The Effects of an Outdoor Camping Experience on the Self-Concept & Wilderness Anxiety of Fifth & Sixth Grade Students at Camp Webb

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THE EFFECTS OF AN OUTDOOR CAMPING EXPERIENCE ON THE SELF-CONCEPT AND WILDERNESS ANXIETY OF FIFTH AND SIXTH GRADE STUDENTS

AT CAMP WEBB

A Specialist Project

Presented to
the Faculty of the Department of Educational Leadership
Western Kentucky University
Bowling Green, Kentucky

In Partial Fulfillment
of the Requirements for the Degree
Specialist in Education

by
Freda L. Mays
August 1993
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AT CAMP WEBB

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THE EFFECTS OF AN OUTDOOR CAMPING EXPERIENCE ON THE SELF-CONCEPT AND WILDERNESS ANXIETY OF FIFTH AND SIXTH GRADE STUDENTS AT CAMP WEBB

Freda Mays August 1993 63 Pages

Directed by: Vernon Sheeley, Don Dinkmeyer, and C. T. Crume, Jr.
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ABSTRACT

The problem statement for this study was "Will a one-week Kentucky Department of Fish and Wildlife Resources camping experience result in a significant difference in the mean pretest and posttest self-concept and wilderness anxiety scores of fifth and sixth grade students at Camp Webb as measured by the Willoughby Schedule and the Crume/Ellis Wilderness Anxiety Scale?" This study was a replication of two other studies sponsored by the Kentucky Department of Fish and Wildlife Resources (KDFWR). The first study was conducted by Charles T. Crume and G. Mac Lang (1990) at Camp Earl Wallace; and, the second study was conducted by Mazen Melky (1992) at Camp Currie. Based upon the recommendations from these studies that the third camp, Camp Webb, be tested, this study was conducted. Data were collected at Camp Webb during the summer of 1992 related to self-concept and wilderness anxiety among male and female fifth and sixth grade students attending a one week Kentucky Department of Fish and
Wildlife Resources camp. An experimental design consisting of separate randomized pretest/posttest groups completed the Willoughby Schedule (self-concept scale) and Crume/Ellis Wilderness Anxiety Scale instruments. The study included randomized sample sizes of male pretest (N = 193) and posttest (N = 158); female pretest (N = 196) and posttest (N = 176); male plus female pretest (N = 389) and posttest (N = 334). Analysis of the Willoughby Schedule data produced no significant pretest/posttest score differences for the male, female, or male plus female groups. The Crume/Ellis Wilderness Anxiety Scale pretest/posttest differences were not significant (.05 or greater) in any of the factor areas or the total scores for the male, female, or the male plus female groups.
CHAPTER ONE

INTRODUCTION

Researchers have investigated many areas in an attempt to understand what factors influenced the development of a positive self-concept in both children and adults. Areas such as group or gang membership (Rosenberg, 1985); positive communication with parents, willingness to take moderate risk, college adjustment (Mooney, Scherman, & LoPreston, 1991); physical and mental health, personal and social adjustment (Witmer & Sweeney, 1992); and a sense of having control over one's life (Gecas, 1982; Rosenberg, 1985) were correlated with a positive self-concept. Parental pressure to succeed, adolescent pregnancy (Patton, 1982), irrational beliefs (Lichtenberg, Johnson, & Arachtingi, 1992), and problems with self (Witmer & Sweeney) were correlated with a negative or low self-concept.

Rice (1989) defined self-concept as "One's sense of self; one's self-imagine; one's attitudes and feelings about self" (p. 204). Kichlstrom et al. (1988) described self-concept as a person's own personality. Others such as Glasser (1969) and Dreikurs (1968) considered the most important aspects of self-concept were a feeling of belonging, a sense of being accepted, and a feeling of being a competent person.
Based on the assumption that a more competent person develops a positive self-concept, the purpose of this study was to investigate the effects of a one-week Kentucky Department of Fish and Wildlife Resources (KDFWR) camping experience on the pretest and posttest self-concept and wilderness anxiety scores of fifth and sixth grade participants. This study was a replication of two previous ones conducted for the Kentucky Department of Fish and Wildlife Resources. The first study was conducted by Charles Crume and Mac Lang (1990) at Camp Earl Wallace; the second study was conducted by Mazen Melky (1992) at Camp Currie. Based on the recommendation from these studies that a third camp be tested, this study was conducted.

**Leisure Time**

Jensen (1977) estimated more than one-third of an American's lifetime consisted of free or leisure time. Many factors have contributed to this increased free time among Americans. Between 1965 and 1975 Americans gained approximately 10 percent more free time due to technological advancements (Kraus & Curtis, 1986). Increased mobility with transportation, higher income levels, and higher levels of formal education also contributed to increased leisure time and influenced the demand for more leisure related activities among Americans.

Aristotle described leisure and work as follows:

> We should be able not only to work well but to use leisure (time) for as I repeat once more, the first principal of all action is leisure. Both are required, but leisure is better than work and is its end. (cited in Jensen, 1977, p. 4)
To Aristotle the problem associated with this increased leisure or free time was that it had a tremendous potential for good or bad. Leisure unlocked doors, but leisure alone did not guarantee an improved individual or a better society.

Many studies documented the physical benefits derived from recreation and leisure programs; however, the cognitive benefits from these programs were more difficult to document. Part of the difficulty was the diversity of factors influencing cognitive development. A few research studies did indicated a change in test scores after exposure to structured recreation and leisure programs (Crume, 1986; Crume & Lang, 1990; Hazelworth & Wilson, 1990; Hestand, Howard, & Gregory, 1971; Melky, 1992).

**Pioneer Camps**

Public education influenced the creation of pioneer camps in the early 1900s. These camps were very rugged, and the participants experienced activities very similar to the early American pioneers. The main goals of these camps were to recreate the participants either physically, psychologically, spiritually, or mentally. Dimock described these early camps: "The emphasis was rugged outdoor experience, and the recapturing of the pioneer spirit and manner of life, the renewal of the city dweller through liberated and refreshing contact with the resources of nature" (Dimock, 1948, p. 5).

Supporters of these camps believed getting back to nature influenced one's definition of self. Some stressed that the knowledge and understanding found in nature had a positive influence
on self-concept (Reeder, Donohue, & Biblauz, 1960). This belief was also supported by the two major goals of outdoor education which were as follows:

1. To provide an opportunity for an individual to participate in problem solving related to survival, comfort, and safety resulting in a more self-reliant and secure being through adventures and challenging outdoor experiences.

2. To improve self-concept through providing opportunities for achieving success and accomplishments in activities which are meaningful to the learner (Smith, Carlson, Masters, & Donaldson, 1974).

Current Trends in Outdoor Activities

Many of the modern day activities in outdoor recreation were influenced by the philosophy of mastering the survival skills of the past. Regardless of the term used, outdoor education, outdoor recreation, environmental education, high adventure, high risk, conservation education, or nature study, they were all based on the same basic philosophy—survival skills. Recreation was defined by one author as

Outdoor recreation consists of all those leisure experiences in the outdoors that are related to the use, understanding, and/or appreciation of the natural environment of those leisure activities taking place indoors that are natural materials or are concerned with understanding an appreciation of the outdoors. (Ford, 1981, p. 73)

The Wilderness Education Association (WEA) and the National Leadership School became leaders in emphasizing the environmental impact of outdoor activities. These organizations developed
procedures and techniques that were in harmony with nature and that minimized environmental destruction. Because of these organizations, many other outdoor organizations took the same direction and developed similar concerns.

In the 1990s, the trend for outdoor activities became instructional programming. Many risk/challenge programs introduced by WEA and the National Outdoor Leadership School influenced the curriculum of physical education departments at many universities. For example, Western Kentucky University required physical education majors to complete a course in individual outdoor skills not based upon team assistance. Indiana State University at Terra Haute developed an outdoor field campus where students learned many areas of outdoor education including ecosystems, team courses, high rope courses, and facilitated instruction.

Many educational, counseling, and redirecting groups claimed improved self-concept among participants through high adventure activities. Newspaper articles and television programs reported involvement by groups such as child development, juvenile corrections, and the military in high adventure activities to aid in self-concept development. All these groups claimed improved self-concept, improved unity, a sense of belonging, and a lifting of spiritual awareness related to the high-adventure activities (Dickey, 1975; Godfrey, 1972; Pangrazi, 1982; Schreyer, White, & McCool, 1978; Tapply 1977).
Many of the modern day outdoor activities related to high adventure, risk/challenge, and outward bound had related educational classes sponsored by local, state, and federal agencies. The court systems used these programs to improve the self-concept of young offenders and maladjusted youth. The former executive director for the National Council of Juvenile Court Judges believed high-adventure programs had a positive psychological effect upon youth (Thorstensen & Heaps, 1973).

In an attempt to facilitate group guidance activities, team management relationships, and team problem solving companies conducted group high adventure activities for their employees. The benefits from such activities grew as more and more companies moved away from the authoritarian style of management toward team management.

**Need for the Study**

Studies related to camping, high-adventure, and other outdoor activities associated with self-concept and wilderness anxiety have reported a positive correlation between outdoor experiences and a positive self-concept (Crume, 1986; Crume & Lang, 1990; Hazelworth & Wilson, 1990; Melky, 1992; Patton, 1982; Rappaport & Lundegren, 1981). Other research (Bultena & Napier, 1981; Pangrazi, 1982; Schreyer et al., 1978) revealed some evidence that self-concept and wilderness anxiety were negatively correlated. Studies by Crume and Lang (1990) and Melky (1992) proposed a link between high adventure activities and an improvement in wilderness anxiety. However,
researchers did not extensively explore wilderness anxiety due to lack of a reliable test instrument for measuring that anxiety.

In this current study the belief was that a positive relationship existed between outdoor activities and the development of a positive self-concept. In Comstock's book the argument was made that outdoor activities assisted one in having a more positive perspective of self and an improved state of mental health. She wrote: "This is an age of nerve tension, and the relaxation that comes from the confronting companionship found in the woods and fields is, without a doubt, the best remedy for this condition" (Comstock, 1912, p. 2).

Before 1975 most outdoor activity research focused on camping and related skills. Current research revealed a trend toward involvement in such activities as repelling, white water rafting, rock/mountain climbing, wilderness survival, and other high risk/challenge activities. While many speculated about a possible improvement in self-concept from such activities, little evidence was found to support this theory.

A need for this study existed because many reported studies on the cognitive changes from outdoor activities were based upon subjective opinion or personal observation with very little empirical evidence. The results of this study provided a better understanding of the effects of outdoor activities on the self-concept and wilderness anxiety of participants. Another purpose of this study was to make statistical comparisons with the data collected from the
two previous studies sponsored by the KDFWR to determine if differences existed among students from different geographical areas.

**Problem Statement**

The problem statement for this study was "Will a one-week Kentucky Department of Fish and Wildlife Resources camping experience result in a significant difference in the mean pretest and posttest self-concept and wilderness anxiety scores of fifth and sixth grade students at Camp Webb as measured by the Willoughby Schedule and the Crume/Ellis Wilderness Anxiety Scale?"

**Summary**

As indicated in Chapter One, a need existed for this study because very little empirical evidence existed to support the assumption that outdoor activities improved one's self-concept. While many of the outdoor programs did not use the term self-concept, they alluded to the characteristics, attitudes, and behaviors produced by and associated with an improved self-concept. The research literature contains considerable evidence supporting a positive correlation between outdoor experiences and a positive self-concept.
CHAPTER TWO

REVIEW OF LITERATURE

Early Theories on Self-Concept

Theories on self-concept can be traced back to early Greek philosophers. Even though these early philosophers never used the word "self-concept," such words as "soul" or "spirit" were used to describe one's self. After the arrival of Christianity, soul was used to describe desire, choice, or thought which caused man to be different from animals. In essence, soul referred to an individual's personality and what made an individual unique (Diggory, 1966).

The distinction between body and soul occurred in 1644 when Rene Descartes wrote Principles of Philosophy. He believed man had the free will to reject anything that was doubted and to accept anything that was not rejected (Diggory). He wrote

While we thus reject all that of which we can possibly doubt, and feign that it is false, it is easy to suppose that there is no God, nor heaven, nor bodies, and that we possess neither hands, nor feet, nor indeed any body; but we cannot in the same way conceive that we who doubt these things are not; for there is a contradiction in conceiving that what one thinks does not at the same time as it thinks, exist. And hence this conclusion I think, therefore I am, is the first and most certain of all that occurs to one who philosophizes in an orderly way. (cited in Diggory, 1966, pp. 2-3)

Descartes' "free will" referred to one's decisions based on another's opinion.
In 1650, Descartes wrote *Les Passions de l'Ame* in which he separated the mind from the physical body. The body was compared to a machine composed of parts and was connected to the soul which contained desire and thought (Diggory, 1966). By his own statement, however, "I think, therefore I am" (cited in Diggory, p. 3), it is unclear whether the two were separated.

Hume in 1739 wrote against the notion of experience being the knower of knowledge when he stated the following:

If any impression gives rise to the idea of Self, that impression must continue invariably the same throughout the whole course of our lives, since self is supposed to exist after that manner. But there is no impression constant and invariable. Pain and pleasure, grief and joy, passions, and sensations succeed each other, and never all exist at the same time.... I never can catch myself without a perception, and never can observe anything but the perception. When my perceptions are removed for any time, as by sound sleep, so long am I insensible of myself, and may truly be said not to exit. (cited in Diggory, 1966, p. 7)

Hume used "self" to distinguish his views or opinions from those of others. From his theory, self meant one's own ideas and opinions and, thus, a separation of the mind from the physical body.

Mill in 1829 contributed to the theoretical analysis of self-understanding when he wrote: "A person's memory of having performed an action and his consciousness of being the same person who performed the action are two ways of stating the same fact" (cited in Diggory, 1966, p. 8). He believed self was the possessor of memories from the past and "I" was what contained memories. In his theory the bond to "me" was the ego, and the greatest determiner of "self" was the memory.
James divided self into two components—the "me" and the "I." James called the primary component of "me" the constituents. These constituents included all the material, social and "spiritual" characteristics which made an individual unique. He believed an individual developed a hierarchical structure based on the "me" constituents. His hierarchical structure consisted of the bodily me at the bottom, the spiritual me at the top, and the social me between (Damon & Hart, 1982).

The "I" was the "self-as-knower"—the part of the self which interpreted in a subjective manner. The "I" referred to all the experiences an individual encountered in the world and gave meaning to life. Through continuity, distinctness, and volition, a person became aware of "I." According to James, individuality was the end result of self-as-knower. He concluded that the study of "I" in self-concept should be left to philosophers and the "me" to psychologists (Damon & Hart, 1982).

James believed one's self-evaluations or self-feelings resulted from one's position in the world, based on success or failure when he wrote:

> With no attempt there can be no failure; with no failure no humiliation. So our self-feeling in this world depends entirely on what we back ourselves to be and do. It is determined by the ratio of our actualities to our supposed potentialities; a fraction of which our pretensions are the denominator and the numerator our success; thus, self-esteem = success/pretensions. (cited in Diggory, 1966, p. 16)

Freud, like Mill, used "ego" to describe a person's behavior. He believed a person's personality consisted of three elements—
id, the ego, and the superego. The id was one's unconscious and had no touch with reality; the ego was partly unconscious but was within the boundaries of reality. Neither the id nor the ego had any morality. The superego assisted an individual in determining what was right or wrong and was an individual's conscious (Freud, 1962). Although Freud was respected for his psychological theory, self was not a primary psychological unit in his model.

Mead's *Mind, Self, and Society* in 1934 again reflected James' concept of the "I" and "Me" theory. His approach was different from James' because he approached the "I" through the "Me." He theorized by studying individuals' knowledge of their objective and subjective selves, the focus should be on self-understanding of both the "me" and the "I." Self-understanding involved an individual's knowledge and reflection on the self-as-known as well as the self-as-knower (Damon & Hart, 1982).

Mead wrote in depth about the relationship between man and society. He believed society and man co-existed with each dependent upon the other for survival. He concluded that an individual influenced the development of a society as much as the development of a society was influenced by man. He argued that society or any social organization must allow "individual" expression lest the world would be "thrown back on the structure found in the mobs" (cited in Diggory, 1966, p. 4).

In 1935, Lewin developed the theory that behavior was a function of both the person and the environment. He believed an individual's
perceived environment and the individual's perception of the environment created an individual's life space (Cartwright, 1979).

Allport was an early leader among academic psychologists in developing personality theories. He believed "traits" were motivating factors which dictated an individual's behavior. He also proposed that an individual's motivational system changed from infancy to adulthood into a more "predictable style of conduct." He theorized, "Ego involvement is . . . a condition of total participation of the self-as-knower, as organizer, as observer, as status seeker and as a socialized being" (cited in Diggory, 1966, p. 56).

Goldstein in 1939 wrote, "... we have to assume only one drive, the drive of self-actualization" (cited in Diggory, 1966, p. 53). He described an individual's drive for self-preservation as either a response to the environment or a "sick organism" who worried about preservation (cited in Diggory, 1966, p. 53).

Chein (cited in Diggory, 1966) wrote that the ego was composed of self-interest. He proposed that one's total personality was larger than earlier writers had assumed and that it also included the ego. Burtocci in 1945 argued that the psychological self was equated with personality and that the ego was a sub-part of it (cited in Diggory, 1966).

Jung again reflected on James' writing when he wrote: "The driving force, so far as it is possible for us to grasp it, seems to be in essence only an urge toward self-realization" (cited in
Diggory, 1966, p. 38). He believed all happiness depended upon individuality.

Combs and Snygg (1959) were credited with giving self-concept wide usage even though it was introduced in 1943 by Raimy. They theorized that an individual was continually searching for adequacy, and this adequacy produced a more positive self-concept. They concluded an individual who had a positive relationship with the environment would develop a positive self-concept. This relationship in turn led to a positive relationship between self and others. If an individual had a negative experience with the environment, a negative self-concept developed and a negative relationship with others developed. Behavior such as aggression, belligerence, and withdrawal were associated with negative perceptions.

Adler emphasized the relationship between weaknesses and the development of a low self-esteem. In his earlier writings he stressed that every individual experienced feelings of inferiority in childhood. In 1957, he proposed three antecedent conditions necessary for the development of a child's self-esteem. The first was the child's size and strength; the second was acceptance, which included support and encouragement from significant others; and, third, with support a child learned to turn weaknesses into strengths (cited in Coopersmith, 1967, p. 31).

Current Theories on Self-Concept

Rogers was very influential in developing self-concept theories, especially the role self-concept had in the development of a
healthy individual. He stated the following:

The self-concept or self-structure may be thought of as an organized configuration of perception of one's characteristics and abilities; the precepts and concepts of the self in relation to others and the environment; the value qualities which are perceived as associated with experiences and objects; and goals and ideals which are perceived as having a positive or negative value. (Rogers, 1954, p. 310)

Rogers (cited in Santrock, 1990), like Combs and Snygg (1959), studied the relationship between experience and self-concept. Rogers, however, devoted much more time on adolescent's behavior. He believed adolescents had trouble understanding their own feelings. His theory was based on the adolescent's experience with the world; a positive experience led to a positive self-imagine and, through experience, the self was created. He theorized that self was accessible to consciousness. He divided self into self-perception and the values an individual placed on these perceptions. In Rogers' theory there was a struggle within an individual between the real self and the self an individual wanted to be. An individual who was unable to distinguish between the real self and the ideal self would be maladjusted. He argued that each person should be valued regardless of his/her behavior. He strongly emphasized "unconditional positive regard" which raised a person's self-worth and self-regard (cited in Santrock, 1990, p. 371). Rogers stressed the individual's worth and not the individual's behavior.

Goldstein in 1935 demonstrated the relationship between self-concept and self-actualization. Maslow reflected this relationship again in 1970. Maslow labeled all basic needs as "instinctoid,"
which were very similar to animals instinct (cited in Cartwright, 1979, p. 7). In happy conditions, benevolent needs developed; in ugly circumstances, brutish needs developed. His theory was based on a hierarchy of needs. Needs were based on a pattern of prepotency in which an individual did not feel the second need until the first need was satisfied. To Maslow, psychological needs were the strongest, followed by safety, and the need for love, affection and belonging. The need for esteem became dominant only when the two previous needs were satisfied. He believed self-esteem consisted of two components: the need for competence and confidence and the need for prestige, fame, and recognition. When these were accomplished an individual felt valued and developed self-confidence. If these needs were not met, an individual felt helpless and worthless (Cartwright, 1979).

Self-actualization was the highest need in Maslow's hierarchy of needs. He believed one should become what one had the potential to become. To Maslow, individuals who reached self-actualization were internally motivated, had better perceptions, developed better relationships, and had an appreciation for the natural things of life (Cartwright, 1979).

Erikson (1990) like Freud believed in the influence of family and unconscious thought in the development of self-concept, but he added a third element--culture. He concluded an individual's concern about social acceptance resulted in self-judgment and a search for more self-concept rules for achieving social adjustment and independence. The search for self-concept rules involved eight
developmental states: infancy; early, middle and late childhood; adolescence; and, young, middle, and late adulthood. Each stage presented an individual with a developmental task that resulted in a crisis. The way in which an individual learned to resolve crises resulted in a healthier development. During the development phase if a crisis was encountered positively, then in the next stage a crisis would also be encountered positively.

Jordan and Merrifield (1981) developed a self-concept model based on the relationship between self and experience. Their model was similar to Guilford's model developed in 1967. The model was composed of four cognitive processes: remembering, evaluating, transforming, and generating. They like Rogers believed an individual's perception of reality and self were related and did interact.

From these theories, researchers studied and analyzed an individual's self-concept and perception of self. Through self, an individual learned to relate to others and to cope with living. The interaction between self, others, and the world influenced one's sense of self-worth and self-imagine.

**Definitions of Self-Concept**

There were many definitions for self-concept. Each writer described it in phenomenal terms. Allport (1937, 1943), Combs and Snygg (1959), James (1980), Rogers (1954) and Wylie (1961) used the term to refer to an individual's personal experience of self. They saw self-concept in terms of an individual's perceived self.
Researchers often use the term self-esteem interchangeably with self-concept. Mack defined self-esteem as "The result of the interplay of the self-as-subject or I, evaluating and experiencing, and the self-as-object, being evaluated or judged by the standards and expectations of the self-as-subject" (cited in Mack & Ablon, 1983, p. 7). Coopersmith (1967) defined self-esteem as

The evaluation which the individual makes and customarily maintains with regard to himself: it expresses an attitude of approval or disapproval, and indicates the extent to which the individual believes himself to be capable, significant, successful, and worthy. In short, self-esteem is a personal judgment of worthiness that is expressed in the attitudes the individual holds toward himself. (pp. 4-5)


Rice (1989) described self-concept as "One's sense of self, one's self-imagine; one's attitudes and feelings about self" (p. 204). Norem-Hebisen referred to self-concept as: "Selections of rules and processes which enhance the survival, maintenance, and growth of the observation of one's self and the organism" (cited in Lynch, Norem-Hebisen, & Gergen, 1981, p. 133). Thus, self-concept has been described as an interaction between behavior, sensory input, and thought process.

From these definitions self-concept should be interpreted to indicate how an individual feels about self. It describes an individual's worth, or whether an individual feels good about self or feels confident about self. Self-esteem is seen as self-evaluation
in which the individual judges self-feelings based on another's opinion or reaction. Even though a distinction has been made between the two terms, they are so intertwined and overlapping in the literature that they are both used to describe one's self-worth or one's respect for self.

Regardless of the term self-esteem or self-concept, three major components emerge. First, self-concept reflects an individual's perception of interaction with others; second, self-concept directs an individual's behavior; and, third, an individual's perception of another's response in fact affects the actual response of others.

**Development of Self-Concept**

Self-concept development has been described as a continuous process beginning in infancy and ending in death. In infancy a positive feeling of well-being develops from the relationship with the parents. Sroufe described this relationship as follows:

> The child who has developed mastery skills, the capacity for affective involvement, and a sense of confidence within the caregiver-infant relationship will be more enthusiastic, persistent and effective in facing environmental challenges on its own. Later, given continued support by the caregiver, this child will be confident, skilled, and positive in dealing with peers and others task of the preschool period. (cited in Mack & Ablon, 1983, p. 126)

Broughton (1980) stated that the self is reflected in physical terms in early childhood. According to Broughton, a child considers self as part of the body which can cause a child to be confused about self, mind, and body. Even motivation is considered to be part of the physical body by the child because the brain, part of the body, told the child what to do.
Along with the focus on body parts, self-evaluation has emerged. Lynch (1981) labeled this self-evaluation or self-esteem because a child applies validity rules. In early childhood goodness or badness is used to refer to body parts. Self-evaluation results from validating rules learned about the use of body parts. As successful rules became validated, a child's confidence and self-esteem rises. These rules play a central role in the development of self-concept.

As the child moves into middle childhood, self-concept rules are validated by verbal, logical, or abstract rules (Lynch, 1981). When the child enters school, the educational structure adds in self-concept flexibility. As the child develops, expectations and standards are set about performance. Based on the expectations and standards, the child develops and evaluates hypotheses concerning behavior.

The ideal self and self-actualization resolve from the development of standards and forming expectations. Expectations become rules for achieving self-ideals which are set as standards. Also during middle childhood, social rules such as fair conduct, winning and losing, and social rules for interacting with family and peers are formed.

As a child matures, so does his/her ability to develop rules for judging how others evaluated them. Mead referred to this as the "interactionist self" (cited in Lynch, 1981, p. 125). Emphatic self-judgment is the end result of this evaluation by others. When the child reaches adolescence, social acceptance becomes the dominant
factor in self-concept development. This transition between
color and adulthood involves many physical, cognitive, and social
changes. Adolescents perceived themselves in a more detailed way and
have a more distinct sense of being unique. As adolescents'
cognitive ability develops, the ability to process information into
a stable sense of who they are also develops.

Self-consciousness and the search for truth about "self" emerges
in adolescence. Erikson referred to this as the "adolescent's
believed an individual developed a true sense of self during
adolescence.

Selman described the adolescent's self-other relations as
"perspective taking." To him, perspective taking moved through a
series of five stages beginning at about age 3 and ending during
adolescence. The first stage, stage 0, is called egocentric, which
occurs between the ages of 3 to 6. In this stage a cause and effect
reasoning takes place because this age child can not distinguish
between the thoughts and feelings of others and self. Stage one
occurs between the ages of 6 to 8 and is called the social-
informational role taking. In this stage a child becomes aware of
other's social perspectives. In stage two, self-reflective role
taking occurs. This stage is characterized by a child putting self
in another's place to judge others actions, purposes and intentions.
Stage three, mutual role taking, occurs between the ages of 10 to 12.
In this stage a child understands that both self and others view each
other mutually. In the final stage, stage four, social and
conventional system role taking occurs. In this stage a child realizes that mutual perspective does not necessarily lead to complete understanding. Social implications are seen as necessary because they are understood by everyone (cited in Santrock, 1990, p. 369).

Many developmentalists believe change does not end with adolescence. Kenniston called the period between adolescence and adulthood as youth. He referred to this period as a time of temporaries, a period in which an individual often makes job or residence changes. During this period, marriage and family are put off until later. This temporary condition could last no longer than 2 to 4 years or as long as 10 years and has a direct influence on one's self-worth and the development of a positive self-concept (cited in Santrock, 1990, p. 370).

In early adulthood, ranging from about age 20 through the 30s, career development, marriage, and family become dominant factors in shaping one's self-concept. Middle adulthood occurs about age 35 and extends to about age 66. This period is marked by transmitting values to the next generation, enhanced interest in one's body, and a changed career perspective. This period also has a direct influence on an adolescence's self-concept. How well middle age parents handle their own pressures is found to be directly related to an adolescent's adjustment (Santrock, 1990).

The last stage of development is called late adulthood and occurs between the ages of 60 to 70. This period is considered a
time of adjustment. Decreased strength and health, retirement and reduced income, increased freedom, less responsibility, and grandchildren have a direct influence on one's self-concept development (Santrock, 1990).

At birth an individual's self-concept emerges and ceases to exist at death. Throughout this period, biological, cognitive, and social development occurs. How an individual learns to cope with each stage of development has a direct influence on the development of one's self-concept.

**Development of a Positive Self-Concept**

The available research literature indicates that the development of a healthy self-concept begins in infancy and depends upon a supportive world of adults. At birth, the infant develops self from the interaction with others. Parental empathy is the key to early confirmation and validating of a developmental self. Coopersmith (1967) identified parental acceptance and firm limit setting as two major characteristics of children with high esteem. Erikson (1990) described this relationship with parents as a "battle for autonomy" when he stated:

> From a sense of self-control without a loss of self-esteem comes a lasting sense of autonomy and pride; from a sense of muscular and anal impotence, a loss of self-control, and of parental overcontrol comes a lasting sense of doubt and shame. (p. 128)

The development of a healthy self-esteem depends upon a child's reaction to discrepancies between the actual self and ideal self. Children need support and encouragement from parents when faced with
failure, disappointment, or rejection in order to gain a positive self-concept.

Cotton (1983) described the personality development throughout the life cycle as a constant, complex interaction with family members, peers, social institutions, and ethnic groups. Culture, encouragement, and support were also found to enhance and shape one's self-esteem. Wolf compared the importance of encouragement and support to the development of a healthy self-concept with the earth's need for oxygen when he said: "It is a relatively silent need until it is not met" (cited in Cotton, 1983, p. 144).

Enhancing Self-Concept

As was stated previously, the development of a healthy self-concept originates in infancy with parental interaction and the support and encouragement received at that stage. Combs and Snygg (1959) and Rogers (1947) believed self-concept evolved from personal experiences. Jordan and Merrifield (1981) labeled this personal experience as generating. In their model, self-concept was described as a cognitive process and had four processes: remembering, evaluating, transforming, and generating. Generating resulted from new learning which created new behavior.

Edeburn and Landry (1974) found teacher's self-acceptance positively related to the self-concept development of elementary children. O'Connor's (1978) study with fourth, fifth, and sixth grade students in northern Florida found teachers, administrators, and other school personnel did not help children develop a positive
self-concept. She further stated that this unpreparedness for meeting the crisis of the middle school experience was possibly at the root of the public tune-out. One of her major recommendations was that the positive side of a child's behavior be emphasized to help the child develop a positive self-concept.

Dinkmeyer, McKay, and Dinkmeyer (1980) further reflected the importance of a teacher's encouragement in the development of children's self-concept. Children's belief in their own abilities helped strengthen their self-confidence and thus gave children enough incentive to try again when a mistake was made.

Some investigators found that a student's self-concept declined after entering junior high. This decline has been attributed to the disrupted social network. In the transition from elementary school to junior high, children are faced with a new environment and often the lost status of being the oldest (Blyth, Simmons, & Carlton-Ford, 1983). A longitudinal study conducted by Wingfield et al. (1991) found a student's self-concept related to sports also declined after the transition to junior high. The increase in competitiveness in sports contributed to this decline.

In the 1980s, the superintendent of the Moreland School district in San Jose, California, introduced a two-step program called "esteem boosters" to help students develop a more positive self-concept. The first step required teachers and administrators to analyze their own self-worth. Once this step was accomplished, the second step was for the students to become involved in the "running of the school." The
school operated as a cooperation between students and administrators and teachers. The results of the new system were as follows: student achievement scores went up by 10 percent; vandalism dropped from $1,000 per year to $187; student attendance grew to 97.7 percent; and the number of students graduating and attending higher education rose from 65 percent to 89 percent (Weisman, 1991).

Peer relationships have been described as one of the most important influences on a child's self-concept development (Santrock, 1990). To many children, not being part of the "crowd" created stress, frustration, and depression. This transition between childhood and adult self-definition was referred to as "a way station" (Santrock, 1990). Peer groups provided feedback about a child's own abilities, and talents. The inability to "fit" into a social network has been linked with many different forms of problems ranging from delinquency to alcoholism (Carlson, 1982; Ismail & Trochtman, 1973; Nicholas & Gobble, 1990; Omizo, Omizo, & D'Andrea, 1982). There also appeared to be a correlation between children who were neither accepted nor rejected by their peers and adults who develop emotional problems (Witmer & Sweeney, 1992).

Bar-Joseph and Tzuriel (1990) found that ego formation had an impact on an adolescent's behavior. Adolescents who achieved a consolidated ego identity had a higher positive self-concept, more complex thinking, less impulsivity, and more interpersonal relationships. In their study with adolescents who had attempted suicide, they concluded that ego formation during adolescence served
as a possible "buffering" force which gave an adolescent inner strength against suicide.

Bandura (1986) described one's ability to deal with the environment and cope with challenges as "self-efficacy." Perceived self-efficacy allows one's judgment to deal with all aspects of life. Individuals who lack self-efficacy tend to avoid challenges and are more likely to give up when crises occur. Bandura described self-efficacy as

Any given activity skills and self-beliefs that insure optimal use of capabilities are required for successful functioning. If self-efficacy is lacking, people tend to behave ineffectual even through they know what to do... The higher the level of perceived self-efficacy the greater the performance accomplishments. Strength of efficacy also predicts behavior change. The stronger the perceived efficacy, the more likely are people to persist in their efforts until they succeed. (Bandura, 1986, p. 130)

Physical Activity

Northway (1946) suggested that a lack of skills may lead to social rejection, thus affecting self-concept. Cooper (1969) described athletes as being socially adjusted, having a greater self-esteem and a higher self-concept. Tillman, Hubbard, and Wriss's (1965) study also concluded that the top 15% in a fitness group were more socially accepted than the bottom 15%.

Riley's (1983) study of 410 middle school students concluded there was a positive relationship between self-concept and perceived physical ability and physical performance. He also found that females showed a strengthening self-concept with physical performance. He further suggested that co-ed physical education
classes had an effect upon young female adolescent's self-concept; girls who participated in co-ed classes had stronger self-concept scores than those who did not.

Witmer and Sweeney (1992) concluded that physical activity contributed to a person's health and well-being through such benefits as more personal energy, ability to handle stress, less depression, fewer physical complaints, better self-imagine, more self-confidence, slowing of the aging process, and greater perseverance. Regular exercise was also found to improve a person's mental health and mood (Doan & Scherman, 1987; Hatfield & Hatfield, 1991). Other researchers (Carlson, 1982; Nicholas & Gobble, 1990) have linked the lack of exercise to chronic fatigue, mental tension, coronary heart disease, and obesity. Physical activity was found to reduce anxiety and depression while increasing self-confidence, self-esteem, and pleasure (Carlson, 1982; Ford, 1990; Witmer & Sweeney, 1992). Glasser found physical exercise replaced undesirable behavior (Carlson, 1982). Collingwood's study in 1976 and Glassier's study in 1982 concluded that one's intellectual and problem solving ability improved with physical activity (cited in Carlson, p. 306). Omizo, Omizo, and D'Andrea (1992) found physical activity when combined with wellness guidance enhanced self-esteem among elementary children.

Exercise also influenced an individual's life-style. Individuals often quit smoking, change eating habits, and make other behavior changes when exercise becomes part of their daily routine. Reaching these initial goals often generates a sense of pride and
accomplishment for an individual; thus, the individual finds a new source of satisfaction and self-respect. These same goals often generalized to other areas of an individual's life (Ismail & Trochtman, 1973).

Menniger (1940) found that recreation contributed to mental health by offering a way to express aggression, allowing an individual to be constructive and creative, and giving a release from tension by relaxing. He believed that well adjusted individuals had strong recreational interests.

**Outdoor Activities**

Outdoor activities may be considered as a new experience for people; thus, attitudes and an improved state of mind may be developed. Ford (1981) described outdoor activity as a "change agent" which helped an individual develop new attitudes. She contended these changes helped an individual find meaning and purpose in life plus an added enjoyment for living.

Previous research on outdoor camping programs implied that a positive relationship existed between these programs and the development of a positive self-concept (Crume, 1986; Crume & Lang, 1990; Hazelworth & Wilson, 1990; Melky, 1992; Patton, 1982; Rappaport & Lundegren, 1981). Bultena (1981) used an interacting model designed by Kinch in 1973 and investigated the relationship between wilderness camping and self-concept. Bultena found a positive relationship between the self that was perceived by the individual and the assigned leadership ranking. The individuals who demonstrated good camping skills were also the ones who achieved
leadership status in the group. Although Bultena did not give any data on overall changes in self-concept within or among group samples, his study indicated a positive correlation between camping skills and self-concept.

In his study funded by the U.S. Air Force Office of Scientific Research Rotter (1966) found personal skills development had a positive relationship to a person's need to achieve. He theorized that skill development caused an individual's expectations of success to rise. He also concluded that there was a relationship between skill development and self-esteem. Dean, Hart, and Morris (1976) found that students developed a more positive self-concept as a result of outdoor activities. They also concluded that as a result of outdoor activities students became more aware of their strengths and weaknesses, more acceptable of others, and accepted more responsibility for their own actions.

Austin's (1980) study with handicapped boys concluded short camping trips did not influence self-esteem development; however, longer camping trips improved self-esteem. Boys involved in an extended camping trips showed improvement in personal and social behaviors as well as general attitudes. Chenery (1980) found acceptance by the camp counselor related to self-concept change. Her study showed an improvement in self-concept for campers over a camping season.

Patton's (1982) research study concluded that outdoor recreation activities had a role in producing a positive self-concept in youth.
This same conclusion was voiced by Kraus in 1973, when he wrote: "Recreation can help the individual to gain a more favorable self-concept and sense of accomplishment and personal worth...to reach a new level of self-esteem" (cited in Patton, p. 164).

While the above studies indicated that outdoor activities may be related to the development of a more positive self-concept, they involved camping and less challenging outdoor activities. These studies provide evidence that a possible relationship exists between outdoor activities and self-concept.

Risk\Challenge Activities

Jackson (1965) stated that self-concept was an important factor contributing to the alienation process in an individual. He concluded that activities which gave participants an opportunity for positive experiences improved self-concept and resulted in less alienation. Likewise, bad experiences led to a poor concept, negative behavior, and alienation. This same idea was expressed by Dickey (1975), who studied the effects of outdoor oriented activities on juveniles. According to Dickey, juveniles developed a greater sense of self-worth and self-confidence through outdoor programs. He believed juveniles experienced an improvement in attitude and thus less alienation from being in outdoor adventure programs.

A high level of skill development was required to participate in most outdoor activities. Because of this high level of skill, anxiety may be produced. One author wrote the following concerning anxiety created by being outdoors: "The average person in today's
society does not feel comfortable in an outdoor setting. Expressions and emotions of insecurity include fear, shyness, bravado (with no foundation), indifference, raised voices, and stillness" (Ford, 1981, p. 72).

According to Schreyer, White, and McCool (1978), an individual's ego fulfillment may be enhanced as a result of outdoor activities. Tapply (1977) supported this philosophy when he stated that outdoor programs enhanced self-development. He concluded that self-esteem and self-concept enhancements were the most important outcomes of any outdoor program.

Pangrazi (1982) believed physical education helped young people develop a more positive self-concept. He wrote the following concerning risk/challenging activities:

When students with low self-concept are asked to perform, their anxiety level is raised to a level that is detrimental to performance. Students with a high anxiety level are unwilling to take risks. This lack of risk taking prevents learning from occurring. Physical education teachers can arrange learning experiences that allow students to work individually and find success. Through successful experiences, the willingness to try new activities grows and the fear of failure is decreased. (Pangrazi, 1982, pp. 16-17)

Outdoor experiences usually involve an element of risk and stress. Such activities force individuals to depend upon their own inter strength to develop self-concept or the personal self. Likewise, outdoor experiences give an individual an opportunity to develop a more positive "me," or social self-concept.

Previous Studies on Self-Concept and Wilderness Anxiety

Many studies (Crume, 1986; Crume & Lang, 1990; Hazelworth & Wilson, 1990; Melky, 1992; Patton, 1982; Rappaport & Lundegren, 1981)
included speculation about a positive correlation between outdoor activities and the development of a positive self-concept; however, few studies included documentation for such a claim (Crume, 1986; Crume & Lang, 1990; Melky, 1992). Crume and Lang (1990) conducted an experimental study at Camp Earl Wallace to investigate the effects of a one week KDFWR camping experience on the self-concept and wilderness anxiety of fifth and sixth grade participants. A replication of the study was conducted at Camp Currie by Melky (1992) to test the validity and reliability of the initial test study data. The primary objectives of these studies were as follows:

1. To provide empirical evidence to support the benefits from outdoor activities.
2. To develop a valid and reliable instrument to measure wilderness anxiety.
3. To investigate the relationship between outdoor experiences and the development of a positive self-concept.

The following results were drawn from the two studies:

1. Both males' and females' self-concept scores improved; however, males' self-concept scores showed greater improvement.
2. Improvement for males' wilderness anxiety scores were greater and more wide spread than females' wilderness anxiety scores.
3. A positive correlation between outdoor experiences and the development of a positive self-concept was found.
Purpose of the Study

The purpose of this study was to investigate the effects of a one week KDFWR camping experience on the pretest and posttest self-concept and wilderness anxiety scores of fifth and sixth grade participants. This study was a replication of two previous ones sponsored by the KDFWR. In addition to the main purpose, two additional subpurposes were: (a) to add to the validity and reliability of the two previous studies; and, (b) to add to the knowledge of individual differences among fifth and sixth graders' self-concept related to regional origin.

The camping program of the KDFWR was formed in 1946; however, the Kentucky Hunter Education program was created approximately 15 years ago. More than 1,100,000 children have been involved in these programs (Melky, 1992). The benefits from the KDFWR's educational programs and camping experiences were assumed to be positive; however, there is little empirical evidence to support this assumption.

Hypotheses

Since this study was a replication of two previous ones, the same hypotheses were tested. The hypotheses were as follows:

H01: There will be a significant difference between the mean pretest and posttest Willoughby Schedule scores among male fifth and sixth grade students.

H02: There will be a significant difference between the total mean pretest and posttest Crume/Ellis Wilderness Anxiety scores among male fifth and sixth grade students.
H03: There will be a significant difference between the mean pretest and posttest Willoughby Schedule scores among female fifth and sixth grade students.

H04: There will be a significant difference between the total mean pretest and posttest Crume/Ellis Wilderness Anxiety scores among female fifth and sixth grade students.

H05: There will be a significant difference between the mean pretest and posttest Willoughby Schedule scores among male plus female fifth and sixth grade students.

H06: There will be a significant difference between the total mean pretest and posttest Crume/Ellis Wilderness anxiety scores among male plus female fifth and sixth grade students.

Limitations

This study was limited to the following:

1. The self-concept and wilderness anxiety data were limited to self-perceptions, as indicated by values established through responses to items on two self-reporting instruments: the Willoughby Schedule for reporting self-concept scores and the Crume/Ellis Wilderness Anxiety scale for reporting wilderness anxiety scores.

2. The pretest and posttest data were collected from fifth and sixth grade boys and girls during a one week camping trip sponsored by the Kentucky State Fish and Wildlife Department.

3. The population was limited to intact groups enrolled in the one-week camping program.
4. Both the male and female groups were selected at random from 11 one-week camping sessions.

**Delimitations**

The controlled variables in this study were the program content and outdoor experiences. The gender of each group was also controlled.
CHAPTER THREE

METHODOLOGY

Design

An experimental design consisting of separate randomized pre-test/posttest groups was used in this study. Designs such as the one used in this study were often used in educational research (Campbell & Stanley, 1963).

Treatment

The treatment consisted of fishing, swimming, boating, archery, shooting, and hunter education with instructional classes in each area. These activities were all part of the 1992 summer camping program at Camp Webb in Grayson, Kentucky. Not all campers had the same instructors; however, all subjects experienced similar activities.

Population

The population for this study included all fifth and sixth grade students attending the Kentucky Department of Fish and Wildlife Camp Webb 1992 summer camp program. The study sample consisted of eight groups of male and female campers randomized from cabins. The total randomized sample consisted of 723 participants. The pretest sample was comprised of 193 males and 196 females. The posttest sample consisted of 158 males and 176 females. All instruments were usable.
Instruments

Psychologists have had difficulty measuring self-concept because an individual's self-perception often changes according to the situation. Most of the instruments developed to measure self-concept are classified as self-reporting in which individuals revealed how they perceive themselves. Some experts (Allport, 1943; Coopersmith, 1967; Ford, 1990; Hatfield & Hatfield, 1991; Jordan & Merrified, 1981; Lynch, 1981; Mack, 1982) suggested using a combination of methods such as observation, self-reporting, and ratings by others to reveal a more accurate picture of one's self-concept.

The Willoughby Schedule test instrument was used for measuring self-concept in this current study since it was used in two previous studies (Crume & Lang, 1990; Melky, 1992). In a review of the literature, the Crume/Ellis Wilderness Anxiety Scale (CEWAS) was the only instrument found to measure wilderness anxiety.

Willoughby Schedule

Self-concept was assessed using the Willoughby Schedule. The Willoughby consists of 25 self-statements in which the individual indicates the degree to which the item reflects his/her personal feelings. Each question has a value scale of zero to four for answers ranging from "no," "never," "not at all," to "always," and "entirely" (see Appendix A).

An individual's score was determined by how far the score deviated from the mean. Individuals with a high score were likely to
take risks, and those with a low score were likely to avoid risky activities.

The Willoughby Schedule was first published with the validation study in 1934 (Crume, 1986) and was retested in 1971, 1980, and 1983 (Crume & Lang, 1990). The reliability of the Willoughby Schedule is reported to be \( r = 0.89 \) by both test-retest and split halves methods. It has a long history of replications and revalidations and generally has been judged to be both valid and reliable (Boles, 1980; Crume, 1986; Crume & Ellis, 1984; Crume & Lang, 1990; Hestand, Howard, & Gregory, 1971; Melky, 1992). While the Willoughby Schedule is subject to the limitations of any pencil and paper self-report scale, it is applicable to a broad range of subjects.

Clinical psychologists use the Willoughby Schedule to measure self-concept. In the past three years, it has been used to measure the self-concept scores of university students and fifth and sixth grade students participating in a summer camping program sponsored by the Kentucky State Department of Fish and Wildlife (Crume & Lang, 1990; Melky, 1992).

**Crume/Ellis Wilderness Anxiety Scale (CEWAS)**

Wilderness anxiety was assessed using the Crume/Ellis Wilderness Anxiety Scale (CEWAS). It was developed in 1984 and provides a measurement of anxiety in both the biological and physical environments (Crume & Lang, 1990). The CEWAS consists of the following eight factor areas: sudden attack; poisonous plants; sharp objects; venomous and infectious animals; inclement weather; water;
being lost or alone; and total score. An individual rates the degree to which a particular item reflects personal anxiety (see Appendix B).

A principle axis factor analysis was used on the test sample of 226 junior high students to identify a factor structure for the instrument. Squared multiple correlation coefficients were used as initial estimates of commonality. Factors with eigenvalues greater than unity were rotated to simple structure by a varimax criterion. The factor based scales were created by combining items with loading of .35 or greater. The Crombach's alpha was calculated as an estimate of internal consistency for each of the resulting scales. The estimated internal consistency for the entire scale was .96. Each of the seven scales produced reliability estimates in excess of .80 (Crume & Ellis, 1984).

**Procedures**

All tests, pre and post, were administered by the cabin counselors. Counselors told each group the purpose of the instrument was to assess the camping experience sponsored by the Kentucky Department of Fish and Wildlife Resources and that there were no "right" or "wrong" answers. The Willoughby Schedule was administered first. The following instructions were read to all participants:

The questions in this schedule are intended to indicate various emotional personality traits. It is not a test in any sense because there are no right or wrong answers to any of the questions in this schedule. After reading each question, you
will circle a number on the answer sheet. The meaning of the numbers is:

0 - means no, never, not at all, etc.
1 - means somewhat, sometimes, a little, etc.
2 - means about as often as not, an average amount
3 - means usually a good deal, rather often, etc.
4 - means practically always, entirely, etc.

After this was completed the camp counselors administered the CEWAS. The following instructions were read to the participants:

Most people are afraid or bothered by some of the creatures that they might come into contact with in the outdoors. One person might be very afraid of something while another person might have little or no fear. One person might be very afraid of thunder storms while another person might have little or no fear. We want you to tell us the things that bother you. We also want to know just how much they bother you. You will find a number of things that you might come into contact with when outdoors listed below. Each thing will have 5 blank spaces. Place an X in the first blank if you have no fear or anxiety about the item; place an X in the second blank if you have no fear and are only slightly cautious; place an X in the third blank if you have anxiety and are cautious; place an X in the fourth blank if you have high anxiety and great caution; place an X in the fifth blank if you have extreme anxiety and tend to avoid all contact with the item.
After the instruments were completed, they were placed in an envelope and labeled by date, sex, and cabin number. Data from the instruments were posted on tally sheets and then entered into a computerized data base and cross checked for accuracy.

The SOLO Statistical Software Package was used to produce the descriptive statistics and $t$-test value computations. A $t$-test value was generated from two samples, unpaired observations. A 95% confidence level plots, $F$-ratio testing of group variances, and probability level were also generated. An alpha level of (.05) was used to test for significant difference. The $t$ test was based upon several assumptions. One was that the variances of the two populations were the same. When this assumption was not valid, SOLO provided appropriate probability data for populations with unequal variances (Melky, 1992).

$t$-test values and descriptive data were generated for male, female and male plus female groups. Pretest/posttest $t$ tests were generated for the Willoughby Schedule scores, individual CEWAS factor scores, and CEWAS total scores for each group and for the total group.
CHAPTER FOUR
FINDINGS

Population Characteristics

The male and female fifth and sixth grade student groups consisted of 723 participants ranging in age from 11 to 13. The pretest sample consisted of 193 males and 196 females. The posttest sample consisted of 158 males and 176 females. The origin of all groups was the eastern part of Kentucky—which included Henry, Carter, Johnson, and Boyd counties. No minority students were included in the study.

Results of the Study

Male

Analysis of the data for males on the Willoughby Schedule revealed no significant improvement; however, a slight improvement from a mean pretest score of 32.56 to a posttest mean of 31.32 occurred (see Table I). Therefore, the hypothesis that there would not be a significant difference between the mean pretest and posttest Willoughby Schedule scores among male fifth and sixth grade students was accepted.
### Table 1

Male Willoughby Schedule and Crume/Ellis Wilderness Anxiety Scale from the Kentucky Department of Fish and Wildlife Camp Webb Study, 1992

<table>
<thead>
<tr>
<th>Variable</th>
<th>Pretest $a_n = b_{X_1}$</th>
<th>Posttest $a_n = b_{X_2}$</th>
<th>$t$-value</th>
<th>Significance</th>
</tr>
</thead>
<tbody>
<tr>
<td>Willoughby Schedule</td>
<td>193 32.56</td>
<td>158 31.32</td>
<td>.726</td>
<td>.468</td>
</tr>
<tr>
<td>Fear of:</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Poisonous Plants</td>
<td>193 8.56</td>
<td>158 8.36</td>
<td>.252</td>
<td>.080</td>
</tr>
<tr>
<td>Sharp Objects</td>
<td>193 7.02</td>
<td>158 6.70</td>
<td>.534</td>
<td>.593</td>
</tr>
<tr>
<td>Venomous and Infectious Animals</td>
<td>193 3.31</td>
<td>158 2.97</td>
<td>.683</td>
<td>.495</td>
</tr>
<tr>
<td>Inclement Weather</td>
<td>193 10.52</td>
<td>158 11.42</td>
<td>-.930</td>
<td>.353</td>
</tr>
<tr>
<td>Water</td>
<td>193 3.80</td>
<td>158 3.66</td>
<td>.262</td>
<td>.794</td>
</tr>
<tr>
<td>Being Lost or Alone</td>
<td>193 3.50</td>
<td>158 4.07</td>
<td>-1.090</td>
<td>.276</td>
</tr>
<tr>
<td>CEWAS Total</td>
<td>193 56.18</td>
<td>158 57.49</td>
<td>-.316</td>
<td>.751</td>
</tr>
</tbody>
</table>

$^a_n$ = number in sample, $b_{X_1}$ = mean, $^c*$ = significance (.05)

No significant improvement was found on the CEWAS. In five of the factor areas males did show slight improvement and on the total CEWAS the pretest mean score of 56.18 was slightly lower than the posttest mean score of 57.49. The hypothesis that there would not be a significant difference between the total mean pretest and posttest Crume/Ellis Wilderness Anxiety score among male fifth and sixth grade students was accepted.

**Female**

Analysis of the data for female students revealed no significant improvement on the Willoughby Schedule scores (see Table 2). The
female pretest mean score was 33.69 and the posttest mean score was 36.69 with a probability of .091. The hypothesis that there would be a significant difference between the mean pretest and posttest Willoughby Schedule scores among female fifth and sixth grade students was not supported.

No significant improvement was found on the CEWAS scores (see Table 2). In six of the factor areas the posttest scores were slightly higher than the pretest scores. The same was observed in the total CEWAS scores. The mean posttest total CEWAS score (81.97) was slightly higher than the mean pretest total CEWAS score (78.55). Therefore the hypothesis that there would not be a significant difference between the total mean pretest and posttest Crume/Ellis Wilderness Anxiety scores among female fifth and sixth grade students was accepted.
Table 2
Female Willoughby Schedule and Crume/Ellis Wilderness Anxiety Scale
from the Kentucky Department of Fish and Wildlife
Camp Webb Study, 1992

<table>
<thead>
<tr>
<th>Variable</th>
<th>Pretest</th>
<th>Posttest</th>
<th>t-value</th>
<th>Significance</th>
</tr>
</thead>
<tbody>
<tr>
<td>Willoughby Schedule</td>
<td>196 33.69</td>
<td>176 36.69</td>
<td>-1.68</td>
<td>.091</td>
</tr>
<tr>
<td>Fear of:</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Sudden Attack</td>
<td>196 28.96</td>
<td>176 29.76</td>
<td>-.568</td>
<td>.569</td>
</tr>
<tr>
<td>Poisonous Plants</td>
<td>196 13.80</td>
<td>176 14.07</td>
<td>-.343</td>
<td>.732</td>
</tr>
<tr>
<td>Sharp Objects</td>
<td>196 9.36</td>
<td>176 9.48</td>
<td>-.201</td>
<td>.840</td>
</tr>
<tr>
<td>Venomous and Infectious Animals</td>
<td>196 4.21</td>
<td>176 4.11</td>
<td>.284</td>
<td>.777</td>
</tr>
<tr>
<td>Inclement Weather</td>
<td>196 13.47</td>
<td>176 14.92</td>
<td>-1.470</td>
<td>.142</td>
</tr>
<tr>
<td>Water</td>
<td>196 4.73</td>
<td>176 5.52</td>
<td>-1.370</td>
<td>.171</td>
</tr>
<tr>
<td>Being Lost or Alone</td>
<td>196 4.03</td>
<td>176 4.11</td>
<td>-.164</td>
<td>.669</td>
</tr>
<tr>
<td>CEWAS Total</td>
<td>196 78.55</td>
<td>176 81.97</td>
<td>-.831</td>
<td>.406</td>
</tr>
</tbody>
</table>

\( a_n = \text{number in sample}, \quad b_\bar{x} = \text{mean}, \quad c_* = \text{significance (.05)} \)

Male Plus Female Results

There was no significant improvement in test scores on the Willoughby Schedule for males plus females (see Table 3). The Willoughby schedule pretest score for males plus female students was 33.13 and the posttest score was 34.10 with a probability of .420. Thus, the hypothesis that there would not be a significant difference between the mean pretest and posttest Willoughby Schedule scores among male plus female fifth and sixth grade students was accepted.
Table 3
Male Plus Female Willoughby Schedule and Crume/Ellis Wilderness Anxiety Scale from the Kentucky Department of Fish and Wildlife Camp Webb Study, 1992

<table>
<thead>
<tr>
<th>Variable</th>
<th>Pretest</th>
<th>Posttest</th>
<th>t-value</th>
<th>Significance</th>
</tr>
</thead>
<tbody>
<tr>
<td>Willoughby Schedule</td>
<td>389</td>
<td>334</td>
<td>3.13</td>
<td>34.10</td>
</tr>
<tr>
<td>Fear of:</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Sudden Attack</td>
<td>389</td>
<td>334</td>
<td>24.41</td>
<td>25.31</td>
</tr>
<tr>
<td>Poisonous Plants</td>
<td>389</td>
<td>334</td>
<td>11.20</td>
<td>11.37</td>
</tr>
<tr>
<td>Sharp Objects</td>
<td>389</td>
<td>334</td>
<td>8.20</td>
<td>8.17</td>
</tr>
<tr>
<td>Venomous and Infectious Animals</td>
<td>389</td>
<td>334</td>
<td>3.79</td>
<td>3.57</td>
</tr>
<tr>
<td>Inclement Weather</td>
<td>389</td>
<td>334</td>
<td>12.00</td>
<td>13.26</td>
</tr>
<tr>
<td>Water</td>
<td>389</td>
<td>334</td>
<td>4.27</td>
<td>4.64</td>
</tr>
<tr>
<td>Being Lost or Alone</td>
<td>389</td>
<td>334</td>
<td>3.77</td>
<td>4.09</td>
</tr>
<tr>
<td>CEWAS Total</td>
<td>389</td>
<td>334</td>
<td>67.45</td>
<td>70.39</td>
</tr>
</tbody>
</table>

\* \( \frac{a_n}{\overline{x}} = \frac{b}{\overline{x}} = \frac{t-value}{csignificance} \)*

\( a_n = number \text{ in sample} \), \( \overline{x} = mean \), \( c* = significance (0.05) \)

No significant improvement in either the factor areas or the total CEWAS scores was observed for males plus females on the CEWAS. In two factor areas, sharp objects and venomous and infectious animals, slight improvement did occur; however, these changes were not significant. Therefore, the hypothesis that there would not be a significant difference between the total mean pretest and posttest Crume/Ellis Wilderness Anxiety scores among male plus female fifth and sixth grade students was accepted.
CHAPTER FIVE

CONCLUSIONS

The results of this study revealed no significant differences in self-concept scores among fifth and sixth grade male and female students attending Camp Webb. The Wilderness Anxiety Scale scores did not differ significantly pre versus post for either sex.

The results of the pretest and posttest scores produced the following conclusions:

1. No significant improvements were found on the Willoughby Schedule scores for male participants.
2. No significant improvements were found on the Willoughby Schedule scores for female participants.
3. No significant improvements were found on the Willoughby Schedule scores for male plus female participants.
4. No significant improvements were found in either the individual factor areas or the total scores on the CEWAS for male participants.
5. No significant improvements were found in either the individual factor areas or the total scores on the CEWAS for female participants.
6. No significant improvements were found in either the individual factor areas or the total scores for male plus female participants on the CEWAS.
When this study was compared to Crume's 1986 study pretest mean of 27.99, the Hestand's 1971 (Hestand, Howard, & Gregory, 1971) study pretest mean of 31.00, and the Willoughby Validation 1932 (cited in Hestand, Howard, & Gregory, 1971) pretest mean of 28.91, the males had higher pretest self-concept scores. The girls, however, had lower self-concept pretest scores of 33.69, than Crume's (Crume, 1986) pretest mean of 33.80, Hestand's (Hestand, Howard, & Gregory, 1971) pretest mean of 35.00, and the Willoughby Validation's (cited in Hestand, Howard, & Gregory, 1971) pretest mean of 36.10.

In summary the results from this study, unlike previous studies, (Crume & Lang, 1990; Melky, 1992) produced no significant differences between the pre- and posttest.

**Recommendations**

It is recommended that

1. Scores from the three student groups be combined to reveal statewide total scores.

2. Research should be conducted to investigate factors which influence regional differences in self-concept and wilderness anxiety.

3. Future studies should investigate the lasting effects of the KDFWR camping experience for participants.
REFERENCES


*Psychology Today, 6*, 79-83.


WILLOUGHBY SCHEDULE

INSTRUCTIONS

The questions on this schedule are intended to indicate various emotional personality traits. It is not a test in any sense because there are no right or wrong answers to any of the questions in this schedule.

After reading each question, you will circle a number on the answer sheet. The meaning of the numbers is:

0 - means no, never, not at all, etc.
1 - means somewhat, sometimes, a little, etc.
2 - means about as often as not, an average amount
3 - means usually, a good deal, rather often, etc.
4 - means practically always, entirely, etc.

Circle the number that describes you or your feelings the best.

Please do not write on anything but the answer sheet.

AT THIS TIME, TURN TO THE QUESTIONS AND BEGIN
58

0 - means no, never, not at all, etc.
1 - means somewhat, sometimes, a little, etc.
2 - means about as often as not, an average amount
3 - means usually, a good deal, rather often, etc.
4 - means practically always, entirely, etc.

1. Do you get stage fright?
2. Do you worry over humiliating experiences?
3. Are you afraid of falling when you are on a high place?
4. Are your feelings easily hurt?
5. Do you keep in the background on social occasions?
6. Are you happy and sad--by turns--without knowing why?
7. Are you shy?
8. Do you daydream frequently?
9. Do you get discouraged easily?
10. Do you say things on the spur of the moment and then regret them?
11. Do you like to be alone?
12. Do you cry easily?
13. Does it bother you to have people watch you work, even when you are doing well?
14. Does criticism hurt you badly?
15. Do you cross the street to avoid meeting someone?
16. At a reception, do you avoid meeting the important people?
17. Do you often feel just miserable?
18. Do you hesitate to volunteer in a class discussion or debate?
19. Are you often lonely?
20. Are you self-conscious before superiors?
21. Do you lack self-confidence?
22. Are you self-conscious about your appearance?
23. If you see an accident, does something keep you from giving help?
24. Do you feel inferior?
25. Is it hard to make up your mind until the time for action is past?
<p>| | | | | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
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<tr>
<td>1</td>
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<td>1</td>
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0 - means no, never, not at all, etc.
1 - means somewhat, sometimes, a little, etc.
2 - means about as often as not, an average amount
3 - means usually, a good deal, rather often, etc.
4 - means practically always, entirely, etc.
CRUME-ELLIS WILDERNESS ANXIETY SCALE

INSTRUCTIONS

Most people are afraid or bothered by some of the creatures that they might come into contact with in the outdoors. One person might be afraid of something while another person might have little or no fear. One person might be very afraid of thunderstorms while another person might have little or no fear. We want you to tell us the things that bother you. We also want to know just how much they bother you. You will find a number of things that you might come into contact with when outdoors listed below. Each thing will have 5 blank spaces. Place an X in the first blank if you have no fear or anxiety about the item; place an X in the second blank if you have no fear and are only slightly cautious; place an X in the third blank if you have anxiety and are cautious; place an X in the fourth blank if you have high anxiety and great caution; place an X in the fifth blank if you have extreme anxiety and tend to avoid all contact with the item.
<table>
<thead>
<tr>
<th>ANSWER SHEET</th>
<th>CRUME-ELLIS WILDERNESS ANXIETY SCALE</th>
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<tbody>
<tr>
<td>- - - - -</td>
<td>Indicates no fear or anxiety whatsoever.</td>
</tr>
<tr>
<td>- - - - -</td>
<td>Indicates no fear and only slight caution.</td>
</tr>
<tr>
<td>- - - - -</td>
<td>Indicates reasonable anxiety and caution.</td>
</tr>
<tr>
<td>- - - - -</td>
<td>Indicates high anxiety and great caution.</td>
</tr>
<tr>
<td>- - - - -</td>
<td>Indicates extreme anxiety and tendency to avoid all contact.</td>
</tr>
<tr>
<td>XXXXXXXXX</td>
<td>Do no in XXXXXXXXX spaces.</td>
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<tr>
<td>snakes - - - -</td>
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<tr>
<td>spiders - - - -</td>
<td>spiders</td>
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<td>bugs - - - -</td>
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<td>wasps</td>
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<td>bees</td>
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<td>birds - - - -</td>
<td>ticks</td>
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<td>strange sounds - - - -</td>
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<td>briars</td>
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<td>wasps - - - -</td>
<td>sharp things</td>
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<td>bees - - - -</td>
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<td>being with people who know nothing about the outdoors</td>
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Mays,
Mitchel R.
1976
SELF-CONCEPT AND DRINKING
AMONG COLLEGE STUDENTS

A Thesis
Presented to
the Faculty of the Department of Psychology
Western Kentucky University
Bowling Green, Kentucky

In Partial Fulfillment
of the Requirements for the Degree
Master of Arts

by
Mitchel R. Mays
May, 1976
CORRECTION

PREceding Image has been refilmed
To assure legibility or to correct a possible error