by presenting opportunities or risks that influence positive or negative growth respectively (Garbarino, 1982). Also, Garbarino (1982) notes that individuals bring to life experiences a unique organization of personal resources or individual qualities including temperament, cognitive abilities, interpersonal skills, and a particular level of maturity which in turn affects the probability for growth and success within a given context. Ford & Lerner (1992) describe this relationship between individual and context applying the developmental contextualism model.

"...Variables from the several levels of organization comprising human life exist in reciprocal relation. The structure and function of variables from any one level influence and are influenced by the structure and function of variables from the other levels."

Thus, an individual's functioning or development is neither determined by personal characteristics (e.g., biological or psychological ones) nor context characteristics (i.e., involving either interpersonal, e.g., peer group, relations or extrapersonal-institutional or physical ecological- relations) but the pattern of relations or dynamic organization which exists between the two (Ford & Lerner, 1992).

### Youth "At-Risk"

Our present American society is becoming increasingly threatened by a growing number of youth who are "at-risk" of not making a successful transition into adulthood. Children and youth "at-risk" face a high probability that unemployment, economic dependency, and various manifestations of antisocial behavior and personal disorganization will characterize their adult lives (deLone, 1987). The general concept "at-risk" is broad, and arguably could be applied to the entire American population of youth since any child may fail to become a "healthy" adult. It is estimated that nearly one-half of the children in our country, aged 10 to 17, engage in one or more of the following problem behaviors: substance abuse, school failure, delinquency and/or early, unprotected intercourse (Dryfoos, 1990).

Demographers predict a continued increase in the population of youth that fit the "at-risk" profile for these adverse developmental outcomes (Mills, Dunham, & Albert, 1988).

#### **Factors Of Risk**

Children and youth face developmental risks when they lack (and appear unlikely to acquire on their own) the basic competencies and credentials that research has shown to be strongly associated with a successful transition from high school to college or the work force (deLone, 1987). It is implied that these children can be

identified by certain characteristics associated with them (i.e. poverty, school failure) and that these characteristics become problematic only in conjunction with events and conditions that have yet to unfold (Natriello, 1990).

The term "at-risk," although very broad, avoids blaming the child and focuses our attention toward the environmental hazards which need to be addressed (Brendtro, 1990). Researchers have attempted to identify conditions which correlate with the developmental problems of youth. These risk factors are individual or environmental hazards which increase a child or youth's vulnerability to experience negative developmental outcomes.

Thornburg, Hoffman & Remeika (1991) identify three primary conditions which create risk: poverty, lack of family guidance and support, and negative peer pressure. Bogenschneider, Small, & Riley (1991) outline five types of risk factors (individual, family, peer, school, and community) which research has shown to be related to negative developmental outcomes. Individual risk factors identified are (correlated problems in parenthesis): 1] anti-social behavior (delinquency and drug abuse), 2] alienation or rebelliousness (substance abuse), 3] and favorable attitudes toward the problem behavior (drug abuse and sexual behavior). Family risk factors identified are: 1] poor parental monitoring (antisocial

activity, substance abuse, and pregnancy), 2] distant, uninvolved, and inconsistent parenting, and 3] unclear family rules, expectations, and rewards. Peer risk factors are: 1] association with peers engaged in similar behaviors. School risk factors are: 1] school transitions, 2] academic failure (drug abuse, teenage pregnancy, and delinquency), and 3] low commitment to school. Community risk factors are: 1] low socio-economic status, 2] complacent or permissive community laws and norms, 3] low neighborhood attachment, community disorganization, and high mobility, and 4] media influences.

It's important to note that the simple presence of risk factors does not guarantee negative developmental outcomes, but rather increases the probability that problem behaviors will occur (Werner, 1990).

Bogensneider, Small, & Riley (1991) found in their review of research that "the presence of one risk factor was not more likely to create dysfunction than when no risk factors were present; with two risk factors, there was four times the chance for problem behaviors, and with four risk factors, the risk increased as much as 20 times." Those children who live in environments posing many risk factors can be considered at "high-risk" for negative developmental outcomes.

These children live in environments which may place them "at-risk" for suboptimal development. Interactions

in the home, school, and community are often marked by inappropriate, acting-out or withdrawal behaviors. Such experiences may increase the child's vulnerability to adverse outcomes because of restricted opportunities for learning the positive social interaction strategies necessary to master the daily challenges of life. Almost half of the population of youngsters aged 10 to 17 are estimated to be vulnerable to behavioral risk factors, including substance abuse, school failure, delinquency, and teenage pregnancy (Bogenschneider, Small, & Riley, 1991). The number of children with such sociocultural risks is increasing at an alarming rate. From 1970 to 1987, the poverty rate for children in the United States increased from 15 to 20 percent (Smeeding & Torrey, 1988). Such children are particularly vulnerable unless opportunities exist for promoting the successful transition to adulthood.

Crawford (1988) has emphasized that a child's education normally is a combination of experiences that occur in the home, the community, and the school. For most children, schooling provides only a part of their total educational experience. For "at-risk" youth, however, the school may be the only institution in which such broad educational development (including orientation to the world of employment) may be possible because of instability in family/community contexts (Crawford, 1988). Unfortunately, children from "at-risk" home

environments are less well prepared to fit into the competitive environment of the school (Rapoport, 1987). A paradoxical relationship may exist between the child in a "high-risk" environment and the traditional education experience. While the school institution represents a powerful resource for the development of positive competencies for "at-risk" youth, such children may see themselves as failures because of their inadequate preparation for and lack of success in the school environment (Brody, 1984).

Thirteen million school-age children are currently "at-risk" for school failure (Schorr, 1988). Those who drop out are three and a half times more likely to be arrested, six times more likely to be unwed parents, and seven and a half times more likely to be dependent on welfare. One out of every seven children fails to complete high school and a high concentration of those children are from poverty backgrounds (Schorr, 1988). School failure and poor reading performance, truancy, poor achievement and misbehavior in elementary school, and failure to master school skills throughout schooling are among the most reliable predictors of dropping out of school (Schorr, 1988).

The current structure of public schools may not be appropriate for the needs of "high-risk" youth. Schools with many "high-risk" youth often do not have sufficient resources, staff or expertise, to adequately serve their

clientele (Dougherty, 1989). Therefore, there is an unmet need for effective intervention which focuses on promoting positive relationships between youth "at-risk" and the significant ecological contexts of their lives, including the family, school and community. Opportunities should be available for all children to develop the competencies necessary to positively engage and thrive within these contexts.

The "at-risk" character of contemporary youth foreshadows a threatening image of society and contradicts promises of the American dream wherein every child is assumed to have an equal chance for quality of life. The fact that these threatening statistics continue to grow in spite of more than two decades of early intervention programs, strongly suggests the need for more effective and additional approaches (Mills, Dunham, & Alpert, 1988). It is critical to understand the severity of contemporary problems, to equate child welfare with our own, and to take appropriate and necessary directions.

### Therapeutic Adventure Programs

#### **The Evolution of Outward Bound**

One reasonably successful strategy for addressing the problems of "at-risk" youth is through selective intervention. Today, many school, camp and treatment facilities are incorporating alternative curriculums which employ an adventure model of learning to more

effectively facilitate the needs of their participants. The general goals of these programs: behavior change, increased emotional adjustment, enhancement of self-concept, and improved relationships with others (Gibson, 1979) are highly consistent with the needs of youth "at-risk" described above. Therapeutic adventure courses have been offered in the United States for over 20 years and from the start, dramatic changes in attitudes and behaviors have been reported by students, staff, parents, and involved professionals (Kimball & Bacon, 1993).

Although these programs vary according to location, season, and populations, they do share a common foundation which has evolved from the Outward Bound school (Bertolami, 1981). The Outward Bound organization was developed during World War II in Aberdovey, Wales by the late Dr. Kurt Hahn. Hahn successfully designed a survival training course to better prepare young British merchant seaman for the mental and physical challenges which awaited them at sea. Hahn's methods strongly emphasized both attitudinal preparation and experiential learning (Berman & Anton, 1988). "The intent of the program was to increase the students' activities both physically and psychologically in a progressive, graded manner. Through this approach, mastery of a wide range of physical and personal skills was thought possible (Berman & Anton, 1988)."

Outward Bound was built on the essential premise

that certain experiences could elicit prosocial values. Furthermore, Kurt Hahn is considered one of the foremost pioneers of experiential learning- of "learning by doing" (Kimball & Bacon, 1993). Bertalomi (1981) cites the Canadian Outward Bound Mountain Mountain School staff manual defining Outward Bound as:

"An educational process dedicated to the principle that the individual develops self-confidence, concern for others, and self-awareness when confronted by challenging, shared experiences based on adventure in the natural environment and through a learning process based on self-discovery and small group interactions" (Bertalomi, 1981)."

Currently, Outward Bound has grown to include over 34 schools in 17 countries, six of those located in the United States (Roland, 1981). The programs' concepts have grown to meet the needs of new contexts since its development during wartime. Hundreds of adapted Outward Bound programs employing an adventure-based education model came into existence in the 1960's and in the 1970's and 1980's that number has grown well past the thousands (Kimball & Bacon, 1993).

#### **Program Design and Intent**

Adventure programs such as; "Wilderness, Outdoor, Project and Therapeutic Adventure," "High-Risk," "Adventure, Challenge, Wilderness and Outdoor Education," and "Adventure Recreation" have been designed to promote positive personal development of their students. Participating in a series of challenging activities,

individuals learn leadership skills which help them develop physically, mentally, and emotionally. Students are placed into situations "(a) where the only resources they have to overcome new problems are basic, personal skills, (b) with others for whom the situation is equally new and frequently bewildering, and (c) when they must rely on their own initiative, resourcefulness, and determination to find a solution (Riggins, 1986)."

Activities serve as a means to an end unlike those of many traditional recreational programs where competition and winning are the main emphasis. They serve as a vehicle for personal growth and have been designed from the principles of the Outward Bound Process (Bertalomi, 1981). This process may be defined conceptually as a series of characteristic problem-solving tasks set in a unique physical and social environment, which creates a state of adaptive dissonance in the learner. The learner adapts to the dissonance by mastery of himself and his environment which reorganizes the meaning and direction of the learner's experience [see Figure 1, The Outward Bound Process, p.32] (Bertolami, 1981).

Program goals are customarily based on the expectation that activities will produce some observable changes in learning (Vogel, 1989) and personal growth. Vogel (1989) defines the goals of wilderness programs as the revelation of the individual's own uniqueness, personal qualities, and, most importantly, potential for

future growth. Miles & Priest (1990) describes the primary aim of adventure education as the development of an understanding of interpersonal and intrapersonal relationships with the enhancement of self-concept and social interaction paramount. The goals of therapeutic wilderness programs are described to include behavior change, increased emotional adjustment, enhancement of self-concept and improved relationships with others (Gibson, 1979). Other major objectives include (1) the development of students' personal competence and confidence, (2) the development of group cohesiveness and the ability for a group to work together effectively, and (3) the development of an increased aesthetic appreciation, emotional commitment, and intellectual understanding of the natural and human environments within which one operates (Roland, 1981).

"By responding to seemingly insurmountable tasks, the groups or individuals learn to overcome almost any self-imposed perceptions of their capabilities to succeed. They are able to turn limitations into abilities and as a result, they learn a great deal about themselves and how they relate to others. Participants experientially learn to become personally astute by gaining an accurate perception of their personal competence and the situational risk (Priest & Martin, 1985)."

#### Purpose Of This Research: An Ecological Perspective

The purpose of this study was to evaluate the impact of a specific summer intervention program utilizing a therapeutic adventure design for "at-risk" preadolescent boys (see Methodology, Program Overview for description

of the Mayhew program). More specifically, changes in perceived and actual competence were measured using the Self-Perception Profile For Children (previously the Perceived Competence Scale For Children) and the parallel test, the Teacher's Rating Scale of Child's Actual Behavior. The study was longitudinal, following a sample of boys through their first summer of participation in the intervention program and again four months later in the community phase of treatment.

The intervention program was based, in part, on the recognition that participants need supportive experiences that may not be available in their homes, schools, and community. The program involved a supportive summer camp experience designed to develop interpersonal skills which maximize opportunities for positive outcomes. The goal of the program was to aid in the social, emotional, physical, and behavioral development of "at-risk" youth, ages 10 to 13, in order to make them more productive members of their communities. If program objectives are accomplished, the home, school and community may become a revitalized source for sustaining and further developing the competency skills achieved during the summer camp experience.

An intervention program cannot effectively treat individuals without adapting an ecological perspective. Changes affected inside program boundaries will naturally influence reactions from relevant social contexts. To

ensure and facilitate positive responses, a cooperative relationship needs to exist between the intervention program and significant others (i.e. parent(s), teachers, and community leaders) outside program boundaries. Only then can the individual's well-being most assuredly continue to be enhanced and maintained.

The science of ecology deals with the sensitive balance that exists between living things and their environments, and the ways in which this mutuality may be enhanced and maintained (Hartman, 1981).

"We are interdependent creatures rather than independent organisms. We are interdependent not only with each other and other living species but also with the total environment in which we live. This offers us a holistic view of individuals and groups in their association with the physical, biological, and social conditions and events around them (Bubolz, Eicher, & Sontag, 1979)."

Systems and organisms do not exist independently, but coexist, reciprocally affecting and being affected by each other and the environment. Meaning and self-definition are dynamic, found within the relationships a system or organism has with its environment. An intervention program treating specific individuals ("at-risk" preadolescent boys in this study) must understand how changes in program participants influence and are influenced by interactions within and between other relevant environments (home, school, the community). This reciprocal influence, which has been termed dynamic interactionism, constitutes the primary process of human

developmental change (Ford & Lerner, 1992).

The intervention program in this research project separates boys from current environmental conditions and places them in a remote wilderness setting. Here, it is felt that individual attitudes and behavior are easier to influence and change when placed in a new environment (Kimball & Bacon, 1993; Nadler, 1993). However, to fully accept positive attitudinal and behavioral changes, boys must understand how new competencies can be utilized and influence positive outcomes in other pertinent settings. Treatment within program boundaries must be related to situations and challenges occurring at home, school and the community.

In summary, the intervention program for youth living in "at-risk" contexts structure may be most effective when: (1) The subject is separated from current environmental conditions, (2) Attitudinal and behavioral change occur in a new environment, (3) Competencies developed in treatment are applied and utilized in relevant social contexts, (4) The intervention program and social agents outside program boundaries work cooperatively for the well-being of the subject, and (5) An ecological perspective is adapted, taking into account the dynamic interactionism existing between child and environment.

### Significance And Generalizability

Youth living in "at-risk" contexts face developmental challenges that threaten healthy passage into adulthood. If the child's self-concept and self-esteem, determined by an interplay between personal and environmental factors is poor, the ability to develop the social competency necessary to overcome those challenges is threatened. The goal of the intervention program extends beyond increased social competence and improved self-concept and self-esteem at the end of treatment. Program success can only truly be felt if interpersonal skills developed inside program boundaries influence positive personal and social outcomes within the child's home environment.

Results of this research can be generalized to practitioners working specifically with youth populations from "at-risk" environments. Although different intervention approaches fostering perceived and actual competence exist (i.e. therapeutic recreation, experiential learning, Outward Bound and similar adventure programs), limited empirical research has been done to evaluate the impact of treatment on participants. Programs promoting competence and interpersonal skill development need to be available to youth who are incapable of developing these skills in their relevant environment (home, school and the community). Furthermore, intervention programs need evaluative

methods enabling them to gauge program performance to efficiently accomplish stated goals. Only through an understanding of the effects of operational procedures can human development practitioners best structure intervention to promote the well-being of youth.

## **CHAPTER II**

### **REVIEW OF LITERATURE**

#### **Introduction**

This chapter reviews research on an alternative type of intervention for "at-risk" youth, therapeutic adventure programs. These programs offer planned situational adventure experiences designed to provide optimum growth and learning opportunities for individuals and groups (see Chapter I, Therapeutic Adventure Programs). Therapeutic adventure literature has tended to focus on three major topics: program philosophy, effects on aspects of self-concept and self-esteem; and descriptions of adventure activities and various new programs (Colan, 1986). Most existing research has been theoretical. For example, in Gass' (1993) annotated bibliography for therapeutic adventure-challenge-outdoor-wilderness research (the most recent to date), only six empirical articles were listed. This reflects the current emphasis of adventure literature which has been the theoretical discussion of how and why adventure programs effect students and how to maximize positive impacts. The empirical research strongly suggests that these programs result in positive changes in the self-

concept, personality, individual behaviors and social functioning of program participants (Colan, 1986; Gibson, 1979; Kimball & Bacon, 1993). However, much research remains unpublished and locating and accessing such empirical studies has proven difficult (Colan, 1986). Another criticism of existing empirical research is that it has questionable validity and methodological weaknesses (Colan, 1986; Gibson, 1979; Kimball & Bacon, 1993; Kolb, 1988; Riggins 1986; Wright, 1983). Small sample sizes, lack of control groups, and limited follow-up have been some of the experimental limitations often cited (Kimball & Bacon, 1993).

This chapter will examine both empirical and theoretical findings as a way of framing and organizing the research questions and hypothesis posed in the current study. The first part of the chapter will address empirical studies involving populations similar to the "at-risk" youth subjects in this research. There were relatively few studies on program effects with similar populations of emotionally and behaviorally disturbed youth. As noted, research most often was theoretical, discussing possible explanations of how and why positive changes with participants are affected. These findings are presented in the second portion of this chapter (Major Components of Therapeutic Adventure Programs).

### Empirical Research On "At-Risk" Populations

Although access to research has often been limited and criticized for poor research design, the preponderance of encouraging reports suggests a strong and reliable positive effect on emotionally and behaviorally disturbed adolescents (Kimball & Bacon, 1993). In adventure and Outward Bound literature, these youth are often referred to as "troubled" and tend to represent the research populations of emotionally disturbed youth, mental health patients, and juvenile delinquents. Empirical research with these populations has focused primarily on the relationship between therapeutic adventure programs and changes in constructs related to personal growth. Constructs gaining most attention have been aspects of self-confidence (Kimball & Bacon, 1993) and self-concept/ self-esteem (Colan, 1986). This section reviews reported relationships found between "troubled" youth and their participation in therapeutic adventure programs. Many of the articles noted below have remained unpublished and were found in other author's reviews of research or Dissertation Abstracts International. As a result, research design and results are often incomplete.

#### **Emotionally Disturbed Youth**

Although therapeutic camping and adventure programming for emotionally disturbed children has been enthusiastically endorsed by professionals over the

years, there is little empirical evidence demonstrating its effectiveness as an intervention (Schwartz, 1983). However, existing research on children with behavior disorders has tended to indicate an enhancement of self-concept and increased social acceptance with peers and teachers (Roland, 1981). Research presented below would seem to suggest that these programs can be influential treatments.

An early study measuring effects with emotionally disturbed youth was Porter's (1975) research which evaluated an eight-day wilderness experience program for 54 male and females, aged 8-15, with adjustment problems. Outcomes examined were self-concept and behavior using the Piers-Harris Self-Esteem Measure and Coopersmith's Behavior Rating Form. At the conclusion of the program the experimental group tested significantly higher in self-control and social acceptance than the control group. The experimental group also showed a significant increase in esteem behavior and a significant decrease in defensive behavior both at the end and six weeks after the program, in comparison with the control group.

Schwartz (1983) evaluated the effects of a therapeutic summer camp on a group of two hundred fifty-eight 6-12 year old emotionally disturbed children. The experimental group consisted of 72 campers, while the remaining 186 nonenrolled children served as controls. Both groups were pre-tested prior to the start of camp

and post-tested 8 weeks after the programs end. Results showed the experimental group improving in interpersonal conduct, self-sufficiency, use of materials, and peer relations and decreasing in maladaptive behavior patterns (significance results were not provided).

In a more recent study involving emotionally disturbed youth, McDonald & Howe (1989) examined a group of 38 abused children residing in a residential treatment facility and found a significant difference in overall self-concept between test groups participating in challenge/ initiative activities when compared to control groups involved in a traditional recreation program. Using the Piers-Harris Children's Self Concept Scale, significant differences were found in four of the six cluster scales used to measure various components of self-concept. Behavior, anxiety, and happiness were significant at  $p < .001$  and popularity was significant at  $p < .05$ . McDonald & Howe (1989) cite other studies (Benson, 1981; Bertolami, 1981; Brown & Simpson, 1976; Crume, 1983; Kimbell, 1980; Marsh, 1984; O'Connor, 1983) which suggest that wilderness/adventure programs and involvement in challenge/initiative activities affect greater rises in self-concept scores than other types of treatment.

### **Psychiatric Patients**

The Outward Bound Program has been used as an adjunct to mental health treatment since 1975 (Colan,

1986). The preceding studies addressed program effects with populations suffering from less severe psychological, socio-emotional, and behavioral problems. Research with specific groups (i.e. mentally handicapped, schizophrenics, autistics, and substance abusers), although valuable, is less representative of the current study sample of "at-risk" youth.

Gibson (1981) examined the effects of a short-term therapeutic wilderness program as an alternative to mental-health treatment. The subjects were a group of 89 students, 66 boys and 23 girls referred by social service, school, and corrections agencies for a wide variety of problems. Measurements of self-concept and interpersonal competence represented the dependent variables of the study. Comparison of pre- and post-test scores indicated positive changes in measures of both self-concept and interpersonal competence. Thirteen independent or predictor variables (previous camping experience, institutionalization, self-esteem, academic achievement, motivation to change, understanding of benefits to be derived from a wilderness program, intactness of family, parental support for participation in the program, age, race, sex, work experience, and primary referral problem) were also examined by means of multiple regression analysis for their possible relationship to success in the wilderness program. No consistent relationship was found. The investigation

concluded that such programs provide a form of milieu therapy where treatment is provided by one's total environment and which has impact upon many different areas of an individual's self-concept and interpersonal competence.

Berman & Anton (1988) studied the effects of a wilderness therapy program on a group of 14 psychiatric inpatients aged 13 to 17 years old. Two groups of students were selected to participate in wilderness activities. The first group was adolescents diagnosed to suffer from withdrawal or acting out behaviors. The second group was diagnosed with attention deficit disorder or conduct disorder. Results of pilot studies suggest patients with intrapersonal problems in the realms of withdrawal or impulsive displays of anger, group 1, most measurably profited from wilderness therapy program on a variety of measures. These included: treatment plan objectives, behavioral symptomatology, and locus of control. Both groups appeared to undergo greater changes while participating in the wilderness therapy program compared to other phases of hospitalization.

Two additional studies (Adams, 1970 & Kaplan, 1974) found a significant relationship between physical, psychological, and socio-emotional variables and participation in therapeutic adventure programs for young psychiatric patients. Adams (1970) found significant

increases in the physical adequacy, self-esteem, and self-reliance of 19 male and female adolescent patients of a state hospital. Decreases in general maladjustment and severity of pathology were also demonstrated.

Measurements were taken some 16 to 28 months after a 30 day wilderness experience. Although approximately 85% of the participants remained nonhospitalized at the time of the follow-up, the lack of a control group makes definitive conclusions uncertain (Berman & Anton, 1988). The second study (Kaplan, 1974) found wilderness therapy programs to influence increases in self-esteem, a more realistic self-evaluation, and an increased sense of concern for other people. The sample consisted of 10 male adolescent patients of a mental health center in Michigan. Other studies show encouraging discharge rates following wilderness program participation (Jerstad & Selzer, 1973 and Stitch & Sussman, 1981) [Berman & Anton, 1988].

In a more recent study, Davis-Berman & Berman (1989) evaluated a wilderness therapy program for twenty-three 13-18 year olds receiving outpatient counseling.

Decreases in self-reported symptoms and increases in self-efficacy and self-esteem were found from analysis of pre- and post-tests (significance was not reported) using Rotter's Internal-External Locus-of-Control Scale, the Brief Symptom Inventory, Piers Harris Children's Self-Concept Scale, the M. Sherer Measure of Self-Efficacy,

and several other measures designed for this program (reviewed in Gass, 1993).

### **Juvenile Delinquents**

Programs for juvenile delinquents have traditionally been successful using Outward Bound and therapeutic adventure program approaches (Colan, 1986).

Psychological and behavioral benefits most often reported for delinquent youth participating in adventure programs include reported changes in: self-concept, feelings of competency, self-esteem, self-image, and self-actualization (Teaff & Kablach, 1987).

In Boudette's (1989) study of the effects of 24-day Outward Bound course as a supplemental component to a traditional probation program, the variables of self-esteem, self-awareness, and sense of belonging were examined for an experimental group of 69 juvenile offenders. Subjects were randomly assigned to experimental and control groups. Those subjects assigned to the experimental group participated in the 24-day Outward Bound Course while subjects assigned to the control group continued with their designated probation plans. The Jesness Inventory and the Global Self-Esteem Scale was administered to both groups at pre-, post-, and follow-up testing intervals. Results showed significant differences between experimental and control groups only in the area of self-esteem.

In another study, Callahan (1989) examined the

academic and therapeutic potential of an adapted Outward Bound program for adjudicated juvenile delinquents. Self-esteem, self-efficacy, locus of control, problem-solving skills, school behavior and follow-up academic achievement were measured using the Tennessee Self-Concept Scale, a modified Internal-External Scale, the Generalized Expectancy of Success Scale, and the Means-Ends Problem Solving Procedure. The variables self-esteem, locus of control, and problem-solving skills showed significant increases over pre-, post-, 6-month, and 12-month follow-up assessment periods. For variables related to school behavior and follow-up academic achievement, (negative comments, grade point average, absences/truancy, and discipline comments), a significant change was found only for negative comments.

In a more recent study, Wright (1993) examined the effects an adapted Outward Bound program had on adjudicated youth. The study measured the program's effects on self-esteem, self-efficacy, locus of control, cardiovascular fitness, and problem solving. His analysis revealed significant differences between experimental and control groups in self-esteem ( $p < .01$ ), internality ( $p < .01$ ), and fitness ( $p < .05$ ) at the end of the wilderness program. The experimental group also showed significant increases in self-esteem ( $p < .001$ ), self-efficacy ( $p < .01$ ), internality ( $p < .001$ ), and fitness ( $p < .001$ ) between the beginning and end of the program.

In Brown and Simpson's (1976) examination of a six week "outdoor challenge experience" for juvenile offenders, it was also determined that the adventure program was effective in the enhancement of self-concept among youths (McDonald & Howe, 1989).

There also appears to be a low rate of recidivism among graduates of therapeutic adventure programs when compared to control groups (Wichmann, 1991). For example, Wright (1983) notes the research of Kelly and Baer (1968), William and Chun (1973), Cytrynbaum and Ken (1975), and Hileman (1979). These studies all reported reductions of recidivism with incarcerated juvenile delinquents after participating in a wilderness therapy program.

### **Summary**

Several positive outcomes for "special" youth populations have been reported involving psychological, socio-emotional or behavioral outcomes. In Berman & Anton's (1988) review of empirical research, the authors found four commonly accepted outcomes of wilderness therapy programs. These were: (1) increases in self-esteem, (2) increases in self-awareness (3) increases in self-assertion, and (4) an increased acceptance of others. Bertolami (1981) noted that personal growth of wilderness program participants seemed primarily related to the personality variables of self-esteem and personal control. Other benefits noted in Dattilo & Murphy's

(1987) review of empirical studies included: increases in muscular strength and cardiovascular efficiency (McAvoy & Dustin, 1986), development of cooperation, trust and problem solving skills (Moore, 1986), enhancement of self-esteem and personal confidence (Rohnke, 1986), development of positive perception of self (Meier, 1978) and opportunities to exercise choice and to accept the consequences of those choices (Miles, 1978). Gibson's (1979) review of research found participation in adventure programs to affect: the development of group support, improved self-esteem, improved relationships with others, increased participation in activities, and decreased hostility.

The intent of wilderness adventure programs is fairly clear, to affect positive changes in the psychological, socio-emotional, and physical functioning of program participants (Gass, 1993; Gibson, 1979). Although access to empirical literature has been limited and many research designs questionable, the overwhelming consensus has been that these programs would appear to accomplish their goals. Given this circumstance the current investigation addresses, in part, the question of whether a therapeutic adventure program can increase the competence of "at-risk" youth as rated by the participant, program counselors, classroom teachers, and parent or legal guardian (see Research Questions, at the end of this chapter). Previous research would strongly

suggest that a therapeutic adventure program should produce such positive outcomes.

Empirical Research On The Theoretical Foundations Of  
Therapeutic Adventure Programs

In addition to research on "at-risk" populations and outcomes, a major focus of adventure program research has been on the general characteristics and theoretical foundations of programs that produce positive changes in participants (Colan, 1985; Gibson, 1979;). In order to understand the impact of these programs, there must be a theoretical foundation from which specific research questions can be developed that are broadly accepted and highly generalized (Wichmann, 1991). Adventure experiences are designed from the basic principles of the Outward Bound Process (Walsh & Golins, 1976). The Outward process (see Figure 1, p.32) contains the major components and characteristics which many researchers have identified as being influential in producing desired therapeutic changes in program participants. These are: 1) a unique physical environment, 2) a unique social environment, 3) a characteristic set of problem solving tasks, 4) a state of adaptive dissonance, 5) mastery, and 6) the reorganization of meaning and direction of the learner's experience. Building on the work of Walsh and Golins (1976), Nadler (1993) has designed a theoretical framework, the Adventure Therapy Process (see Figure 2, p.33), which contains the critical aspects of adventure

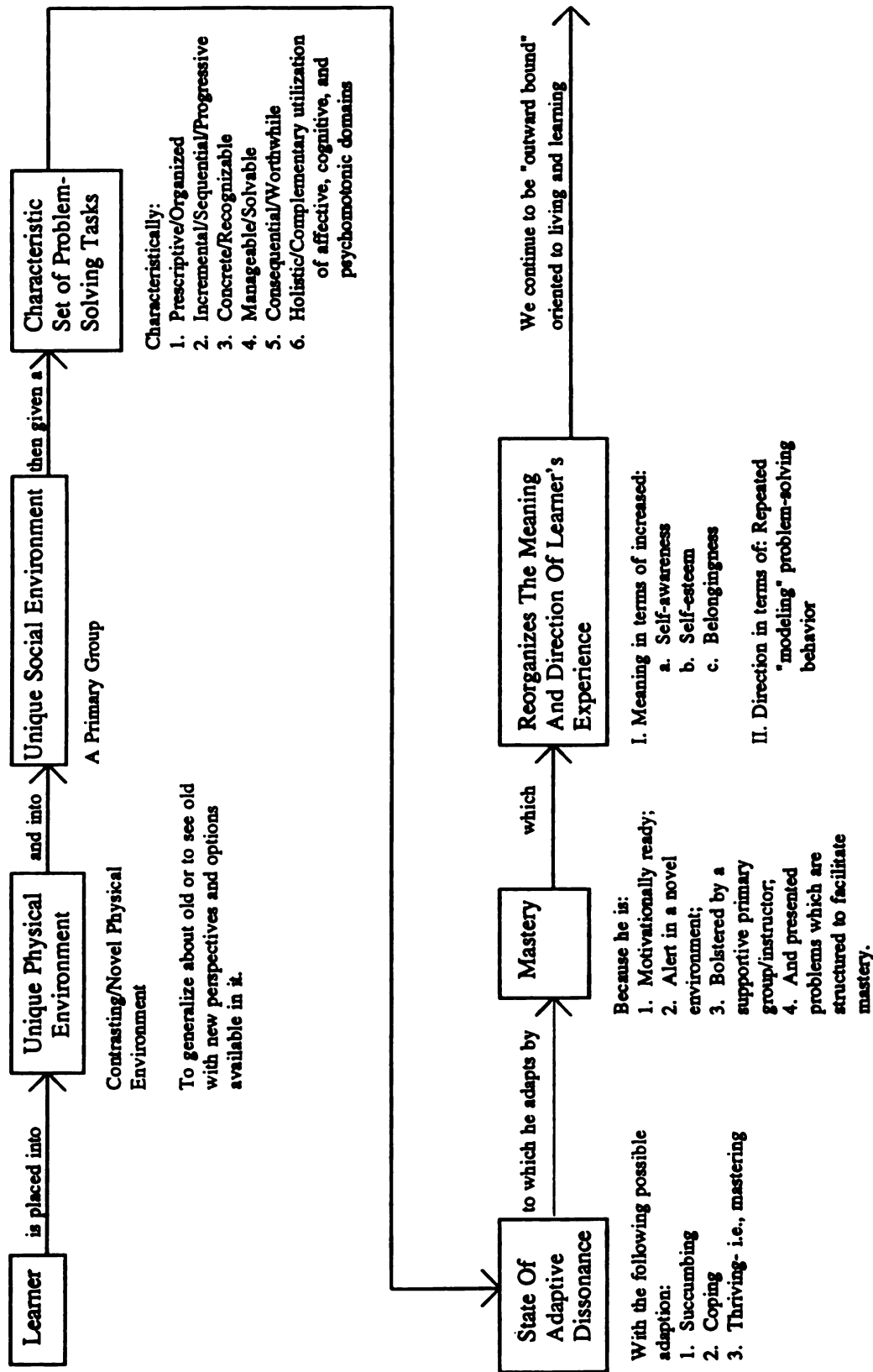


Figure 1.1 The Outward Bound Process

Note: Adapted from "The Exploration of the Outward Bound Process" by V. Walsh and C. Collins. Denver: Colorado Outward Bound Publications, 1976.

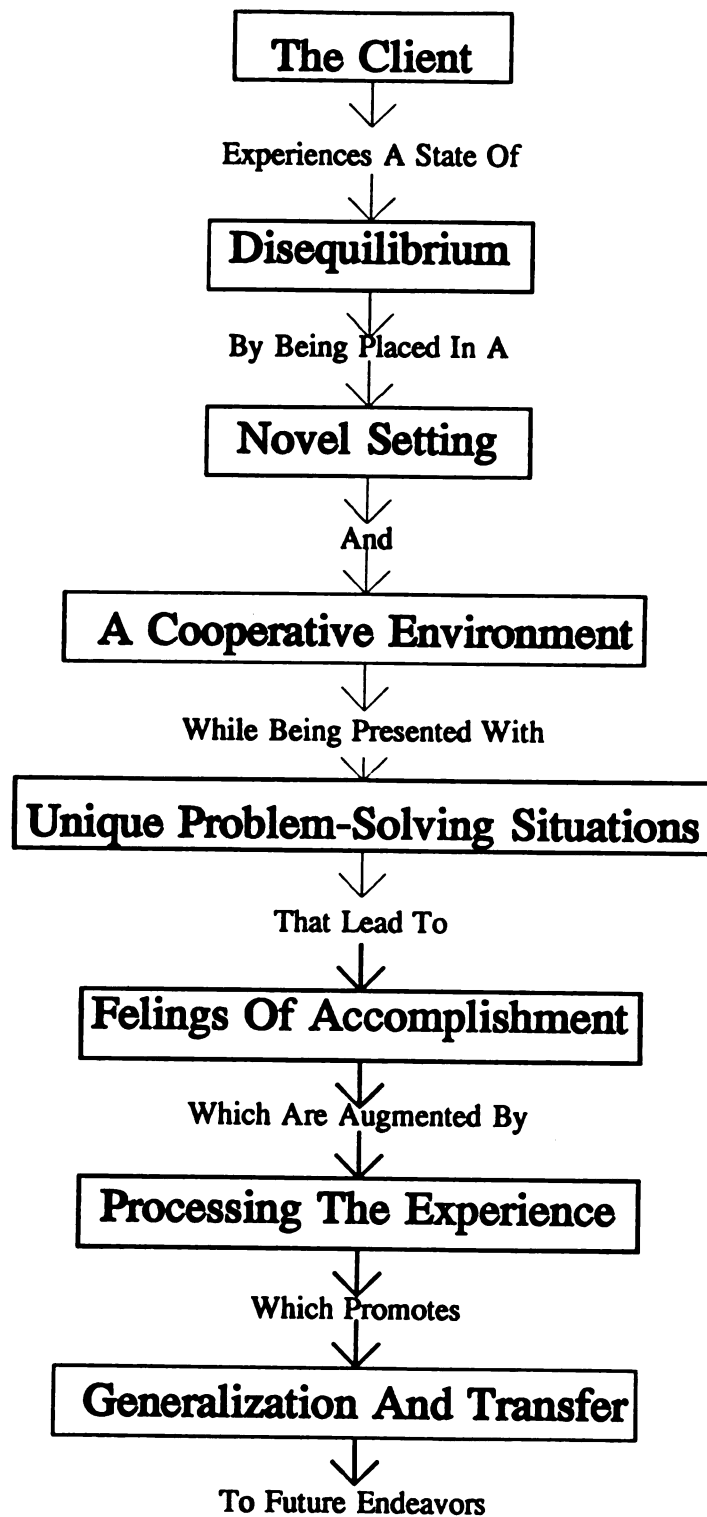


Figure 2 The Adventure Therapy Process, Nadler (1993)

therapy programs which he feels are most influential in helping people break through into new behavioral territories. The Adventure Therapy Process is described as follows: "The client experiences a state of disequilibrium by being placed into a novel setting and a cooperative environment while being presented with unique problem-solving situations that lead to feelings of accomplishment which are augmented by processing the experience which promotes generalization and transfer to future generalization and transfer to future endeavors (Nadler, 1993)."

This section addresses the major components and characteristics outlined in Walsh and Golin's (1975) and Nadler's (1993) theoretical frameworks. These components represent theoretical assumptions which provide insight into reported positive participant outcomes (see, Empirical Research, above). Most literature on adventure programs examines to some degree major components or common characteristics shared by varying adventure organizations. Those found in this review of research were: 1] a novel, unfamiliar or new environment, 2] small groups and a feeling of community, 3] challenging activities involving risk, and 4] debriefing or reflection upon experience.

#### **New Environment**

The practice of structuring outdoor activities in alternative settings (i.e. summer camps, clubs, and

groups) as a therapeutic medium has both historical and empirical significance (Berman & Anton, 1988). Research has shown new environments to be ideal settings for influencing social, emotional and physical behavioral changes with older children and adolescents (Berman & Anton, 1988; Gass 1993; Nadler 1993; Gibson 1979; Kimball 1986; & Riggins 1986).

For one, the wilderness provides a simplified, natural setting for change to occur. Without the distractions of televisions, stereos, video games and other technological devices, the opportunity for youth to repress physical, social, and emotional responses within these potentially nonproductive activities is eliminated (Kimball & Bacon, 1989). A simplified environment presents problems in a clear cut, "what you see is what you get" manner. Gass (1993) notes that this greatly reduces the side-issues or external stressors which commonly complicate and disable youth in their problem solving efforts.

In addition, new environments are ideal settings for youth to learn new response alternatives. Berman & Anton (1988) argue that the wilderness adventure setting provides a non-ambiguous, objective learning atmosphere where in the consequences of participants' behaviors are immediate and natural. In this new environment, previous defensive and maladaptive behaviors are now out of context (Berman 1988; Gass 1993; Gibson 1979; Kimball &

Bacon 1989 & Mills, Dunham, & Alpert, 1988).

Viewing negative behaviors (i.e. acting out or withdrawal) as conditioned responses to one's environmental setting, the youths' behavior establishes an equilibrium or homeostasis between him/herself and their environment. Kimball (1986) suggests that placement in novel settings encourages new behavioral responses. Given a new framework where the cause and effect relationship of dysfunctional behaviors and their outcomes can be distinctly realized, adaptive rather than defensive behaviors are elicited (Berman & Anton, 1988). With the removal of external circumstances which reinforce conditioned responses to their environment, youth are more naturally inclined to function with common sense and maturity (Mills, Dunham & Alpert, 1988). Gibson (1979) sees the wilderness as offering a high degree of predictability with little ambiguity which evokes coping as opposed to defensive behavior.

"Conflict is provided only by natural environmental forces, demanding a change of outlook on the part of participants. ...The physical freedom of the new setting weakens undesirable behaviors that are no longer adaptive and the successful wilderness experience can make the participant feel, for perhaps the first time in his life, that he is a useful individual with potential for both growth and achievement (Gibson, 1979)."

False securities found within familiar settings are removed and youth who may characteristically behave with great therapeutic resistance are enabled to gain new

perspectives on old patterns and assumptions. Immersed within the new and unfamiliar setting, the young person is given fertile ground to develop prosocial problem-solving and coping techniques (Kimball, 1986).

Finally, new environments may be perceived by the participant as metaphors for transformation. Kimball & Bacon (1993) describe new environments as possessing aesthetic, archetypal, and spiritual/transcendent qualities. Bacon (1983) proposes that wilderness adventure participants unconsciously equate the novel environment with an archetype that Jungians sometimes call "Sacred Space." This archetype is inextricably linked with the concept of transformation and change. Bacon feels that by participating in a wilderness adventure program, students have implicitly accepted the possibility that some kind of powerful transformation may occur. This transformation has often been compared to a "rite of passage" and hundreds of anecdotes exist that suggest the enormous psychological power wilderness challenge programs have had upon participants (Kimball & Bacon, 1993).

#### **Small Group Experience**

A second component of wilderness programs often discussed in literature as being therapeutic is the small group experience (usually ranging between 6-14 people). The use of small groups to aid in the acquisition of therapeutic goals has been recognized as a cornerstone of

adventure programs (Kerr & Gass, 1987). Kerr & Gass (1987) see the primary focus of the therapeutic group as the purposeful changing or directing of behaviors to create a healthier social structure for the individual. The group forms an entity where participants are held accountable for their behavior and its effect on others (Kerr & Gass, 1987).

Through his review of research findings, Riggins (1986) found a positive correlation between small learning group size and learning effectiveness (Riggins, 1986).

"The small group social environment promotes individual decision making within an atmosphere of group support, one can find individuality within a cooperative framework, a reciprocity occurs, where strengths and weaknesses can be traded off and each member contributes to the problem-solving group of alternatives (Riggins, 1986)."

Kimball & Bacon (1993) indicate that it is through the small group process that youth can develop the greatest insights into their behavior. The countless challenges group members encounter demand the development of a cohesiveness which promotes mutual dependence, trust, honest emotional expression, and sharing. To be effective, a system of exchange needs to evolve such that the group learns to maximize member strengths while simultaneously minimizing member weaknesses. Youth realize that the power of a supportive group is greater

than the sum of its individual resources. Success is achieved through a mutual dependence between members where each group member learns to recognize the significance their behavior has in affecting others. It is within this supportive small group context that the "at-risk" youth may encounter a much desired experience of family, community, and in-depth relationships with others (Kimball & Bacon, 1993).

Kerr & Gass (1987) suggest that as group members interact in demanding situations, they progress through definitive stages of group development. Garland's theory of small group development (see Table 1, p.40,41) outlines this evolution and the unique characteristics which arise during each stage of group development (Kerr and Gass, 1987, pp.39-40).

#### Indirect Competition/Cooperation

Group cooperation is essential in order to succeed at the various adventure activities (Gibson, 1979). This cooperative framework requires effective group dynamics if personal comfort and security is to be achieved (Kimball & Bacon, 1993). Competition in adventure recreation is indirect or competition with one's self, one's fears, and one's perception of limitations rather than with other individuals or groups (Dattilo & Murphy, 1987). Dattilo & Murphy (1987) indicate that adventure activities shift the emphasis away from winning toward learning and development fostered by indirect

TABLE 1  
Garland's Theory Of Small Group Development

"Stage 1) Pre-affiliation

...group members strive to become familiar with one another and their environment. ...relationships tend to be superficial and stereotypic. Members are generally ambivalent toward involvement and often experience some kind of anxiety about participating in the group. Individuals' past experiences with other groups... influence how they view this new small group environment...

Stage 2) Power and Control

Once it has been established that the group is potentially safe and worth emotional investment, members begin testing group power and control issues. Issues can include, but are not limited to, problems of status, communication, and defining group values. ...familiar frames of reference may not be satisfactory for governing current behaviors, and new behaviors are often implemented in their place. ...issues concerning the balance of individual versus group needs occur. The amount of control members have on deciding and planning group activities is also a central issue of this stage.

Stage 3) Intimacy

...members have decided to affiliate with one another and must contend with sibling-like rivalries and deeper emotions that are characteristic of close relationships. Members are more invested in the group and there tends to be a greater proficiency in planning and conducting projects as a group. There is also a greater desire to immerse oneself in group life and to share emotions arising out of common experiences.

Stage 4) Differentiation

...group's development, roles and status of group members tend to be less rigid. Individual differences and personal needs are accepted more freely and the group becomes more functionally autonomous from the leader(s). The group has created its own identity and members often compare themselves to other groups and previous

social situations. The group is seen as being cohesive, yet is able to identify both individual and group needs.

**Stage 5) Separation**

...conclusion of the group experience where members are placed in a situation where they must find new resources for meeting needs. The task of separation can be accomplished in a positive manner (e.g., reviewing experiences to analyze benefits of the group, incorporating growth of group experiences into future interactions) or a negative one (e.g., denying that the experience is over, regressing to previous negative behaviors as the experience draws to a conclusion) [found in Kerr & Gass, 1987]."

competition. This allows participants to enhance and appreciate their unique abilities and skills, rather than simply comparing themselves with others. Success no longer has to occur at the expense of others. Unlike traditionally competitive recreational settings, the focus of group cooperation becomes development and growth rather than defeat at the expense of others (Dattilo & Murphy, 1987). Groups cooperatively participate in a "no-win, no-lose" context where the only feeling of competition is internal (Kolb, 1988).

Riggins (1986) outlines the following key components of cooperative/competitive environments. First, emphasis is placed on students taking charge of their own learning. As a result, students assume more responsibility for their goals, performance standards, levels of aspiration, and the pace at which they learn. Second, it is imperative that students treat each other as resources. Cooperative environments generate three valuable processes: (a) the development of superior problem-solving strategies; (b) interaction which benefits low-ability and medium-ability students; and (c) achievement motivation enhanced by group work (Riggins, 1986).

### **Challenging Activities Involving Risk**

Within a new and unfamiliar environment, personal growth and competencies are stimulated and discovered through the youth's involvement with a series of

adventure activities. These activities take the form of challenges which test the participants abilities in a natural environment where an element of risk is present and the outcome of the experience is doubtful (Dattilo & Murphy, 1987). Risk is considered the potential to lose something of value, whether it be physical, mental, or socio-emotional (Priest & Martin, 1985).

The therapeutic use of risk is paramount in providing theoretical insights towards how adventure activities may function as vehicles for self-enhancement and prosocial skill development. Wilderness adventure programs offer a wide range of challenges, each requiring participants to tap inner resources and commit themselves if success is to be achieved (Dattilo & Murphy, 1987). The risk these activities offer is most often perceived as being very high where as in reality there is little or no actual danger. To achieve maximum therapeutic outcomes with students, the counselor must be sensitive to the youth's readiness for each activity. The goal is to produce a tension that is creative and growth-oriented rather than overwhelming and defeating (Kimball, 1986).

Walsh and Golins (1976) identify six characteristics which offer a model to better understand the problem-solving tasks that adventure activities present. First, problems are structured as to fit the needs and the capabilities of the learner. Second, problems are presented incrementally so that skills development

parallels the graduated difficulty of the tasks. This allows confidence to be developed through successive achievements and accumulated skills. Third, problems are concrete. Success and failure stand out in bold relief and tasks have a beginning and a clear end. Fourth, problems are manageable. While they can be solved, success is not guaranteed. Students cannot simply dismiss a problem as impossible and successful resolution requires maximum motivation. Fifth, problems offer real consequences. Success or failure is readily apparent. Feedback to the learner is immediate. Because the outcomes are consequential, the individual and the group learn to assume responsibility for their actions and choices. Sixth, tasks are holistic. Problem resolution requires the students to draw upon the full complement of their physical, emotional, and cognitive resources (Kimball & Bacon, 1993).

#### Opportunities for Success with Failure Oriented Youth

Gass (1993) describes the tension produced in challenging activities as a healthy use of stress which he terms "eustress." Successful mastery of stressful experiences allows students to achieve beyond their self-perceived limits, opening new grounds for self-definition (Gibson, 1979).

"When failure-oriented adolescents summon the courage, discipline, and resolve to master a difficult challenge, they have challenged their self-definition as well. Interpreted metaphorically, either

consciously or unconsciously, mastery experiences set the stage for new psychological perceptions (Kimball & Bacon, 1993)."

In Riggins (1986) review of research, he finds that if students experience failure more than 60 percent of the time they will form a negative relationship to learning the task at hand. This same review also suggests that students are more likely to be motivated when they are able to praise themselves and feel good about their performance because they have accomplished or surpassed the goals they have set. Adventure activities are carefully constructed, multifaceted experiences which involve individuals in situations which challenge their sense of efficacy and counteract patterns of failure (Kimball, 1986). They offer an attractive alternative for those youth who might otherwise reject prosocial contexts as opportunities for personal growth.

"At-risk" youth are seen as interpreting new experiences through a set of interpretations already in place, programmed into the brain as a result of prior experiences (Mills, Dunham, & Alpert, 1988). Mills, Dunham, & Albert (1988) argue that these individuals develop a cognitive framework or frame of reference which produces negative attitudes towards school and a poor self-concept of themselves in relation towards learning. They use the term "learned insecurity" to describe such "at-risk" behavior (i.e. destructive acting out or

withdrawal) as an outcome to the conditioned negative self-concepts youth develop in relation to school and other social institutions. As at-risk youth experience repeated failure in school and with nondeviant peers, they reject these contexts as sources of support and self-esteem (Mills, Dunham, & Alpert, 1988). When these individuals are confronted with adventure challenges, it's natural that they will behave in a manner congruent with how they perceive their ability to deal with stress. Opportunities now exist to break cycles of failure.

#### Breaking the Cycle of Failure

Wilderness adventure students participate in activities that challenge dysfunctional behaviors and reward functional change (Gass, 1993). Activities are experiential in nature and learning occurs through direct, active experiences which challenge the participants sense of efficacy (Kimball, 1986). Gass (1993) has adapted several elements inherent in the experiential learning process and applies them to therapeutic adventure activities.

- "1. The client becomes a participant rather than a spectator in therapy.
2. Therapeutic activities require client motivation in the form of energy, involvement, and responsibility.
3. Therapeutic activities are real and meaningful in terms of natural consequences for the client.
4. Reflection is a critical element of the therapeutic process.

5. Functional change must have present as well as future relevance for both clients and their society (Gass, 1993)."

Gass (1993) views the client as an individual who is in a "systemic relationship" with dysfunctional behaviors that are homeostatic in nature. The use of stress therapeutically ("eustress") has the potential to disrupt the equilibrium between the client and unhealthy behaviors allowing a new context for change to occur. This concept is described as "disequilibrium." Nadler (1993) defines "disequilibrium" as an internal conflict between cognitive processes, a psychological tension or pressure in which the individual reattempts to establish homeostasis. It occurs when persons are taken from a state of comfort and placed into situations of emotional intensity, dissonance, or disorder. A breakthrough occurs when the participant uses a new behavior or changes an attitude or belief to reduce the disorder. This process of reestablishing equilibrium through the use of "eustress" has been referred to as "adaptive dissonance" (Gass, 1993).

In this way, the path is open for youth to gain insight into how their impulsive or antisocial behaviors may work to their disadvantage. Through consistent reinforcement (both positive and negative) of the child's behavior, "social foresight" or the ability to anticipate the interpersonal consequences of one's actions, may be gained (Brown, 1983). Adventure activities help the

child learn to be accountable for their actions. As youth develop responsibilities, they become empowered to choose between good and bad behaviors (Knapp, 1989). Knapp (1989) describes this as the "technology of effectiveness," a process where youth can learn the pros and cons of adopting a positive mental attitude. By choosing a positive attitude, apparent failures can now be viewed as opportunities for helpful feedback.

"Not reaching a goal can be turned into something positive, whereas if you choose a negative attitude, failure becomes a self-fulfilling prophecy and pulls you down. By understanding this technology, some students will learn a structure through which they can examine their thoughts feelings and behaviors. They can see that they have options. They realize that they don't have to be marionettes at the end of strings that are controlled by authority figures (Knapp, 1989)."

#### The Adventure Experience Paradigm

Challenge can be thought of as the interplay between risk and competence (Priest, 1990). Priest & Martin (1985) suggest that adventure experiences are influenced by one's perception of the risk inherent in the activity, on one's perception of their competence to meet or overcome that risk, and the instance in time when the experience occurs. Thus, adventure experiences are individually specific, situationally specific, and chronologically specific and a function of individual competence, situational risk and time (Priest & Martin, 1985).

The Adventure Experience Paradigm (Priest & Martin, 1985) offers a conceptual model that diagrams the adventure experience and potential outcomes for the participant. Based on the works of Ellis (1973) and Csikszentmihalyi (1975), the Adventure Experience Paradigm (see Figure 3, p.51) theoretically interprets the relationship between risk (the potential to lose something of value) and competence (a synergy of skill, knowledge, attitude, behavior, confidence, and experience) (Priest, 1990). For the student to benefit most from a challenging situation, successful outcomes require a balance between the skills an individual possesses and the challenge they give themselves (Davies & Berman, 1989).

Ellis' "optimal arousal theory of play behavior" (1973) suggests that individuals perform best when they are engaged in an optimum level of arousal. To this end, people seek stress in environmental situations which stimulates and brings out a higher level of performance. However, if the stress of a given situation is too low, the tendency is for individuals to become underaroused or lethargic. Likewise, if the stress of a given situation is too high, the tendency is for individuals to become overaroused or nervous. In both situations their performance will drop off accordingly (Priest & Martin, 1985). For intrinsic motivation to be enhanced the wilderness adventure program must foster feelings of

competence and a sense of self-control (Riggins, 1986).

Priest & Martin (1985) overview Csikszentmihalyi's Flow Model (1975) which describes the delicate balance between personal skills and environmental challenges. Csikszentmihalyi terms challenges as "action opportunities" and a participant's response as "action capabilities." When "action opportunities" match "action responses" the state of a "Flow Experience" occurs. Csikszentmihalyi believed that when a person's skills and the challenge presented balanced one another then this "Flow" level of arousal occurred. Also, a "Peak Experience" was thought possible when "action opportunities" and "action capabilities" exactly match one another at the extreme limits of capability. Csikszentmihalyi also describes two states which border each side of the "Flow," "Boredom" and "Anxiety." These states may be thought of as being congruent with Ellis' concept of "underarousal" and "overarousal." The components of risk and competence form the axes for the conceptual model of the Adventure Experience Paradigm (see Figure 3, p.51). Building on the previous models discussed, the Adventure Experience Paradigm offers five conditions which may arise from the interplay of risk and competence: "Adventure," "Experimentation & Exploration," "Misadventure," "Disaster & Devastation," and "Peak Adventure." Looking at Figure 3, we see that the condition of "Experimentation" and "Exploration" arises

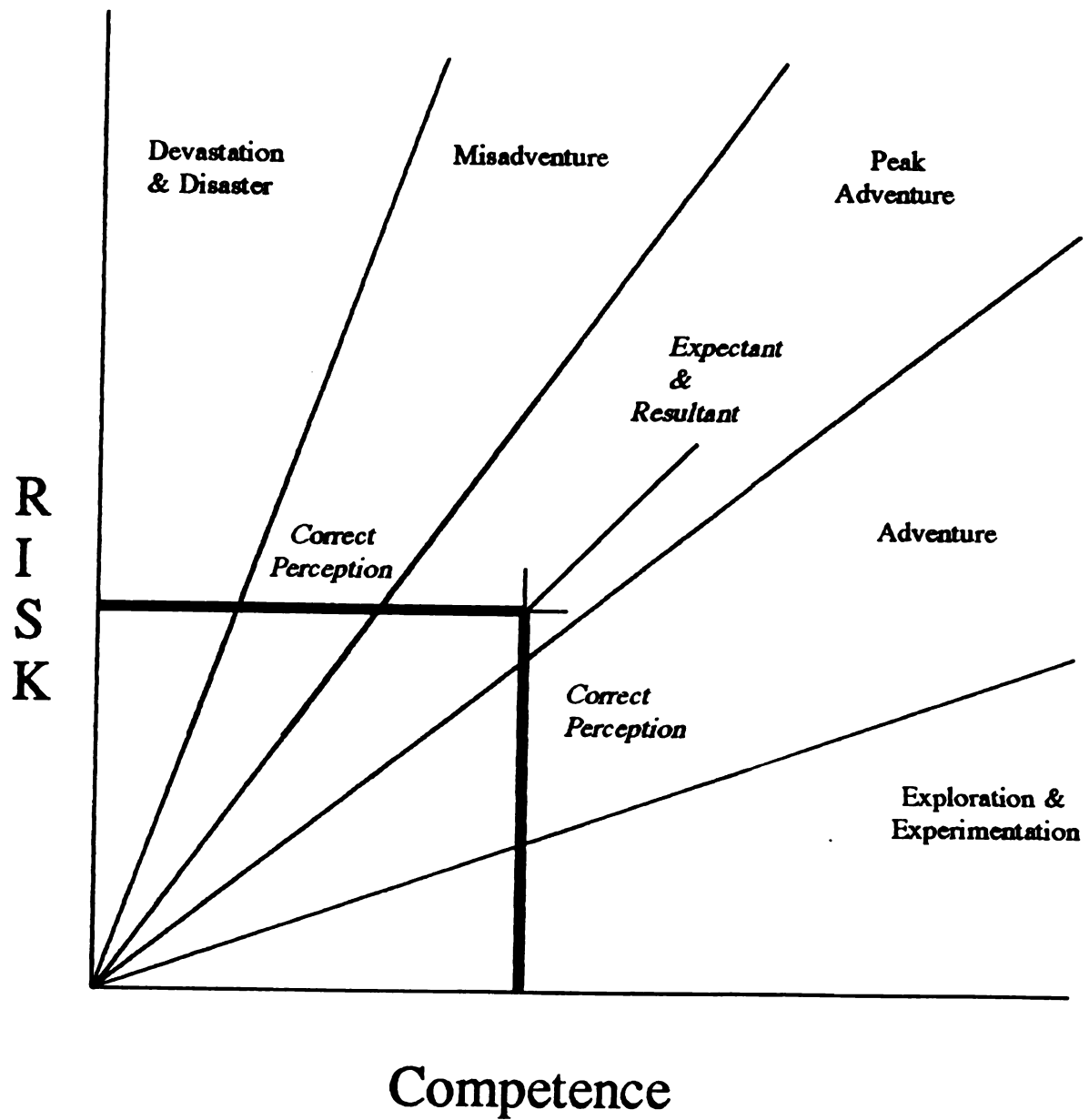


Figure 3: The Adventure Experience Paradigm, Priest & Martin (1985)

in situations where risks are low and an individual's competence high. The conditions of "Adventure," "Peak Adventure," and "Misadventure" occur as risks increase and/or competencies decrease. Finally, "Devastation and Disaster" may arise if risks are high and competencies are low. This condition has no place in the adventure programs and should be controlled for at all costs (Priest, 1990).

To better understand the dynamics of the Adventure Experience Paradigm, it is important to review Priest & Martin's description of three different types of risk and competence: "Real," "Actual," and "Perceived." According to Priest & Martin (1985), "Real Risk" is the danger inherent in the situation and "Real Competence" is the skill of the individual. These are uncertain values and can only be estimated. They represent the uppermost possible limits for each variable and it's impossible to know for certain where the real values will lie. "Actual Risk" is the amount of "Real Risk" which actually occurs in a given setting and "Actual Competence" the amount of "Real Competence" which an individual can muster. Actual values arise from an interaction between the individual and situation and dictate the condition of the adventure experience which results. "Perception of Risk" (or challenge) and "Perception of Their Own Competence" (or ability) are subjective assessments, representing the best evaluation of real values and are not always

accurate.

Priest & Martin (1985) stress that since real values may only be estimated, it is the perceived values which define the goal a person sets for an adventure experience. The resultant condition, as an outcome, is determined by the actual values. If the perceived values are in accordance with the actual values, then the resultant condition will be the one which was desired. However, if misperceptions occur, as is often the case, then although the individual sought one condition, another is likely to result (Priest & Martin, 1985).

Therapeutic adventure programs employ a facilitated adventure experience which is both structured and controlled. The experience is structured since the facilitator or leader sets up the level of the challenge to custom fit the participant and controlled because the risks that are manipulated are strictly the perceived values (Priest, 1990). Priest & Simon (1985) point out that through a manipulation of the risk variables, potential changes in competence variables are made possible.

"By first raising the perceived risk, while keeping actual risk low, a shift in expected conditions toward misadventure occurs. Participants expect trouble, but since actual values do not change the outcome is easily dealt with and they are surprised by their ability to respond successfully. Further such experiences result in a experientially learned astuteness of their actual competence. As actual competence improves than actual

risk levels may also be raised to match competence levels accordingly and to maintain conditions of adventure, peak adventure and misadventure as primary learning conditions (Priest & Martin, 1985)."

Thus, astuteness is achieved; first by bringing participants' perceptions more in line with their actual levels; and second by raising their actual levels to meet the real upper limits of their competence (Priest, 1990).

The final product of the facilitated adventure experience is personal growth. This is affected by incorporating feelings of stress and anxiety to form a sense of perceived risk, the amount of which depends on the type of activity and how it is presented (Kolb, 1988). As mentioned, the ability of individuals to experience adventure recreation is influenced by their perceptions of their skills relative to the challenge presented as much as by their actual abilities to perform (Dattilo & Murphy, 1987). Individual and groups learn to overcome self-imposed perceptions of their capabilities to succeed, turning limitations into opportunities for self-knowledge, skill development, and socialization (Priest & Martin, 1985).

#### **Debriefing/ Reflection or Processing**

Wilderness challenges are high in ambiguity, presenting a sort of Rorschach ink blot test to the student who must interpret or structure the task demands

as well as his/her response to it (Gass, 1993). Debriefing/ reflection or processing is the technique used in adventure programs where group members and the leader(s) discuss what happened during an activity. Through this technique, participants express their behaviors, reactions, and feelings, thereby reinforcing and recognizing the adventure experience (Roland, 1981). This promotes an internal, self-directed, reflected form of reinforcement as opposed to the more traditional form of external reinforcement given by the teacher (Roland, 1981). The result allows participants to achieve a feeling of closure or completeness in their experience (Hammel, 1993).

Davies & Berman (1989) feel that reviewing individual and group performance develops the educational side of these activities and in doing so differentiates them from leisure pursuits and other activities that are ends in themselves. He sees debriefing as having two main purposes. First, it should allow participants to recognize and clarify what they did, felt, and found out. Secondly, it should enable group members to build on what was learned for preparation towards the next experience. Thus, as group members interpret and share adventure experiences, they move beyond the familiar and are compelled to form new perceptions, becoming aware and appreciating the development of skills and attitudes (Davies & Berman, 1989).

More important than the skills learned or the challenges accomplished are the deep meanings that the student becomes enabled to understand and internalize (Gillette, 1990). It is theorized that the stress produced from adventure activities causes the participant to "project" a clear representation of their behavior patterns, personalities, structure, and interpretations into the challenge situation (Gass, 1993). Debriefing allows the leader or therapist to actively design and frame adventure experiences around critical issues for clients, focusing on development of specific treatment outcomes (Gass, 1993). Clapp & Rudolph (1993) feel therapeutic change is best facilitated through behavior, action, and reflection. Insight into the nature of problems does not produce positive change by itself; change best occurs from translating insight into action through the active experiencing of new experiences (Clapp & Rudolph, 1993). Thus, processing both enhances the present therapeutic value of the adventure experience and increases the positive integration of functional therapeutic change for future use by the client (Gass, 1993).

#### Transfer of Learning and Generalization

Its vital that learning experiences occurring within program boundaries hold significance for the student in future contexts (i.e. home, school, work). This impact that a particular experience has on future learning

experiences is considered transfer of learning or simply transfer (Gass, 1990). Nadler (1993) describes generalization and transfer as follows: "The goal of outdoor adventure experiences is to assist clients in forming their own linkages to what they are learning. This allows clients to integrate their new knowledge and desired behavior with their lifestyle during the remainder of the course and continue with these changes when they return home." Bacon (1983) describes learning as a metaphoric function in which the individual confirms or reorders their sense of reality by relating previous experiences with present ones. He feels that the effectiveness of the metaphor is dependent on the extent to which the experience is isomorphic or similar in structure to the normal life situation of the student. Kimball & Bacon (1993) feel that to best ensure a metaphoric connection is made, wilderness challenges should be framed in a way that helps the student recognize the connection between present experiences and issues in their daily lives. The authors give an example of how a physically demanding day hike might be presented to a group of teens. To facilitate a metaphoric experience, the group leaders might introduce the activity as a special opportunity to develop compassion for others and as a chance to find out whether the group can stick together and help each other under stress. Without such a introduction, most students would view the

hike as an endurance test. If the students were limited to this viewpoint, it is likely that the stress involved the activity would result in heroic endurance, interpersonal isolation, and a fragmenting of the group into subgroups of quarreling individuals. However, with proper introduction the students could experience the same hike as a metaphor for interdependence, healthy social functioning, and compassion (Kimball & Bacon, 1993). Thus, staff members act as translators between the student and teachable moments of the course, helping students see daily-life implications of their wilderness experience and interpreting the symbols and metaphors that abound (Kimball & Bacon, 1993).

To conclude, how activities are debriefed/ reflected upon or processed is crucial for effective transfer and generalization to occur. Although these techniques will vary, Gass (1990) suggests the following characteristics will assist the transfer of learning when processing an adventure experience:

- "1) Present processing sessions based on the student/client's ability to contribute personally meaningful responses. Use feedback that is well-intended, descriptive, specific, and directed toward positive change.

- 2) Focus on linking experiences from the present and future learning environments together during the processing session. This can often be accomplished by actually contracting with the students for this to occur.

3) When possible, debrief prior to and throughout the learning experience and not just at the end of it. This allows students to continually focus on the future applicability of the adventure experience (Gass, 1990)."

### **Summary**

The true value and effectiveness of adventure programs lies in how learning experienced during adventure activities will serve the learner in the future (Gass, 1990). To this end, the adventure experience should be structured, facilitated, and processed with the developmental needs of the participant in mind. Mills, Dunham, & Albert (1988) argue that many "at-risk" youth develop a cognitive framework or frame of reference which produces negative attitudes towards school and a poor self-concept of themselves in relation to learning. Therapeutic adventure programs are concerned with breaking the cycle of failure that many of these children fall into by challenging dysfunctional behaviors and rewarding functional change. The empirical research discussed above has shown that adventure programs can be an effective intervention for youth with developmental needs. The current study adds to the preceding literature through the investigation of a therapeutic adventure program's influence upon a sample of "at-risk" boys. As discussed in Chapter I, Introduction, the experimental group represents a growing number of youth facing developmental risks due to a lack of basic

competencies and credentials strongly associated with a successful transition from high school to college or the work force (deLone, 1987).

#### Research Questions

- 1) Do "at-risk" preadolescent boys' levels of perceived competence (the child's self-evaluation of his scholastic, social, athletic, physical, and behavioral attributes which facilitates adaptation and effective functioning in relevant environments) increase during their participation in a therapeutic adventure program?
- 2) Do "at-risk" preadolescent boys' levels of actual competence (the attainment of relevant scholastic, social, athletic, physical, and behavioral goals in specified contexts, using appropriate means and resulting in positive developmental outcomes) as rated by camp counselors increase during their participation in a therapeutic adventure program?
- 3) Do "at-risk" preadolescent boys' levels of actual competence as rated by a parent or legal guardian increase during their participation in a therapeutic adventure program?
- 4) Do "at-risk" preadolescent boys' levels of perceived competence as rated by his classroom teacher increase during their participation in a therapeutic adventure program?

## **CHAPTER III**

### **METHODOLOGY**

The purpose of this study is to evaluate the impact of a specific therapeutic adventure program, The Mayhew Program, on the perceived and actual competencies of youth living in "at-risk" settings. The research is an exploratory investigation utilizing a pre-test, post-test, follow-up design. This chapter addresses six methodological considerations: (a) description of sample, (b) the treatment/intervention, (c) conceptual definitions, (d) research design, (e) hypotheses, and (f) procedures.

#### Description Of Sample

The unit of analysis for this study was 42 boys, aged 10-12, participating in an intervention program for high-risk preadolescent youth. There were 84 boys enrolled in the 1990-1991 program year. Each boy participates in the program for a two year period. The sample for this study was 42 newly enrolled program participants (see Table 2, p.62). The demographic information presented in Table 2 indicates that the vast majority of boys were from low socioeconomic status families. 33.3% of the boys came from families with an

TABLE 2  
Demographic Information For Sample Of 42 Boys

|                         | Single Parent, Mother | Mother, Remarried        | Both Parents             | Grandmother              | Both Grandparents | Other     |
|-------------------------|-----------------------|--------------------------|--------------------------|--------------------------|-------------------|-----------|
| Family Structure        | 33 (78.6%)            | 3 (7.1%)                 | 0 (0%)                   | 2 (4.7%)                 | 2 (4.7%)          | 2 (4.7%)  |
|                         | <u>2</u>              | <u>3</u>                 | <u>4</u>                 | <u>5</u>                 | <u>6</u>          | <u>7</u>  |
| Family Size             | 7 (16.7%)             | 12 (28.6%)               | 14 (33.3%)               | 5 (11.9%)                | 3 (7.1%)          | 1 (2.4%)  |
|                         | <u>4th</u>            | <u>5th</u>               | <u>6th</u>               |                          |                   |           |
| Grade                   | 7 (16.7%)             | 23 (54.8%)               | 12 (28.6%)               |                          |                   |           |
|                         | <u>10</u>             | <u>11</u>                |                          |                          |                   |           |
| Age                     | 18 (42.9%)            | 24 (57.1%)               |                          |                          |                   |           |
|                         | <u>under \$10,000</u> | <u>\$10,000-\$15,000</u> | <u>\$15,001-\$20,000</u> | <u>\$20,001-\$25,000</u> | <u>\$25,000+</u>  | <u>NA</u> |
| Annual Household Income | 7 (16.7%)             | 14 (33.3%)               | 10 (23.8%)               | 5 (11.9%)                | 2 (4.7%)          | 4 (9.5%)  |

annual household income between \$10,000-\$15,000 and almost 75% of the boys were families whose annual income was less than \$20,000. Family structure was typically single parent, female headed households (78.6%) and none of the children resided with both parents. The majority of boys enrolled were in the fifth grade (54.8%). Seven boys were in the 4th grade (16.7%) and twelve were in the sixth grade (28.6%). The personalities of these children defy generalities- some are outgoing, others withdrawn and socially insecure; some are very bright, while several are intellectually challenged; some are street-wise and lack effective self-control, while others come from overprotective and sheltered home environments and need to develop stronger interpersonal skills. These boys were nominated for the Mayhew Program by school principals, teachers and counselors, social workers, Boys' Club directors, youth athletic programs, probation officers, and other New Hampshire youth officials.

#### The Treatment/ Intervention Program

The Mayhew Program is a therapeutic wilderness adventure program for "at-risk" preadolescent boys throughout the state of New Hampshire. Boys spend two summers involved in a highly structured camp environment. Each child attends one of two summer camp sessions. Half (42) of these boys are returning for a second year while the other half are just beginning their involvement with The Mayhew Program. Adult staff act as positive role

models, helping the children gain better self-control and build a healthier self-image. Throughout the rest of the year, program community workers interact with the child in their home and school environment, relating the summer learning experience to daily challenges.

#### **Program Goals And Objectives**

Behavioral, social, and athletic goals are developed through staff-child interaction to meet the unique needs of each child. These mutually agreed upon objectives typically include the following: to develop positive behavioral changes, to increase one's sense of self-worth, to develop acceptance and an increased use of socialization skills, to develop new and increased athletic and recreational skills, to improve one's physical condition, to improve hygiene and knowledge of proper nutrition, to develop the ability to cope with the demands of group problem-solving, and to develop positive approaches to the demands of group and individual competition.

Objectives are achieved in the context of the highly structured daily schedule for each boy. In this intensive living/working/playing together environment, each small success is swiftly rewarded with praise, encouragement, and visible rewards (ribbons, trophies, bandanas, etc.). Emphasis is placed on improvement, effort and participation by all. Each activity, every meal, during transitions from one event to the next

offers the opportunity to learn the lessons of cooperation, manners, self-control, and performing for the good of the group. As successes build so does the confidence a boy has in himself. Finding achievement within a group setting offers a boy feelings of self-worth through interaction with others, building his sense of trust in the world around him.

### **Discipline**

One of the most important aspects of treatment at Mayhew is the adherence to a clear and fair set of guidelines. Boys need to know the behavioral boundaries and consequences of their actions ahead of time. One set of rules exists which all staff members must apply. All disciplinary action results in a plan. The original incident is discussed and what lessons were learned. A plan is developed by both boy and staff to avoid that sort of trouble again.

### **Intervention Activities**

Competitive athletics are central to the Mayhew schedule. Cabin groups participate in three leagues: softball, basketball, and floor hockey. Improved socialization, good behavior, giving one's best effort, handling victory or disappointment are all focus points while children are engaged in athletic activity.

Cabin groups go on two modest hikes. These offer the chance 1) for boys to take their Mayhew behavior outside the program; 2) for boys to appreciate nature; 3)

for boys to conquer a new challenge; and 4) to provide the opportunity to learn wilderness skills.

Crew rowing is a microcosm of all that is done on the island: it is a challenging, often unpleasant and awkward task, but the cabins which best manage to work together and apply themselves fully to this activity are inevitably the most successful.

Wilderness adventure activities represent a major portion of the activities that cabin groups participate in. These activities are an approach to education, counseling, recreation, and life that is engaging, active, and challenging, and that places a high level of expectation within an atmosphere of support and caring. Wilderness adventure activities utilize the Challenge Ropes Course, often associated with Outward Bound. The course is a blend of low and high challenges designed to allow individuals and groups to achieve successes beyond their own expectations (major components and empirical research on adventure activities are discussed in Chapter II, Review of Literature).

### **Cabin Group**

The primary focus of a boy's summer activity is his cabin group. The cabin becomes the boy's family, their team, and their base of identity in the program. There are six groups of seven boys each session. Each cabin is carefully put together to make each group roughly equal

in terms of athletic ability, behavior, age, size, and leadership potential.

The cabin group is the vehicle in which each child experiences daily activities. Boys are quickly educated to the daily schedule, program philosophies, and discipline system. A sense of group unity is a main focus of each group. It is in this supportive environment consisting of seven kids and two counselors that personal goals and program objectives can be achieved.

#### Definitions and Measurement of Variables

The dependent variables or outcome measures of the proposed research were both the perceived competence of the 42 first year Mayhew participants and the actual competence of the same participants, as rated by significant others (their Mayhew counselors, their parents, and their school teachers). The independent or treatment variable was participation in the Mayhew intervention program for preadolescent boys, as described above.

Conceptually, PERCEIVED COMPETENCE refers to a child's self-perception of his ability to interact in a given situation in such a manner that proves effective or maximizes the probability of producing, maintaining, or enhancing positive outcomes. More specifically, it is the child's self-evaluation of his scholastic, social, athletic, physical, and behavioral attributes which

facilitates adaptation and effective functioning in relevant environments.

PERCEIVED COMPETENCE was measured using the Self-Perception Profile For Children developed by Harter (1985) [previously the Perceived Competence Scale For Children] (Refer to Appendix A). This 36-item, four-point scale contains six subscales yielding scores in the following domains: (1) scholastic competence, (2) social acceptance, (3) athletic competence, (4) physical appearance, (5) behavioral conduct, and (6) global self-worth. The model underlying the construction of the scale is based on the assumption that children eight and older make discrete judgements about their competence in different domains (Harter, 1988). Although there is strong support for this model, thus far it has been used primarily with middle- and upper middle-income, predominately white subjects.

Subscales represent five major competence domains the author determined most relevant to elementary school children and a measure of global self-worth. Harter considers global self-worth to be a measure separate from competence domain scores and not a summing or average of individual domain scores (e.g., Coopersmith's self-esteem measure). Her inclusion of this scale allows the study of the influences of domain specific perceived competence ratings upon self-worth. This study focused on the five competence domains not on the relationship between those

domains and global self-worth. Scores from that subscale were disregarded.

A question format was developed to avoid socially desirable responses (see Figure 4, p.69). By using a "structured alternative format," respondents are presented a description of two types of children and asked to: 1) decide which kind of kid sounds more like him and 2) is the chosen description really true or just sort of true for him.

| Really<br>True<br>for me | Sort of<br>True<br>for me |                 |               | Really<br>True<br>for me | Sort of<br>True<br>for me |
|--------------------------|---------------------------|-----------------|---------------|--------------------------|---------------------------|
| -----                    | -----                     | Some kids       | Other         | -----                    | -----                     |
| -----                    | -----                     | often forget    | but kids can  | -----                    | -----                     |
|                          |                           | what they learn | remember      |                          |                           |
|                          |                           |                 | things easily |                          |                           |

Figure 4. Question Format For The Self-Perception Profile For Children

Each item is scored from 1 to 4, with a score of 1 indicating low perceived competence and a score of 4 reflecting high perceived competence. The correlation between perceived competence ratings and scores on the Children's Social Desirability Scale was .09 (Harter, 1982).

Harter (1985) reported internal consistency reliabilities for all subscales using Cronach's Alpha (an index of internal consistency). Subscale reliabilities ranged from .71 to .86. Factor loadings for each subscale were substantial, the range of average cross-

loadings was between .04 and .08 (Harter, 1985).

Conceptually, ACTUAL COMPETENCE refers to a child's interactions in a given situation which prove effective or maximize the probability of producing, maintaining, or enhancing positive outcomes for the interactor. More specifically, it is the attainment of relevant scholastic, social, athletic, physical, and behavioral goals in specified contexts, using appropriate means and resulting in positive developmental outcomes.

ACTUAL COMPETENCE was measured using the Teacher's Rating Scale Of Child's Actual Behavior (Harter, 1985). This 15-item, four-point scale was developed by Harter (1985) to parallel the Self-Perception Profile For Children. The scale taps independent judgements of significant adults (e.g. teachers, counselors, and parents) on the child's adequacy in each domain: (1) scholastic competence, (2) social acceptance, (3) athletic competence, (4) physical appearance, and (5) behavioral conduct. The format is basically the same as the Self-Perception For Children (Refer to Appendix B, Teacher's Rating Scale Of Child's Actual Behavior).

Conceptually, TREATMENT IN AN INTERVENTION PROGRAM FOR HIGH-RISK BOYS refers to the Mayhew Program (see discussion above).

TREATMENT FROM AN INTERVENTION PROGRAM FOR HIGH-RISK BOYS will be measured by whether the boy completes the Mayhew program during the six month period of the

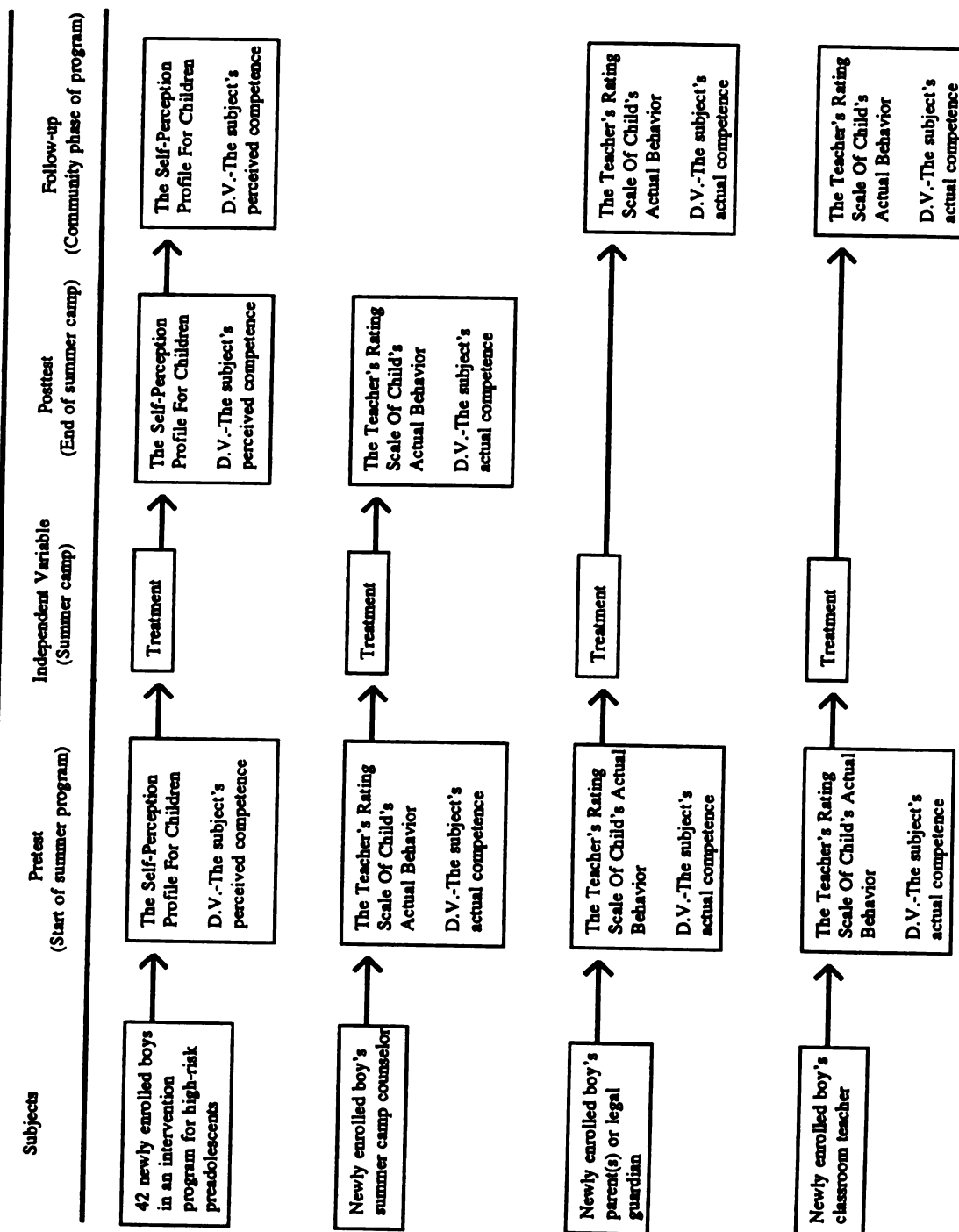
research.

### Research Design

The design of this exploratory study involved a pre-test, post-test, follow-up investigation using a panel of 42 "at-risk" boys participating in a two year intervention program. The objective was to evaluate the impact of the intervention program (The Mayhew Program) on the competence of first year participants. More specifically, the research measured changes in perceived competence and actual competence as rated by significant adults; this being their camp counselor, parent(s) or legal guardian, and their classroom teacher. Scores were received for both returning and newly enrolled participants, however, for purposes of this study only measurements for the sample of 42 first year boys is reported. Since this was an exploratory pilot study, no control group was used.

Table 3, Conceptual Model Of Research Design (p.72), provides a succinct outline of this study. The first column describes the subjects tested; the second column, the pre-test administered and the dependent variable; the third column, the independent variable (the summer camp); the fourth column, the post-test administered and the dependent variable; and the fifth column, the follow-up administered and the dependent variable. The subject's perceived competence was measured using The Self-Perception Profile For Children, administered three times

TABLE 2  
Model Of Research Design



throughout the course of the study and the subject's actual competence was measured using The Teacher's Rating Scale Of Child's Actual Behavior, administered twice during the course of the study.

The current research design was used to examine hypotheses derived from the four research questions presented in Chapter II.

- 1) Do "at-risk" preadolescent boys' levels of perceived competence increase during their participation in a therapeutic adventure program?
- 2) Do "at-risk" preadolescent boys' levels of actual competence as rated by camp counselors increase during their participation in a therapeutic adventure program?
- 3) Do "at-risk" preadolescent boys' levels of actual competence as rated by a parent or legal guardian increase during their participation in a therapeutic adventure program?
- 4) Do "at-risk" preadolescent boys' levels of perceived competence as rated by his classroom teacher increase during their participation in a therapeutic adventure program?

#### Hypotheses

- H01 The intervention experience will increase a boy's level of perceived competence from the beginning to the end of his participation in a summer intervention program for "at-risk", preadolescent

boys.

- H02 Positive changes in perceived competence will be sustained four months after the conclusion of the summer intervention effort.
- H03 The intervention program will increase the level of actual competence, as rated by camp counselors, from the beginning to the end of the summer intervention program.
- H04 The intervention program will increase the level of actual competence, as rated by his parent or legal guardian, from the beginning of the summer intervention program to four months after the conclusion of the summer intervention effort.
- H05 The intervention program will increase the level of actual competence, as rated by classroom teachers, from the beginning of the summer program to four months after the conclusion of the summer intervention effort.

### Procedures

The Self-Perception Profile for Children, which measured perceived competence (see Appendix A), was administered to each newly enrolled program participant three times during the course of this research: 1) a pre-test was administered at the beginning of each summer session; 2) a post-test was administered at the end of each summer session; 3) finally, a follow-up test was given four months into each boy's school year (see Table

3, Conceptual Model Of Research Design, p.72).

The child's actual competence as rated by others was measured using Harter's Parallel Teacher-Rating Scale (see Appendix B). As outlined in the conceptual model of research design (see Table 3, p.72), this test was administered to each subject's summer camp counselor, parent(s) or legal guardian, and classroom teacher. Each boy's summer counselor completed the Parallel Teacher-Rating Scale five days into the start of the summer program. The timing of this pre-test was delayed to allow counselors an adequate period to assess each child's competency levels. Counselors were administered the same test at the end of the summer camp to obtain post-test scores. The pre-test administered to each boy's parent(s) or legal guardian was mailed out with a return postage paid envelope at the start of the summer program. The name was changed from The Teacher's Rating Scale Of Child's Actual Behavior to The Parent's Rating Scale Of Child's Actual Behavior, but besides the title change the test remained identical. These tests were asked to be filled out and returned by the end of the summer program. The Parent's Rating Scale Of Child's Actual Behavior was again mailed out with a return postage paid envelope during the follow-up testing four months after their son's completion of the summer camp. The Parallel Teacher-Rating Scale was administered to the child's classroom teacher twice during the course of this

research. The pre-test was mailed out with a return postage paid envelope at the start of the summer program and was asked to be returned by the start of the new school year. The Teacher's Rating Scale Of Child's Actual Behavior was again mailed out with a return postage paid envelope during the follow-up testing four months after the boy's completion of the summer camp. The pre-test was completed by the subject's classroom teacher for the school semester preceeding his enrollment in the Mayhew Program. The post-test was completed by the subject's classroom teacher for the school semester following his enrollment in the Mayhew Program. A cover letter accompanied each questionnaire mailed to parent(s) or legal guardian and classroom teacher explaining the purpose of the test and the importance of its completion (see Appendix C).

Table 4 (p.78) shows the total number of questionnaire responses for the sample of 42 boys. The responses varied for each test for several reasons. For The Self-Perception Profile for Children, the pretest was administered to 41 boys from the total sample. One boy was absent due to a physical examination scheduled for him during the testing period. Two other questionnaires were not appropriately completed and disregarded making the total number of subjects for the pretest 39. The post-test was administered to 33 boys from the total sample. The other nine boys were on the summer

intervention program camping trip as a reward for their achievements during the summer. During the follow-up testing, two boys declined to complete the questionnaire, such that the total number of subjects tested for the follow-up was 40.

The Teacher's Rating Scale of Child's Actual Behavior noted in Table 4 reflects the number of questionnaires returned by summer camp counselors, parent(s) or legal guardian, and classroom teachers. All questionnaires for the sample of 42 boys were returned for counselor's pre-test and post-test ratings on the child's actual competence. For the parent(s) or legal guardian's rating of their child's actual competence, 27 pretest and 22 follow-up questionnaires were mailed back. The return for the classroom teacher's rating of each boy was somewhat higher, 39 pretest and 35 follow-up questionnaires were mailed back.

**TABLE 3**  
**Questionnaire Response From Sample Of 42 Boys**

---

**The Self-Perception Profile For Children**

Pretest.....n=39

Posttest.....n=33

Follow-up.....n=40

**Teacher's Rating Scale Of Child's Actual Behavior**

**Counselor's Rating**

Pretest.....n=42

Posttest.....n=42

**Parent's Rating**

Pretest.....n=27

Follow-up.....n=22

**Classroom Teacher's Rating**

Pretest.....n=39

Follow-up.....n=35

## **CHAPTER IV**

### **RESULTS**

#### **Hypothesis 01**

The intervention experience will increase boys' level of perceived competence from the beginning to the end of their participation in a summer intervention program for "at-risk," preadolescent boys.

A T-Test was used to compare the pre-test and post-test group means for the sample of 42 boys administered the Self-Perception Profile for Children (previously the Perceived Competence Scale for Children). The dependent variable, perceived competence, was defined (see METHODS: Variables) and measured as a multidimensional construct. Five subscales of The Self-Perception Profile for Children (scholastic competence, social acceptance, athletic competence, physical appearance, and behavioral conduct) were measured and combined to give a composite score of perceived competence. Results for the composite perceived competence score and domain specific scores of perceived competence are reported in Table 5 (p.80) and Table 6 (p.80) respectively.

Hypothesis 01 was not supported. Although, post-test group mean scores increased for the composite score

TABLE 5  
Means and Standard Deviations for Changes in Childrens'  
Perceived Competence: Composite Scores

| Composite<br>Score      | Pretest<br>(n=39) | Posttest<br>(n=33) | 2-Tail<br>Probability |
|-------------------------|-------------------|--------------------|-----------------------|
| -----                   |                   |                    |                       |
| Perceived<br>Competence |                   |                    |                       |
| x                       | 79.79             | 82.38              | .47                   |
| Sd                      | 13.60             | 16.45              |                       |
| -----                   |                   |                    |                       |
| ***p<.01                | **p<.05           | *p=.10             |                       |

TABLE 6  
Means and Standard Deviations for Changes in Childrens'  
Perceived Competence: Domain Scores

| Domain<br>Scores         | Pretest<br>(n=39) | Posttest<br>(n=33) | 2-Tail<br>Probability |
|--------------------------|-------------------|--------------------|-----------------------|
| -----                    |                   |                    |                       |
| Physical<br>Appearance   |                   |                    |                       |
| x                        | 16.48             | 17.86              | .16                   |
| Sd                       | 4.06              | 4.24               |                       |
| Scholastic<br>Competence |                   |                    |                       |
| x                        | 15.67             | 16.69              | .34                   |
| Sd                       | 4.34              | 4.77               |                       |
| Athletic<br>Competence   |                   |                    |                       |
| x                        | 16.03             | 16.45              | .61                   |
| Sd                       | 3.65              | 3.48               |                       |
| Social<br>Acceptance     |                   |                    |                       |
| x                        | 16.44             | 16.78              | .72                   |
| Sd                       | 3.86              | 4.18               |                       |
| Behavioral<br>Conduct    |                   |                    |                       |
| x                        | 15.18             | 14.58              | .52                   |
| Sd                       | 3.76              | 4.00               |                       |
| -----                    |                   |                    |                       |
| ***p<.01                 | **p<.05           | *p=.10             |                       |

and all domain scores but one, Behavioral Conduct ( $x=15.18$  compared to  $x=14.58$ ,  $p=.52$ , neither the composite score nor any of the domain specific scores had increases large enough for significance at the  $p<.05$  level or at the  $p<.10$  level. Changes in perceived Physical Appearance ( $x=16.48$  compared to  $x=17.86$ ) showed strongest direction towards supporting Hypothesis 01 with a 2-Tail Probability of .16. The next strongest group mean increase was found for Scholastic Competence ( $x=15.67$  compared to  $x=16.69$ ,  $p=.34$ ), followed by the Composite Score ( $x=79.79$  compared to  $x=82.38$ ,  $p=.47$ ), Athletic Competence ( $x=16.03$  compared to  $x=16.45$ ,  $p=.61$ ), and Social Acceptance ( $x=16.44$  compared to  $x=16.78$ ,  $p=.72$ ).

#### Hypothesis 02

Positive changes in perceived competence will be sustained four months after the conclusion of the summer intervention effort.

Pre-test and follow-up group means were compared using a T-Test to determine the significance of changes in perceived competence. Results are shown for composite (Table 7, p.82) and domain specific scores (Table 8, p.82).

T-Test results support Hypothesis 02 for the composite score ( $x=79.79$  compared to  $x=87.53$ ,  $p=.02$ ) and for two of the five domain specific scores: Athletic Competence ( $x=16.03$  compared to  $x=18.26$ ,  $p=.007$ ) and

TABLE 7  
Means and Standard Deviations for Changes in Childrens'  
Perceived Competence: Composite Scores

| Composite<br>Score                | Pretest<br>(n=39) | Follow-up<br>(n=40) | 2 Tail<br>Probability |
|-----------------------------------|-------------------|---------------------|-----------------------|
| Perceived<br>Competence           |                   |                     |                       |
| x                                 | 79.79             | 87.53**             | .02                   |
| Sd                                | 13.60             | 15.53               |                       |
| ***p<.01      **p<.05      *p=.10 |                   |                     |                       |

TABLE 8  
Means and Standard Deviations for Changes in Childrens'  
Perceived Competence: Domain Scores

| Domain<br>Scores                  | Pretest<br>(n=39) | Follow-up<br>(n=40) | 2-Tail<br>Probability |
|-----------------------------------|-------------------|---------------------|-----------------------|
| Athletic<br>Competence            |                   |                     |                       |
| x                                 | 16.03             | 18.26***            | .007                  |
| Sd                                | 3.65              | 3.51                |                       |
| Physical<br>Appearance            |                   |                     |                       |
| x                                 | 16.48             | 18.63**             | .02                   |
| Sd                                | 4.06              | 4.21                |                       |
| Scholastic<br>Competence          |                   |                     |                       |
| x                                 | 15.67             | 17.18               | .11                   |
| Sd                                | 4.34              | 4.03                |                       |
| Social<br>Acceptance              |                   |                     |                       |
| x                                 | 16.44             | 17.82               | .14                   |
| Sd                                | 3.86              | 4.35                |                       |
| Behavioral<br>Conduct             |                   |                     |                       |
| x                                 | 15.18             | 15.64               | .60                   |
| Sd                                | 3.76              | 3.82                |                       |
| ***p<.01      **p<.05      *p=.10 |                   |                     |                       |

Physical Appearance ( $x=16.48$  compared to  $x=18.63$ ,  $p=.02$ ). Strong direction was shown in support of Hypothesis 02 for Scholastic Competence ( $x=15.67$  compared to  $17.18$ ,  $p=.11$ ) and Social Acceptance ( $x=16.44$  compared to  $17.82$ ,  $p=.14$ ). A slight group mean increase was found for Behavioral Conduct ( $x=15.18$  compared to  $x=15.64$ ,  $p=.60$ ).

### Hypothesis 03

The intervention program will increase the level of actual competence, as rated by camp counselors, from the beginning to the end of the summer intervention program.

Pre-test and post-test group means of the Teacher's Rating Scale of Child's Actual Behavior (parallels the Self-Perception Profile for Children), administered to each boy's summer camp counselor, were compared using a T-Test to determine the significance of changes in the sample's actual competence. Results are shown for the composite (Table 9, p.84) and domain specific scores (Table 10, p.84).

Hypothesis 03 was not supported. Although, post-test group mean scores increased for the composite score and all domain scores, these increases were not large enough to prove significance at a  $p<.10$  level. Changes in actual Scholastic Competence ( $x=7.12$  compared to  $x=7.79$ ) showed strongest direction in supporting Hypothesis 3 with a 2-Tail Probability of .18. The next strongest group mean increase was found for the Composite Score ( $x=37.48$  compared to  $38.83$ ,  $p=.49$ ), followed by

TABLE 9  
Means and Standard Deviations for Changes in Counselor's  
Rating of Child's Actual Competence: Composite Scores

| Composite<br>Score                | Pretest<br>(n=42) | Posttest<br>(n=42) | 2-Tail<br>Probability |
|-----------------------------------|-------------------|--------------------|-----------------------|
| Actual<br>Competence              |                   |                    |                       |
| x                                 | 37.48             | 38.83              | .49                   |
| Sd                                | 9.17              | 8.64               |                       |
| ***p<.01      **p<.05      *p=.10 |                   |                    |                       |

TABLE 10  
Means and Standard Deviations for Changes in Counselor's  
Rating of Child's Actual Competence: Domain Scores

| Domain<br>Scores                  | Pretest<br>(n=42) | Posttest<br>(n=42) | 2-Tail<br>Probability |
|-----------------------------------|-------------------|--------------------|-----------------------|
| Scholastic<br>Competence          |                   |                    |                       |
| x                                 | 7.12              | 7.79               | .18                   |
| Sd                                | 2.28              | 2.23               |                       |
| Physical<br>Appearance            |                   |                    |                       |
| x                                 | 8.33              | 8.67               | .50                   |
| Sd                                | 2.25              | 2.28               |                       |
| Athletic<br>Competence            |                   |                    |                       |
| x                                 | 7.36              | 7.69               | .55                   |
| Sd                                | 2.62              | 2.46               |                       |
| Social<br>Acceptance              |                   |                    |                       |
| x                                 | 7.45              | 7.52               | .90                   |
| Sd                                | 2.47              | 2.57               |                       |
| Behavioral<br>Conduct             |                   |                    |                       |
| x                                 | 7.14              | 7.17               | .97                   |
| Sd                                | 2.78              | 2.60               |                       |
| ***p<.01      **p<.05      *p=.10 |                   |                    |                       |

Physical Appearance ( $x=8.33$  compared to  $x=8.67$ ,  $p=.50$ ) and Athletic Competence ( $x=7.36$  compared to  $x=7.69$ ,  $p=.55$ ). Social Acceptance ( $x=7.45$  compared to  $x=7.52$ ,  $p=.90$ ) and Behavioral Conduct ( $x=7.14$  compared to  $x=7.17$ ,  $p=.97$ ) group means remained nearly unchanged.

#### Hypothesis 04

The intervention program will increase the level of actual competence, as rated by his parent or legal guardian, from the beginning of the summer intervention program to four months after the conclusion of the summer intervention effort.

Pre-test and follow-up group means of the Mayhew Questionnaire (Teacher's Rating Scale of Child's Actual Behavior, paralleling the Self-Perception Profile for Children), administered to each boy's parent or legal guardian, were compared using a T-Test to determine the significance of changes in the sample's actual competence. Results are shown for the composite (Table 11, p. 86) and domain specific scores (Table 12, p.86).

Hypothesis 04 was not supported. Post-test group mean scores decreased for the composite score ( $x=45.15$  compared to  $x=43.59$ ,  $p=.39$ ) and three of the domain scores: Physical Appearance ( $x=11.04$  compared to  $x=11.00$ ,  $p=.93$ ) remained nearly unchanged and Behavioral Conduct ( $x=8.11$  compared to  $x=7.32$ ,  $p=.21$ ) and Social Acceptance ( $x=9.19$  compared to  $x=8.16$ ,  $p=.17$ ) showed fairly strong decreases. Slight group mean increases were found for Scholastic Competence ( $x=8.44$  compared to  $x=8.66$ ,  $p=.72$ )



**TABLE 11**  
**Means and Standard Deviations for Changes in Parent's**  
**Rating of Child's Actual Competence: Composite Scores**

| Composite<br>Score                | Pretest<br>(n=27) | Follow-up<br>(n=22) | 2-Tail<br>Probability |
|-----------------------------------|-------------------|---------------------|-----------------------|
| <b>Actual Competence</b>          |                   |                     |                       |
| x                                 | 45.15             | 43.59               | .39                   |
| Sd                                | 5.94              | 6.58                |                       |
| ***p<.01      **p<.05      *p=.10 |                   |                     |                       |

**TABLE 12**  
**Means and Standard Deviations for Changes in Parent's**  
**Rating of Child's Actual Competence: Domain Scores**

| Domain<br>Scores                  | Pretest<br>(n=27) | Follow-up<br>(n=22) | 2-Tail<br>Probability |
|-----------------------------------|-------------------|---------------------|-----------------------|
| <b>Scholastic Competence</b>      |                   |                     |                       |
| x                                 | 8.44              | 8.66                | .72                   |
| Sd                                | 1.97              | 2.14                |                       |
| <b>Athletic Competence</b>        |                   |                     |                       |
| x                                 | 8.37              | 8.45                | .90                   |
| Sd                                | 2.08              | 2.36                |                       |
| <b>Physical Appearance</b>        |                   |                     |                       |
| x                                 | 11.04             | 11.00               | .93                   |
| Sd                                | 1.34              | 1.48                |                       |
| <b>Behavioral Conduct</b>         |                   |                     |                       |
| x                                 | 8.11              | 7.32                | .21                   |
| Sd                                | 2.06              | 2.30                |                       |
| <b>Social Acceptance</b>          |                   |                     |                       |
| x                                 | 9.19              | 8.16                | .17                   |
| Sd                                | 2.43              | 2.65                |                       |
| ***p<.01      **p<.05      *p=.10 |                   |                     |                       |

and Athletic Competence ( $x=8.37$  compared to  $x=8.45$ ,  $p=.90$ ).

#### Hypothesis 05

The intervention program will increase the level of actual competence, as rated by classroom teachers, from the beginning of the summer program to four months after the conclusion of the summer intervention effort.

Pre-test and follow-up group means of the Teacher's Rating Scale of Child's Actual Behavior (parallels the Self-Perception Profile for Children), administered to each boy's classroom teacher, were compared using a T-Test to determine the significance of changes in the sample's actual competence. Results are shown for the composite (Table 13, p.88) and domain specific scores (Table 14, p.88).

Hypothesis 05 was not supported. Post-test group mean scores increased for the composite score ( $x=38.58$  compared to  $x=39.74$ ,  $p=.52$ ) and three of the domain scores: Behavioral Conduct ( $x=6.10$  compared to  $x=6.77$ ,  $p=.32$ ), Scholastic Competence ( $x=6.84$  compared to  $x=7.40$ ,  $p=.33$ ) and Social Acceptance ( $x=6.82$  compared to  $x=7.37$ ,  $p=.36$ ). However, these increases were not large enough to prove significance at a  $p<.10$  level. Group means for Athletic Competence ( $x=8.28$  compared to  $x=8.22$ ,  $p=.93$ ) remained nearly unchanged and group means for Physical Appearance ( $x=10.54$  compared to  $x=9.97$ ,  $p=.17$ ) showed a fairly strong decrease.

TABLE 13  
Means and Standard Deviations for Changes in Teacher's  
Rating of Child's Actual Competence: Composite Scores

| Composite<br>Score   | Pretest<br>(n=39) | Follow-up<br>(n=35) | 2-Tail<br>Probability |
|----------------------|-------------------|---------------------|-----------------------|
| -----                |                   |                     |                       |
| Actual<br>Competence |                   |                     |                       |
| x                    | 38.58             | 39.74               | .52                   |
| Sd                   | 7.74              | 7.46                |                       |
| -----                |                   |                     |                       |
| ***p<.01             | **p<.05           | *p=.10              |                       |

TABLE 14  
Means and Standard Deviations for Changes in Teacher's  
Rating of Child's Actual Competence: Domain Scores

| Domain<br>Scores         | Pretest<br>(n=39) | Follow-up<br>(n=35) | 2-Tail<br>Probability |
|--------------------------|-------------------|---------------------|-----------------------|
| -----                    |                   |                     |                       |
| Behavioral<br>Conduct    |                   |                     |                       |
| x                        | 6.10              | 6.77                | .32                   |
| Sd                       | 2.91              | 2.81                |                       |
| Scholastic<br>Competence |                   |                     |                       |
| x                        | 6.84              | 7.40                | .33                   |
| Sd                       | 2.49              | 2.37                |                       |
| Social<br>Acceptance     |                   |                     |                       |
| x                        | 6.82              | 7.37                | .36                   |
| Sd                       | 2.55              | 2.58                |                       |
| Athletic<br>Competence   |                   |                     |                       |
| x                        | 8.28              | 8.22                | .93                   |
| Sd                       | 2.32              | 2.09                |                       |
| Physical<br>Appearance   |                   |                     |                       |
| x                        | 10.54             | 9.97                | .17                   |
| Sd                       | 1.71              | 1.77                |                       |
| -----                    |                   |                     |                       |
| ***p<.01                 | **p<.05           | *p=.10              |                       |

## **CHAPTER V**

### **DISCUSSION AND IMPLICATIONS**

The purpose of the current study was to evaluate the impact of a wilderness adventure program on the perceived and actual competence of 42 "at-risk" preadolescent boys. Previous research (see Chapter II, Review of Literature) suggests that these types of adapted Outward Bound programs may offer an excellent form of alternative intervention, especially for children and youth. Current research findings were somewhat supportive of those findings. These are discussed in light of methodological weaknesses and presented below. This is followed by suggestions for practitioners and future research.

#### **Findings For Perceived Competence**

Perceived competence was measured using Harter's Self-Perception Profile for Children. This instrument measures competence as a multidimensional construct and provided information for the intervention treatment's effect upon separate competence subscales (physical appearance, scholastic competence, athletic competence, social acceptance, and behavioral conduct). During the post-test administered during the final days of the experimental groups intervention experience, no

significant changes were found within any of the subscales for perceived competence.

However, it is important to note that all domain scores with the exception of Behavioral Conduct did increase with changes in perceived Physical Appearance ( $p=.16$ ) and Scholastic Competence ( $p=.34$ ) being the strongest.

Increases in the experimental groups ratings of perceived competence were found significant ( $p=.02$ ) when measured four months after their involvement with the summer camp intervention. Subscale results revealed that all domain scores with the exception of Behavioral Conduct were strongly influenced. This is encouraging since program goals are for boys to develop the competencies necessary to make positive changes within significant ecological contexts of their lives and to open new grounds for self-definition. Reviewing the results of this study, it could be concluded that the adventure program influenced changes in perceived competence for "at-risk," preadolescent boys within program boundaries. More importantly, these changes continued to increase to significant levels over a period of four months after the boys return home. However, it can only be assumed that the intervention treatment produced these changes. Without a control group representational of the current test subjects the possibility that these changes are normal to the developmental character of "at-risk" preadolescents

exists.

As mentioned, changes for Behavioral Conduct did not conform to the pattern of changes found within other domain scores. One possible explanation for this could be the fact that therapeutic adventure programs focus on helping "acting out" and "withdrawing" youth to become accountable for behavioral misconduct and dysfunctional interactions. As children experience a new system of discipline and learn responsibility for their actions they also may come to recognize a need for development in this area. The fact that significant adults rated the youths' competence for Behavioral Conduct lower than all other competence domains suggests that intervention may shift a child's perception of their behavioral conduct to be more in align with their actual behavioral conduct. This could potentially offer opportunities for youth to develop more appropriate behavioral skills.

It's important to note two other experimental design weaknesses which may have influenced post-test and follow-up scores. First, post-test and follow-up tests were administered in different settings. Both pre- and post-test questionnaires were given to the experimental group as a whole while participating in the summer intervention program. However, since the summer camp was closed during the winter and test group members were spread out across the state of New Hampshire it was impossible to replicate these conditions for the follow-

up. Instead each boy was tested individually in their school setting and it is uncertain how these contrasting test environments may have affected reports of self-perceived competence. One possibility is that test subjects used peer groups and significant adults found within the contrasting contexts of the intervention program and their home/school environments as reference groups when making self-judgements. Thus, the question is raised, when children undergo changes in an environment where others are changing in a similar manner, do they report perceived self-competence differently than when making the same self-evaluations within their home context.

Second, during the administration of the post-test, nine boys were absent. This may have weakened test results due to the fact that these children were on special outings to reward their high level of achievement. In theory these children should have scored higher for the post-test than other test group members and could have influenced group means to show stronger direction perhaps at significant levels.

#### Findings For Actual Competence

Actual competence was measured using Harter's Teacher's Rating Scale of Child's Actual Behavior. This instrument tapped independent judgements of significant adults (intervention counselors, parents, and classroom teachers) on the child's adequacy in different competence

domains (scholastic competence, social acceptance, athletic competence, physical appearance, and behavioral conduct). Results showed that the intervention program did not increase levels of actual competence for test subjects at significant levels.

Only counselor's ratings revealed increases for all domain scores. However, with the exception of the Scholastic Competence post-test score ( $p=.18$ ), changes in group means were slight. This would suggest that the summer adventure program made its strongest impact upon the youths' decision making and problem solving skills, supporting similar findings of Callahan (1989) and Riggins (1986).

Scores for the parents' ratings of childrens' actual competence were discouraging with almost no or negative direction found for domain scores. Decreases in actual Behavioral Conduct and Social Acceptance were nearly significant. A major weakness for this finding was the low questionnaire response for parent(s) ratings. Only a few more than half of subjects parents returned the follow-up and an increased questionnaire response would have provided more accurate findings. This could be reflective of a low level of support and involvement with the child's participation in treatment.

Teacher ratings of actual competence were somewhat more encouraging with positive direction found for nearly all domain scores with the exception of athletic

competence and physical appearance. A limitation for these results was that in many cases it is likely that pre- and follow-up tests were completed by two different classroom teachers since these measurements were taken during different school years. Ratings may have been more reflective of actual changes if the same teacher was in a position to make evaluations at both points in time. It's also interesting to note that decreases for Physical Appearance ( $p=.17$ ) were nearly significant. This may suggest that teachers find the childlike appearance of students more attractive than the adolescent features that are most likely beginning to emerge with the subject group.

#### Future Implications

Therapeutic effectiveness most often appears to be represented by change occurring in individual(s) and/or systems being treated. An ideal intervention would be one that creates both positive changes in symptomatic behavior of the identified client(s) and interactions within significant ecological contexts. Results of this study would appear to indicate that therapeutic adventure programs influence positive changes in ratings of perceived competence with "at-risk," preadolescent boys' and that these changes continue to increase significantly within the ecological contexts of their home environment. Although these findings appear encouraging, ratings from significant others (i.e.; parents and teachers) were on

the whole unaffected and for some domains even decreased. Kielsmier (1989) stresses that "intervention fades quickly as a metaphor if there is no reinforcing context to apply new skills, values and energy. We must go beyond the intervention to an emphasis on the setting to which people return and the creation of contexts where youth can be genuinely useful."

Thus, to be most effective, intervention may need to adapt an ecological perspective. This would shift the focus from promoting changes in an individual's personal growth towards applying those changes to the relationships existing between the individual and significant developmental contexts. Follow-up intervention strategies and increased involvement of significant adults in the therapeutic process are two suggested areas where changes could begin to be developed and applied. Likewise, future research must not only measure client specific variables but also variables representational of client-environmental relationships. The inclusion of measurements of parents and teachers ratings for the child's actual competence was a first step in recognizing this relationship. It is suggested that objective measures such as changes in school grades, number of times sent to the principal's office, number of extracurricular activities the child is involved in and/or subjective evaluations from significant adults may aid future researchers in better understanding the impact

of treatment. Also, the inclusion of an appropriate control group would greatly strengthen the internal and external research validity of future studies. Due to ethical questions of withholding therapeutic treatment the use of control groups is often not possible. However, Campbell and Stanley (1969) emphasize that use of a control group represents a true experimental design which provides much stronger interpretations of the effects of treatment upon subjects tested.

Russell, etc. (1984) emphasizes the importance of systematically documenting specific interventions. Equating outcome results with the type of treatment applied is an insufficient definition of whether that therapy is effective or not unless other factors are reviewed as well (i.e. length of treatment, client profiles, and specific adventure activities employed). Future research should attempt to clarify who benefits most from therapeutic adventure and how intervention design affects different aspects of personal growth. Research design, the intervention process, and treatment outcomes should be viewed as being mutually interdependent and provide researchers and practitioners insight into the changing demographics of our society. Historically, the role of youth has altered dramatically from the dawn of Outward Bound during World War II. Family, school, religion, and the workplace hold new meanings for each new generation of youth and as society

changes so do the needs of our children. The "at-risk" subjects for this study although similar to populations reviewed in Chapter II cannot be as distinctly categorized. To date, the majority of research with "troubled" youth has been with specific populations (i.e. emotionally disturbed, mental health patients, and juvenile delinquents). The current experimental group, "at-risk" children, represents a much broader population of children who face the probability that adverse developmental outcomes will threaten a healthy passage into adulthood. By testing for relationships between independent or predictor variables (i.e. whether the child tends to display "acting out" or "withdrawing" behavior when disruptive) and reported changes and how particular design strategies may affect specific areas of personal development, intervention may best be structured to meet the needs of their clients and the continuously changing demographics of society.

One must also be cautious in their interpretation of research findings when making judgements on the effectiveness of a specific program or type of treatment. It is important for intervention programs to be aware of the impacts they may have upon participants. The application of test instruments and measurements provide helpful gauges to better understand these influences. However, simply not finding group means to have changed at a significant level does not prove that intervention

was ineffective or not worthwhile. First, group means may not reflect dramatic changes that occurred in a handful of participants and dilute successes found for those individuals. Secondly, although care should be taken when choosing instrumentation, even the best instrument may not tap beneficial changes with certain constructs. Finally, smaller outcomes may be influenced that eventually trigger greater outcomes but whose influence at the time of testing is not truly felt. While Freeman, etc. (1982) stresses the need for measures of quantifiable objective outcomes as opposed to subjective judgements and participant observations, qualitative information should not be devalued or dismissed. For the current study, each program participant received an evaluative report describing the successes and difficulties of their participation in the therapeutic summer camp. For many of the boys, these reports were encouraging, emphasizing many areas of actual personal growth that benefited dramatically. For other boys, qualitative reports indicated a much more difficult summer. However, although breakthroughs in actual competencies did not occur, new awarenesses into areas of dysfunction and needed development were achieved and a solid platform to build from was established. This second group of children most likely would have shown little or negative changes for the quantitative measures applied. Qualitative measures may offer a wider scope of

evaluation which provides a more inclusive profile of the impact intervention has with all its participants.

Future research may benefit by studying qualitative findings before designing quantitative measures.

Researchers could then pinpoint areas which need to be more exhaustively evaluated and would be provided a larger framework for interpretation.

Some excerpts of the qualitative testimonials for first year Mayhew participants are presented below. A complete island phase report is also included in Appendix D. Boys names have been changed to protect their anonymity.

"Tom had a difficult but very beneficial first summer on Mayhew Island. He arrived totally inexperienced in the type of group and individual activities of the program. His limited experiences and resistance to structure made for a difficult first few days. Once he came to understand the program, however, he began to concentrate on the challenges at hand...Tom became more and more accepted by the group. He even came to get excited about group success and though not a leader, became a pretty good group follower. Tom would accept small responsibilities if he could see it was helping the group, no matter how unglamorous the role, so long as he could participate..."

"...Early in the session, Bob seemed to have every physical ailment imaginable and used that as an excuse for his sub-par performances...Although his overconcern regarding his body did not disappear, the number of ailments vocalized by Bob radically reduced as the session progressed. Gradually Tom became a team contributor as he came to realize his natural physical talent and ability

despite being overweight."

"Fred arrived at Mayhew insecure in his physical ability, shy about social interactions, and very inexperienced in group activities. Fred made tremendous progress in nearly every activity this summer, gaining enthusiasm and showing significant ability in everything he tried. In the process, he grew more assertive and outgoing, a process that had its positive and negative repercussions. Fred gained confidence not only to try new events but, unfortunately, to become aggressive with other boys as well..."

## APPENDIX A

## What I Am Like

### SAMPLE SENTENCE

|     | Really<br>True<br>for me | Sort of<br>True<br>for me |                                                                                    |     |                                                                                              | Sort of<br>True<br>for me | Really<br>True<br>for me |
|-----|--------------------------|---------------------------|------------------------------------------------------------------------------------|-----|----------------------------------------------------------------------------------------------|---------------------------|--------------------------|
| (a) | <input type="checkbox"/> | <input type="checkbox"/>  | Some kids would rather<br>play outdoors in their<br>spare time                     | BUT | Other kids would rather<br>watch T.V.                                                        | <input type="checkbox"/>  | <input type="checkbox"/> |
| 1.  | <input type="checkbox"/> | <input type="checkbox"/>  | Some kids feel that they<br>are <i>very good</i> at their<br>school work           | BUT | Other kids <i>worry</i> about<br>whether they can do the<br>school work assigned to<br>them. | <input type="checkbox"/>  | <input type="checkbox"/> |
| 2.  | <input type="checkbox"/> | <input type="checkbox"/>  | Some kids find it <i>hard</i> to<br>make friends                                   | BUT | Other kids find it's pretty<br><i>easy</i> to make friends.                                  | <input type="checkbox"/>  | <input type="checkbox"/> |
| 3.  | <input type="checkbox"/> | <input type="checkbox"/>  | Some kids do <i>very well</i><br>at all kinds of sports                            | BUT | Other kids <i>don't</i> feel that<br>they are very good when<br>it comes to sports.          | <input type="checkbox"/>  | <input type="checkbox"/> |
| 4.  | <input type="checkbox"/> | <input type="checkbox"/>  | Some kids are <i>happy</i><br>with the way they look                               | BUT | Other kids are <i>not</i> happy<br>with the way they look.                                   | <input type="checkbox"/>  | <input type="checkbox"/> |
| 5.  | <input type="checkbox"/> | <input type="checkbox"/>  | Some kids often do <i>not</i><br>like the way they <i>behave</i>                   | BUT | Other kids usually <i>like</i><br>the way they behave.                                       | <input type="checkbox"/>  | <input type="checkbox"/> |
| 6.  | <input type="checkbox"/> | <input type="checkbox"/>  | Some kids are often<br><i>unhappy</i> with themselves                              | BUT | Other kids are pretty<br><i>pleased</i> with themselves.                                     | <input type="checkbox"/>  | <input type="checkbox"/> |
| 7.  | <input type="checkbox"/> | <input type="checkbox"/>  | Some kids feel like they<br>are <i>just as smart</i> as<br>as other kids their age | BUT | Other kids aren't so sure<br>and <i>wonder</i> if they are<br>as smart.                      | <input type="checkbox"/>  | <input type="checkbox"/> |
| 8.  | <input type="checkbox"/> | <input type="checkbox"/>  | Some kids have <i>alot</i> of<br>friends                                           | BUT | Other kids <i>don't</i> have<br>very many friends.                                           | <input type="checkbox"/>  | <input type="checkbox"/> |

|     | Really<br>True<br>for me | Sort of<br>True<br>for me |                                                                                                    |     | Sort of<br>True<br>for me                                                              | Really<br>True<br>for me |
|-----|--------------------------|---------------------------|----------------------------------------------------------------------------------------------------|-----|----------------------------------------------------------------------------------------|--------------------------|
| 9.  | <input type="checkbox"/> | <input type="checkbox"/>  | Some kids wish they could be alot better at sports                                                 | BUT | Other kids feel they are good enough at sports.                                        | <input type="checkbox"/> |
| 10. | <input type="checkbox"/> | <input type="checkbox"/>  | Some kids are <i>happy</i> with their height and weight                                            | BUT | Other kids wish their height or weight were <i>different</i> .                         | <input type="checkbox"/> |
| 11. | <input type="checkbox"/> | <input type="checkbox"/>  | Some kids usually do the <i>right</i> thing                                                        | BUT | Other kids often <i>don't</i> do the right thing.                                      | <input type="checkbox"/> |
| 12. | <input type="checkbox"/> | <input type="checkbox"/>  | Some kids <i>don't</i> like the way they are leading their life                                    | BUT | Other kids <i>do</i> like the way they are leading their life.                         | <input type="checkbox"/> |
| 13. | <input type="checkbox"/> | <input type="checkbox"/>  | Some kids are pretty <i>slow</i> in finishing their school work                                    | BUT | Other kids can do their school work <i>quickly</i> .                                   | <input type="checkbox"/> |
| 14. | <input type="checkbox"/> | <input type="checkbox"/>  | Some kids would like to have alot more friends                                                     | BUT | Other kids have as many friends as they want.                                          | <input type="checkbox"/> |
| 15. | <input type="checkbox"/> | <input type="checkbox"/>  | Some kids think they could do well at just about any new sports activity they haven't tried before | BUT | Other kids are afraid they might <i>not</i> do well at sports they haven't ever tried. | <input type="checkbox"/> |
| 16. | <input type="checkbox"/> | <input type="checkbox"/>  | Some kids wish their body was <i>different</i>                                                     | BUT | Other kids <i>like</i> their body the way it is.                                       | <input type="checkbox"/> |
| 17. | <input type="checkbox"/> | <input type="checkbox"/>  | Some kids usually <i>act</i> the way they know they are <i>supposed</i> to                         | BUT | Other kids often <i>don't</i> act the way they are supposed to.                        | <input type="checkbox"/> |
| 18. | <input type="checkbox"/> | <input type="checkbox"/>  | Some kids are <i>happy</i> with themselves as a person                                             | BUT | Other kids are often <i>not</i> happy with themselves.                                 | <input type="checkbox"/> |
| 19. | <input type="checkbox"/> | <input type="checkbox"/>  | Some kids often <i>forget</i> what they learn                                                      | BUT | Other kids can remember things <i>easily</i> .                                         | <input type="checkbox"/> |
| 20. | <input type="checkbox"/> | <input type="checkbox"/>  | Some kids are always doing things with <i>alot</i> of kids                                         | BUT | Other kids usually do things <i>by themselves</i> .                                    | <input type="checkbox"/> |

|     | Really<br>True<br>for me | Sort of<br>True<br>for me |                                                                               |     |                                                                      | Sort of<br>True<br>for me | Really<br>True<br>for me |
|-----|--------------------------|---------------------------|-------------------------------------------------------------------------------|-----|----------------------------------------------------------------------|---------------------------|--------------------------|
| 21. | <input type="checkbox"/> | <input type="checkbox"/>  | Some kids feel that they are <i>better</i> than others their age at sports    | BUT | Other kids <i>don't</i> feel they can play as well.                  | <input type="checkbox"/>  | <input type="checkbox"/> |
| 22. | <input type="checkbox"/> | <input type="checkbox"/>  | Some kids wish their physical appearance (how they look) was <i>different</i> | BUT | Other kids <i>like</i> their physical appearance the way it is.      | <input type="checkbox"/>  | <input type="checkbox"/> |
| 23. | <input type="checkbox"/> | <input type="checkbox"/>  | Some kids usually get in <i>trouble</i> because of things they do             | BUT | Other kids usually <i>don't</i> do things that get them in trouble.  | <input type="checkbox"/>  | <input type="checkbox"/> |
| 24. | <input type="checkbox"/> | <input type="checkbox"/>  | Some kids <i>like</i> the kind of <i>person</i> they are                      | BUT | Other kids often wish they were someone else.                        | <input type="checkbox"/>  | <input type="checkbox"/> |
| 25. | <input type="checkbox"/> | <input type="checkbox"/>  | Some kids do <i>very well</i> at their classwork                              | BUT | Other kids <i>don't</i> do very well at their classwork.             | <input type="checkbox"/>  | <input type="checkbox"/> |
| 26. | <input type="checkbox"/> | <input type="checkbox"/>  | Some kids wish that more people their age liked them                          | BUT | Other kids feel that most people their age <i>do</i> like them.      | <input type="checkbox"/>  | <input type="checkbox"/> |
| 27. | <input type="checkbox"/> | <input type="checkbox"/>  | In games and sports some kids usually <i>watch</i> instead of play            | BUT | Other kids usually <i>play</i> rather than just watch.               | <input type="checkbox"/>  | <input type="checkbox"/> |
| 28. | <input type="checkbox"/> | <input type="checkbox"/>  | Some kids wish something about their face or hair looked <i>different</i>     | BUT | Other kids <i>like</i> their face and hair the way they are.         | <input type="checkbox"/>  | <input type="checkbox"/> |
| 29. | <input type="checkbox"/> | <input type="checkbox"/>  | Some kids do things they know they <i>shouldn't</i> do                        | BUT | Other kids <i>hardly ever</i> do things they know they shouldn't do. | <input type="checkbox"/>  | <input type="checkbox"/> |
| 30. | <input type="checkbox"/> | <input type="checkbox"/>  | Some kids are very <i>happy</i> being the way they are                        | BUT | Other kids wish they were <i>different</i> .                         | <input type="checkbox"/>  | <input type="checkbox"/> |
| 31. | <input type="checkbox"/> | <input type="checkbox"/>  | Some kids have <i>trouble</i> figuring out the answers in school              | BUT | Other kids almost <i>always</i> can figure out the answers.          | <input type="checkbox"/>  | <input type="checkbox"/> |
| 32. | <input type="checkbox"/> | <input type="checkbox"/>  | Some kids are <i>popular</i> with others their age                            | BUT | Other kids are <i>not</i> very popular.                              | <input type="checkbox"/>  | <input type="checkbox"/> |

|     | Really<br>True<br>for me | Sort of<br>True<br>for me |                                                                               |     | Sort of<br>True<br>for me                                   | Really<br>True<br>for me |
|-----|--------------------------|---------------------------|-------------------------------------------------------------------------------|-----|-------------------------------------------------------------|--------------------------|
| 33. | <input type="checkbox"/> | <input type="checkbox"/>  | Some kids <i>don't</i> do well<br>at new outdoor games                        | BUT | Other kids are <i>good</i> at<br>new games right away.      | <input type="checkbox"/> |
| 34. | <input type="checkbox"/> | <input type="checkbox"/>  | Some kids think that<br>they are good looking                                 | BUT | Other kids think that<br>they are not very<br>good looking. | <input type="checkbox"/> |
| 35. | <input type="checkbox"/> | <input type="checkbox"/>  | Some kids behave<br>themselves very well                                      | BUT | Other kids often find it<br>hard to behave<br>themselves.   | <input type="checkbox"/> |
| 36. | <input type="checkbox"/> | <input type="checkbox"/>  | Some kids <i>are</i> not very<br>happy with the way they<br>do alot of things | BUT | Other kids think the way<br>they do things is <i>fine</i> . | <input type="checkbox"/> |



## **APPENDIX B**

## MAYHEW QUESTIONNAIRE

|     | Really<br>True           | Sort of<br>True          |                                                            |    |                                                              | Sort of<br>True          | Really<br>True           |
|-----|--------------------------|--------------------------|------------------------------------------------------------|----|--------------------------------------------------------------|--------------------------|--------------------------|
| 1.  | <input type="checkbox"/> | <input type="checkbox"/> | This child is really good at his school work               | OR | This child can't do the school work assigned                 | <input type="checkbox"/> | <input type="checkbox"/> |
| 2.  | <input type="checkbox"/> | <input type="checkbox"/> | This child finds it hard to make friends                   | OR | For this child it's pretty easy                              | <input type="checkbox"/> | <input type="checkbox"/> |
| 3.  | <input type="checkbox"/> | <input type="checkbox"/> | This child does really well at all kinds of sports         | OR | This child isn't very good when it comes to sports           | <input type="checkbox"/> | <input type="checkbox"/> |
| 4.  | <input type="checkbox"/> | <input type="checkbox"/> | This child is good-looking                                 | OR | This child is not very good-looking                          | <input type="checkbox"/> | <input type="checkbox"/> |
| 5.  | <input type="checkbox"/> | <input type="checkbox"/> | This child is usually well-behaved                         | OR | This child is often not well-behaved                         | <input type="checkbox"/> | <input type="checkbox"/> |
| 6.  | <input type="checkbox"/> | <input type="checkbox"/> | This child often forgets what he learns                    | OR | This child can remember things easily                        | <input type="checkbox"/> | <input type="checkbox"/> |
| 7.  | <input type="checkbox"/> | <input type="checkbox"/> | This child has alot of friends                             | OR | This child doesn't have many friends                         | <input type="checkbox"/> | <input type="checkbox"/> |
| 8.  | <input type="checkbox"/> | <input type="checkbox"/> | This child is better than others his/her age at sports     | OR | This child can't play as well                                | <input type="checkbox"/> | <input type="checkbox"/> |
| 9.  | <input type="checkbox"/> | <input type="checkbox"/> | This child has a nice physical appearance                  | OR | This child doesn't have such a nice physical appearance      | <input type="checkbox"/> | <input type="checkbox"/> |
| 10. | <input type="checkbox"/> | <input type="checkbox"/> | This child usually acts appropriately                      | OR | This child would be better if he acted differently           | <input type="checkbox"/> | <input type="checkbox"/> |
| 11. | <input type="checkbox"/> | <input type="checkbox"/> | This child has trouble figuring out the answers in school  | OR | This child almost always can figure out the answers.         | <input type="checkbox"/> | <input type="checkbox"/> |
| 12. | <input type="checkbox"/> | <input type="checkbox"/> | This child is popular with others his age                  | OR | This child is not very popular.                              | <input type="checkbox"/> | <input type="checkbox"/> |
| 13. | <input type="checkbox"/> | <input type="checkbox"/> | This child doesn't do well at new outdoor games            | OR | This child is good at new games right away                   | <input type="checkbox"/> | <input type="checkbox"/> |
| 14. | <input type="checkbox"/> | <input type="checkbox"/> | This child isn't very good looking                         | OR | This child is pretty good-looking                            | <input type="checkbox"/> | <input type="checkbox"/> |
| 15. | <input type="checkbox"/> | <input type="checkbox"/> | This child often gets in trouble because of things he does | OR | This child usually doesn't do things that get him in trouble | <input type="checkbox"/> | <input type="checkbox"/> |

## **APPENDIX C**



The  
**MAYHEW**  
Program

Newfound Lake  
PO Box 120  
Bristol, NH 03222

Alan M. Cantor, Executive Director  
(603)744-6131

July 1990

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Dear Parent,

This summer, a study is being done to measure effects that Mayhew may have upon boys. It would be greatly helpful and appreciated if you could provide information on your child by answering questions 1 through 15 on the attached survey and return the completed questionnaire no later than Friday, July 20th.

All information collected will remain anonymous and will in no way affect your child's enrollment in the Mayhew Program. The purpose of this survey is to determine positive impacts that Mayhew may have with children; you and your child's identity will be treated with strict confidence.

**INSTRUCTIONS FOR MAYHEW QUESTIONNAIRE**

For each item (1-15), two types of children are described. First, decide which description best fits your child, the one on the left or the right. Next decide if that description is really true or sort of true for your child. For each item, you will check only one box.

Thanks for your help. If you have any questions or concerns about any of the above information, please contact me at 744-6131.

Sincerely,

*Alan Cantor*

Alan M. Cantor  
Executive Director

*P.S. The summer's going very well!*

AMC/mb

enclosure



Mayhew is a member agency of these New Hampshire United Ways: Greater Manchester, Lakes Region, Monadnock, North Country, Strafford County, and Upper Valley.

## APPENDIX D

## 1987 Mayhew Island Phase Report

arrived at Mayhew typical of many first-year boys: insecure in his physical ability, shy about social interactions, and very inexperienced in group athletics and other activities. perhaps more than any other boy, made tremendous progress in nearly every activity this summer, gaining enthusiasm and showing significant ability in everything he tried. In the process, grew more assertive and outgoing, a process that had both its positive and negative repercussions. gained confidence not only to try new events but, unfortunately, to become aggressive with the other boys as well. Overall, however, was a good experience on Mayhew Island.

progress and problems were most carefully charted by his cabin counselor, who writes, "I saw tremendous athletic improvement from over the course of the summer; on the other hand, the emotional, social and behavioral progress was difficult to see. On the first day and through the first week was extremely quiet and obviously intimidated. He would always talk quietly or under his breath in a manner that made it difficult for him to be understood. In cabin group activities showed hardly any assertiveness or initiative. Whenever he was given a chance to go first or to stand out, he backed down. In a sense his quietness was good for our group, where conflict ran rampant, and kept out of the crossfire. In the meantime, who had very little athletic experience, showed that he possesses the talent to contribute to the group. His ability became obvious to others and to himself, and he began to participate more easily within the group.

"In a behavioral sense, this emergence became detrimental," his cabin counselor continues. "As he came to realize his strengths, began to struggle for recognition within the group. Whereas he was at first overlooked because of his small size and quiet manner, now expected to be in the spotlight, even when it was already occupied. went from low self-confidence to being (in his mind) a superman, without the steps in between. In leaving his shell, became more articulate and assertive. Unfortunately, this assertiveness was often negative, with complaining and refusing to support the other members of the group. Whereas was once willing to non-descriptly help the group, he now alienated himself from the others by getting upset and refusing to cooperate. It was pleasing, of course, to see discover his abilities and attempt to be more assertive: in a very real way, that was why he came to Mayhew. And I must say that having in the cabin could be a most rewarding experience, seeing him achieve things he never thought possible. It was discouraging, though, to see how his more assertive character hurt the group. If felt he was being pushed or tested by the other boys, or if he felt he was being overlooked or ignored, he could change to a very ugly mood very quickly."

The reports of the activity counselors place more emphasis on achievements than his social difficulties, and the reports are therefore very positive, even while touching on the negative. For example, the athletic director writes, pattern in athletics was much as it was elsewhere on the island: once he began to emerge from insecure self-defensiveness, he proved to be a capable boy who made many positive

contributions to the group. Not only did [redacted] prove to be a stronger-than-average athlete in all three of our sports, but he also developed a very intense competitive attitude that pushed him to new levels of success. The only thing that may keep [redacted] from continued growth is his extreme sensitivity to criticism from his peers. [redacted] needs to learn to be satisfied with doing his best and not worrying too much about what others say. There is much that [redacted] can be proud of in his athletic performance this summer, however, and we hope that he has now developed the confidence to produce future successes upon his return home."

[redacted] progress was even more significant in the crew rowing program. The rowing instructor writes, "[redacted] without a doubt, made the most progress of anyone in his cabin. He went from being a non-participant to being his cabin's leader in the boat -- as coxswain -- and a pivotal member of the championship crew. [redacted] became an above average coxswain who did an excellent job of keeping the boat straight and leading the rowing cadence. He also showed great character during the session, an attitude that earned him the "Best Sportsmanship" award. [redacted] did a great job."

[redacted] did similarly well in swimming instruction. His swim counselor writes, "[redacted] arrived with no prior experience in the water, but he always tried his hardest and made a great effort all session long. He listened well, worked well with others, and was simply a great kid. He concluded the summer by earning his Red Cross 'Beginner' swimming certification."

[redacted] strengths and weaknesses were perhaps most noticable in the Project Adventure (P.A.) activity. The P.A. counselors write, "[redacted] began the session being quietly involved in the warm-up games, enjoying himself without really asserting himself. As he found his feet he began to contribute more to his group both in spotting for others and in solving group initiatives. There was a moment or two when [redacted]'s enthusiasm was so overpowering that the whole group listened and allowed him to lead them. In the meantime he showed great trust in the staff members and a willingness to accept the challenges of the high-element events."

"[redacted]'s assertiveness did have a negative side, though," the Project Adventure counselors continue. "Occasionally he would react to a request by another boy by saying, 'No! I won't do what you want.' As he gained confidence, he also gained a bit of stubbornness and intolerance. [redacted]'s group wasn't the most supportive, and that didn't help any, but we feel he could have done a better job of being a more positive influence at times."

[redacted] was in many ways a perfect referral to Mayhew, and his four weeks allowed him to show progress that was heartening and problems that could be expected. We are delighted that [redacted] got a chance to see how well he could handle the difficult physical and emotional challenges of Mayhew, and we hope he can now learn from his social difficulties. [redacted] was unaccustomed to nearly every aspect of Mayhew, and it could be

expected that he had difficulties "fine-tuning" his reaction to the stresses of the program. What was obvious was that very much wanted to do well, and that he was capable of significant success. As applies himself to the tasks of home and of school, we hope that he can apply some of the self-confidence he gained during his four weeks on Mayhew Island. We meanwhile look forward to visiting with throughout the school year, strengthening our friendship with him and preparing him for a second, and even more successful, year in the program.

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