AN EXAMINATION OF EARLY DEPARTURES ON COLORADO OUTWARD BOUND SCHOOL COURSES

By

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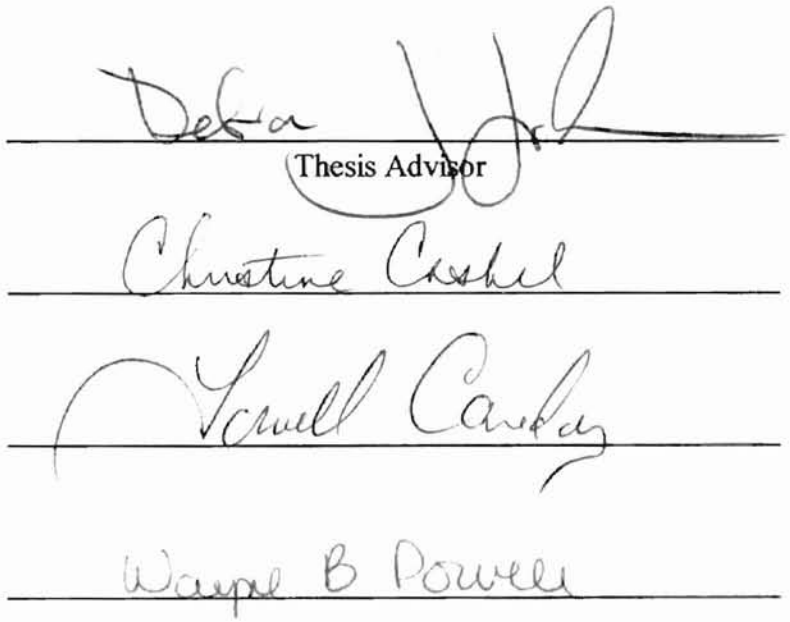

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Chapter 1

Introduction

A common belief about the benefits of using adventure experiences and "risk recreation" activities can be seen in the works of philosophers such as Aristotle and Rousseau and a number of psychologists including Freud, Erikson, and Maslow (Wurdinger, 1997). The concepts of experiencing what one is learning and dealing with the challenges of risk, problem solving, nature, group dynamics, and stressful situations can be found in works that existed before 350 B.C. (Hunt, 1990). The ancient Greek philosopher Plato wrote of this type of learning in the *Republic*. Aristotle, one of Plato's students, also spoke of a participatory learning approach. He spoke frequently of the learning of virtue in young people. Both he and Plato agreed that the best way to learn virtue was by experiencing it. They also thought the best way to experience virtue was to participate in demanding situations (Hunt, 1990).

The modern day philosopher and psychologist William James spoke of the benefits of extremely intense situations that occur in war. In his 1910 work "The Moral Equivalent of War," James wrote that the "dread hammer [of war] is the welder of men [*sic*] into cohesive states, and nowhere but in such states can human nature adequately develop its capacity" (Wilshire, 1971, p. 35). A number of people in a more modern era also shared

similar beliefs. Two of these individuals were German educator Kurt Hahn, and businessman, Lawrence Holt.

Kurt Hahn was born a German of Jewish parents in 1886. He grew up as an active student at a number of prominent educational institutions including Oxford. His initial career as a politician eventually lead to his position of Headmaster at the Salem School in Germany. In 1933 Hahn was taken into custody by the Nazis because of his political resistance to the German government. He was released from prison and became founder and headmaster of the Gordonstoun School. Throughout Hahn's life and career, he constantly expressed a number of concerns with the youth of the era. He led a continual effort to address a number of social declines he had identified. He felt that society had experienced a noted decline of fitness, enterprise, tenacity and compassion (Miner & Boldt, 1981).

While Hahn was headmaster of Gordonstoun, he made an attempt to promote physical fitness and simple athletic skills in the community. The vehicle for Hahn's attempt to educate the bodies of local youth was initially known as the Moray Badge (Rohrs & Tunstall-Behrens, 1970). The Moray Badge consisted of regular athletic training sessions which were linked with an expedition that would test stamina, determination, and some map reading and route finding. This idea inspired Hahn to start a small adolescent college for boys 14 to 18 years of age. The students would participate in four week courses involving a certain specialty while living a boarding school lifestyle. Eventually, Hahn evoked enough interest to convince a number of education authorities to become part of the County Badge Experimental Committee. The County Badge scheme

was the next generation in physical training programs.

By the end of 1940 Hahn sought funding for two separate enterprises. These enterprises included extending the county badge idea to day schools and youth organizations, and establishing a boarding school for demonstration of the county badge training (Rohrs & Tunstall-Behrens, 1970). Hahn's fund raising efforts eventually led him to Mr. Lawrence Holt.

Holt had long been an admirer of Hahn's. His son had attended Gordonstoun, and he financed scholarships for other boys in the community (Rohrs & Tunstall-Behrens, 1970). Holt was the head of a large merchant shipping fleet. He had great interest in employing the finest staff and officers available because in the battle of the Atlantic, a number of his employees had become casualties as a result of attacks from German submarines.

After noticing that the more experienced sailors were surviving at a greater rate than the newly trained sailors, it was apparent to Holt that there was a problem in their training (Miles & Priest, 1990). Holt saw a need to train his employees to be better prepared in emergency and high stress situations. As a result, Hahn and Holt combined their knowledge and resources and founded the first Outward Bound school.

The original Outward Bound school was for boys, ages 16 - 21. The original focus of the school curriculum was to prepare sailors for the rigors of seamanship by creating emergencies in order to expose sailors to the stress and difficulty of intense situations (Miner & Boldt, 1981).

Holt referred to the program as a training *through* the sea instead of a training *for*

the sea (Miner & Boldt, 1981). The name Outward Bound, which is a reference to a ship that has left the safety of the harbor, was conceived and implemented by Holt (Miner & Boldt, 1981). The school eventually expanded and also began using the mountains as another vehicle through which to drive this educational process.

On March 25, 1959, Ted Hopkins of the U.S. Air Force Academy, spoke to Stephen House and F. Charles Froelicher about a course he attended in England called Outward Bound School (James, 1980). Froelicher, headmaster of the Colorado Academy, immediately became enthralled about the school and the possibilities of having an Outward Bound program in the United States. After a few inquiries the project was put on hold.

Eventually, a man named Gilbert Burnett began working as a teacher at Andover School, also known as Phillips Academy (Miner & Boldt, 1981). He met a man named Josh Miner. Miner had an extensive history with Kurt Hahn. Miner was once a teacher at Gordonstoun and knew about Hahn and his philosophies. Burnett was fascinated with Hahn and his teachings, so Miner arranged for Burnett to visit Hahn in England (Miner & Boldt, 1981).

Burnett returned to the United States with a list of Americans who had written to Outward Bound to inquire about the program. Among those on the list was Charles Froelicher. Miner and Holt began contacting people on the list and eventually a meeting at Froelicher's Colorado Military Academy was arranged. In the meeting Froelicher is quoted as saying "let's just decide we're going to start a school, and line out what we have to do to get it started" (Miner & Boldt, 1981, p. 199). After that meeting the Colorado Outward Bound School was established.

By 1966 there was a total of five Outward Bound Schools in the United States. Outward Bound has continued steady growth since World War II and now has almost 50 schools worldwide. Currently, the Colorado School serves over 2000 students per year and conducts courses in Colorado, Wyoming, Utah, Arizona, Alaska, Mexico, and Nepal (Roos, 1999).

Since the introduction of Outward Bound to the United States a number of adventure education organizations have come about. Today, there are hundreds of schools in the United States and thousands throughout the world that provide adventure education with various different kinds of goals and objectives. Adventure education organizations have specialized programming for an array of populations from youth-at-risk to senior citizens.

The Colorado Outward Bound School (COBS) is the first and oldest Outward Bound School in the United States. The mission of COBS is "to enhance individual character, promote self-discovery and challenge students to cultivate self-reliance, leadership, fitness, compassion, and service through exceptional wilderness education" (COBS, 1997, p. 1-1). Outward Bound Schools stem from a history of innovative and controversial educators who use the natural environment and wilderness as a medium for education.

Colorado Outward Bound School courses are field based educational expeditions. The school uses the natural environment and certain adventure activities to teach technical skills as well as leadership, communication, and self awareness. COBS courses are almost entirely field based and last anywhere from 5 to 81 days. Course participation numbers

range from 8 to 65 students between 14 and 85 years of age. Most often groups comprised of ten or fewer students travel with one or two instructors over various land features. On the river, up to 28 students travel with six or eight instructors. Some activities include rock climbing, mountaineering, canyoneering, whitewater rafting, hiking, backpacking, sea kayaking, glacial travel, skiing, snowboarding, and service projects.

PURPOSE

The purpose of this study was to gain a greater understanding of the differences between profiles of finishers and non-finishers of COBS courses. The ultimate goal of this study is to better understand early departures on COBS courses. To understand the importance of this study one must first understand why it is necessary to ensure that an effort is made to encourage people to complete COBS courses.

There is no doubt that participation on a program like Outward Bound can be a very powerful experience. A sizable amount of evidence suggests, at least in broad terms, that adventure education can have a positive influence on one's self-concept (Ewert, 1983; Hattie, Marsh, Neill, & Richards, 1997; Hazelworth & Wilson, 1990; Richards, 1977; Shore, 1977). Thomas James wrote "It is no exaggeration to say that the individual commitment of the student, the expressed desire to accomplish a worthy goal by means of the course, becomes in effect, the community. It becomes the foundation both of compassion and of achievement, and it is, in addition, the ultimate source of value for the Outward Bound pin and certificate (James, 1980). With this in mind it can only be assumed that the completion of an Outward Bound course (when one receives their pin and certificate) is an extremely important portion of the experience. Consequently, the

end of the course would be a desirable portion of the experience. Obviously an early departure would miss this important part of the experience.

Another reason for striving toward course completion by Outward Bound students is the cost of evacuations. Sometimes evacuations can be very costly and labor intensive. COBS courses take place in very rugged environments away from medical assistance. The resources necessary to get a student to care or transportation can be very demanding on a group. The extremes of the situation can be compounded if the student must be carried from the field. Furthermore, the cost of fuel, equipment, and personnel involved in an evacuation are always substantial when compared to the alternative of no evacuation. By knowing what type of student is most likely to require early departure, necessary steps can be taken to avoid these situations.

Knowing what type of person is most likely to depart early can also be a great asset to a medical screener or admissions director within an organization. The screener or course advisor could more appropriately counsel and advise students as to which type of course would best be suited for their purposes. Also, the screener may suggest that the student not attend a COBS course. This could be beneficial for the student in that economical and psychological resources are not depleted. Furthermore, Outward Bound would benefit because the cost of an early departure or excessive instructor attention to that one individual could be avoided.

If an instructor knew that a certain person had a high statistical probability of departing early then, perhaps, a more efficient educational strategy could be arranged. Almost every major outdoor education organization gathers information about individuals

before they arrive for courses. This information, if used properly, could be an extremely valuable tool when devising a strategy or plan as to how effectively to instruct this group of students and how they will be addressed individually.

DELIMITATIONS

Delimitations of this study include:

- The population of this study is delimited to Colorado Outward Bound School students enrolled in courses taking place in the years 1998 and 1999.
- The sample being studied were all 18 years of age or older.

LIMITATIONS

Limitations of this study include:

- The forms that Outward Bound has been using to document incident reports and medical information have changed slightly in the last few years. This could have a slight impact on recording certain information.
- The data being collected were reported by humans (both participants and COBS staff) and, therefore, subject to inaccuracies and misrepresentations.
- The data being collected were secondary in nature, which could lead to incomplete or incorrect data through the misuse of incident and medical forms as well as data being inadvertently transferred incorrectly.
- This study compares the entire population of one group to only a sample of another group.
- The data could have been inadvertently transferred incorrectly.

ASSUMPTIONS

For the purposes of this study it will be necessary to assume that the self reported data that have been submitted by students are accurate and uncompromised. Also, it was assumed that the data kept by Outward Bound were complete, accurate, documented, and correctly filed.

It was also assumed that an early departure from an Outward Bound course is less desirable than the alternative.

RESEARCH QUESTIONS

The research question this study examined was:

What are the differences between finishers and non-finishers of Outward Bound Courses?

This study also addressed the following hypotheses:

HO_1. There were no demographic differences between finishers and non-finishers.

HO_2. There were no medical differences between the finishers and non-finishers.

HO_3. There were no lifestyle differences between finishers and non-finishers.

DEFINITION OF TERMS

Adventure Education - a form of outdoor education which involves the presence of perceived risk and challenge. The process also involves both intrapersonal and interpersonal relationships and the use of adventure activities that provide a group or individual with compelling tasks (Priest & Gass, 1997).

Attrition - a reduction or decrease in numbers (Random House Dictionary, 1980). For this study attrition refers to the failure to retain students in their current educational

program.

Behavioral early departure - A situation where students, through their behavior, put themselves or others in an unnecessary or avoidable compromise of physical safety or emotional safety, or is in direct violation of policy and/or procedure established within the group and directed to leave the course indefinitely.

COBS - Colorado Outward Bound School

Demographic variables - Items on the "QUESTIONNAIRE FOR MEDICAL FORM" (Appendix A) that were considered demographic variables. These items include; age, height, weight, sex, and ethnicity.

Early Departure - Any participant who leaves a course early and does not return. There are four types of early departures mentioned in this study: Motivational, Behavioral, Injury, and Illness.

Finisher - Participant of a Colorado Outward Bound School adventure education course who participated throughout the duration of the scheduled course.

Illness early departure - A situation where a student becomes sick or ill to a degree that medical attention is necessary or the student cannot participate for the duration of the course.

Incident report form - Standardized form that is filled out by an instructor or course director for any early departure, incident, near miss, accident, illness, or injury on an Outward Bound course. The form has both an objective and narrative section to help document critical information.

Injury early departure - A situation where a student becomes hurt or injured to a degree

necessary to seek medical attention or discontinue involvement with the course.

Lifestyle variables - Items on the "QUESTIONNAIRE FOR MEDICAL FORM" (Appendix A) that were considered lifestyle variables. These items include: alcohol use, tobacco use, current substance abuse, past substance abuse, fitness level, and previous Outward Bound experience.

Medical variables - Items on the "QUESTIONNAIRE FOR MEDICAL FORM" (Appendix A) that were considered medical variables. These items include: past medical problems, allergies, medications, current counseling, and past counseling.

Medical form - Standardized form that is completed by each student prior to participation in an Outward Bound course. The form requests information pertaining to a student's demographic information, past medical history, medications, fitness level, and more.

Motivation - how and why individuals move or don't move from one state of being to another (Priest & Gass, 1997).

Motivational early departure - A situation where a student lacks the physical or emotional drive to participate in course activities and discontinues involvement indefinitely.

Non-finisher - Participant of a Colorado Outward Bound School adventure education course who, for any reason, leaves the course and does not return to actively participate in the remainder of the course.

Profile - A set of attributes belonging to a group or individuals. These attributes could include demographics, health history, fitness level, substance use, and more.

Retention - The act of remaining for the duration of a program or course.

Risk - the potential to lose something of value (Priest & Baillie, 1987).

Chapter 2

Review of Related Literature

This chapter will focus on three areas to help guide the process of understanding the literature related to this research. The areas of focus in this chapter include: literature related to motivation, areas of risk and perceived risk, and theories and models of student attrition.

MOTIVATION

Motivation is being addressed in this section because it strongly correlates and associates directly with a number of issues experienced on an Outward Bound course. It is an important ideal to examine because every action, movement, or event that happens is *motivated* by something. The term "motivation" was derived from a Latin word *movere*, which means "to move" (Mannell & Kleiber, 1997). In this sense, motivation deals with why and how individuals move, or don't move from one state of being to another (Priest & Gass, 1997). Motivation theories attempt to explain or predict observable behavior. Factors influencing motivation include: direction of effort, intensity of effort, choice of behaviors, ability to sustain motivation, and resulting behavior change (Sage, 1977; Weinberg & Gould, 1995).

Because of the diversity of basic assumptions and beliefs about philosophical and

theoretical assumptions pertaining to human nature, and the fact that theories of motivation explain only a small portion of human variance, a substantial number of motivational theories exist (Nelson & Quick, 1994). Several are summarized and reviewed here.

Some motivational theories emphasize factors external to an individual, or exogenous causes, in attempting to explain or predict the person's behavior. Other theories emphasize internal attributes and characteristics of the person, or endogenous processes to predict behavior (Katzell & Thompson, 1990). One early perspective of motivation assumes that people behave in ways that will gratify differing emotional needs (Nelson & Quick, 1994).

Abraham Maslow was a psychologist who proposed a theory of human motivation for understanding behavior based primarily upon a hierarchy of five need categories (Maslow, 1943). In conceptualizing these categories Maslow used the influence of William James and John Dewey, as well as Sigmund Freud and Alfred Adler (Nelson & Quick, 1994). The need categories Maslow developed are physiological needs, safety and security needs, love (social needs), esteem needs, and self-actualization needs. In his original 1943 article Maslow described these basic needs as being arranged in a hierarchy of propensity. The less proponent or higher needs are minimized. When a need is fairly well satisfied, the next proponent need emerges, to dominate the conscious and serve as the center of organization of behavior. The theory assumes gratified needs are not active motivators (Maslow, 1943) (Appendix B).

Mills tested Maslow's theory with a random sample of 708 visitors at Tahoe area

downhill ski resorts in California. The participants of the study were asked to rate the importance of 23 items (which represented particular needs) required for having a successful ski day (Mills, 1985). The data were analyzed to determine if the empirical structure of motivation for participation in downhill skiing corresponded to Maslow's theory of motivation. The researcher stated that the study empirically verified a carefully hypothesized structure of participation motivations for downhill skiing (Mills, 1985).

Also among the prominent figures in the motivation field is Frederick Herzberg. His work focused primarily on the experiences that satisfied or dissatisfied people's needs at work. His need motivation theory became known as the two-factor theory (Herzberg, Mausner, & Snyder, 1959). Herzberg and his colleagues believed that people had two sets of needs. One need related to the animalistic avoidance of pain, the other was related to humanistic desire for psychological growth. The avoidance of pain needs were labeled hygiene factors and the psychological growth needs were labeled motivation factors. In short, motivation factors relate to job satisfaction and hygiene factors relate to job dissatisfaction (Herzberg, 1966). The heart of Herzberg's approach is that dissatisfaction may lower performance, but hygiene measures will not markedly improve performance (Beck, 2000).

Herzberg tested his motivational theory by measuring job attitudes and output or production in the workplace (Herzberg et al., 1959). In this study, Herzberg and his colleagues interviewed 203 subjects to determine whether different kinds of factors were responsible for bringing about job satisfaction and dissatisfaction (Herzberg et al., 1959). The authors reported that the data showed job attitudes as a powerful force and

functionally related to the productivity, stability, and adjustment of the industrial work force. They also noted that advantageous effects of positive attitudes are more potent than disadvantageous effects of negative attitudes (Herzberg et al., 1959).

Another need theory of motivation, which was based on Murray's early studies of personality (Murray, 1938), is McClelland's Need Theory. McClelland identified three learned or acquired needs he called manifest needs. These manifest needs are the needs for achievement, the need for power, and the need for affiliation. All of these needs are specific for each individual and culture. The need for achievement concerns issues of excellence, competition, challenging goals, persistence, and overcoming difficulties (McClelland, 1965). A person with a high level of achievement is one who seeks excellence in performance, enjoys difficult and challenging goals, and is persevering and competitive in work activities (Nelson & Quick, 1994). The need for power is concerned with making an impact on others, the desire to influence others, the urge to change people and events, and the desire to make a difference in life (McClelland & Burnham, 1976). The need for affiliation is concerned with establishing and maintaining warm, close, intimate relationships with other people (Schachter, 1959).

RISK

In a 1969 article, William Furlong reported on a conversation with Dr. Sol Roy Rosenthol. Furlong indicated that Rosenthol believed that the need for risk and adventure was a basic necessity of life. Rosenthol believed the need for risk stems from a struggle for evolutionary survival that still lurks within humans. With the rise of civilization, a number of risks have been eliminated from everyday life. Thus, humans have a need to

seek out risk and adventure to satisfy basic human desires (Furlong, 1969).

In the realm of adventure education, risk is a part of the experience. The fact that risk exists in Outward Bound courses may be the primary reason many individuals participate. Risk is addressed in this section because real or perceived risk is part of what happens within the scope of an Outward Bound course.

The term *risk* has a somewhat loose definition. Priest and Baillie (1987) define risk as the potential to lose something of value. The loss of something of value could take the form of physical, mental, or social loss or injury. The perception of risk or danger is highly individualistic. People differ in their cognitive appraisals of risk based on prior learning, adaptation, and individual differences (McGrath, 1977). The presence of risk has two distinct forms: real and perceived risk.

Real, or actual, risk addresses the true probability of injury or loss. Fear of possible loss is central to actual risk (Keyes, 1985). For example, there is a real risk that a B.A.S.E. jumper's parachute will not open soon enough to sufficiently decelerate the decent. Perceived risk deals with the amount of risk that the individual believes is present within a given situation. It is defined as the risk that is judged by the participant; this may be an accurate or inaccurate perception (Guthrie, 1997). With these definitions established, it is apparent that no uniform definition or perception of risk is feasible for all individuals. What one individual perceives to be of great risk may seem harmless to another person.

In a 1980 publication dealing with a literature review of risk recreation, it was reported that "few researchers have provided demographic profiles of their risk taking

subjects" (Meir, Morash, & Welton, 1980, p. 55). One researcher who did was Klausner in 1967. He tabulated data from questionnaires returned by 825 parachutists and found that parachutists were young, single-minded, and over represented by residents of Western states. He also described this risk taking population to be nearly all men and less-likely to be married than their same aged counterparts (Klausner, 1967). Since 1980 it seems that little investigation has taken place with regard to the profile of people who tend to take risks or participate in risk situations.

Among the many aspects of risk is the well documented risk-shift phenomenon (Meier, 1985). The risk-shift phenomenon suggests that groups make riskier decisions than the individuals who comprise the groups (Belovicz, 1971; Kogan & Wallach, 1967; Rabow, Fowler, Bradford, Hofeller, & Shibuya, 1966). In 1965 Bem and Wallach conducted research concerning risk and decisions made by individuals and groups by emphasizing negative consequences. In order to enhance the risk or consequences of the experiment, the researchers used physical pain and discomfort, as well as monetary loss as potential outcomes to risk taking. The Klausner experiment included 126 male students enrolled in a summer session at the University of Colorado. The participants answered a series of questions individually and as a group. The results showed that decisions concerning discussion to consensus were significantly more risky than the decisions made by the group members individually. The researchers concluded that "unanimous group decisions concerning matters of risk show a shift toward greater risk taking when compared with individual decisions, and post discussion individual decisions that follow group consensus reflect the risk shift of the group rather than the original pre-discussion

decisions" (Bem & Wallach, 1965, p. 458).

An attempt has been made to explain this risk shift phenomenon by presenting a number of different theories. Among the most prominent are the diffusion of responsibility hypothesis, and the risk as value hypothesis (Clark, 1971).

The diffusion of responsibility theory "emphasizes that discussion (a) produces emotional bonds between members and (b) frees the individual from full responsibility for his [*sic*] later decision that has been partially shaped by the group" (Clark, 1971, p. 259). One study which examined this theory was a 1964 study by Wallach, Kogan, and Bem. The subjects of the study met in groups of three and were told that their main task was to answer ten multiple choice questions which have been taken from old College Board examinations. They would be paid for correct answers and not paid for incorrect answers. Beforehand, each subject had to determine the difficulty level of the ten questions they would answer. A control group and a number of experimental groups participated in the study. The results showed that a significant shift towards a more risky decision occurred in the decision conditions where subjects had to reach a unanimous group decision that would be binding on each member (Wallach, Kogan, & Bem, 1964).

The other major theory of risk shift is the theory of risk as value. This explanation assumes that society values risk and that most people feel that they, themselves, are greater risk takers than the average person (Levinger & Schneider, 1969). In an attempt to prove the "risk is a value" hypothesis, Levinger and Schneider conducted an investigation of 250 undergraduates enrolled in psychology classes at a mid-sized college. Each participant was given 12 situations from Kogan and Wallach's 1967 choice-dilemma

instrument. Each situation had two decisions from which to choose. One choice was more desirable but less likely achievable, the other less desirable and more achievable. Results were tabulated based on participant responses to the situations. The results were consistent with the value theory. "On one hand these subjects perceived themselves as significantly more risky than their typical peer; on the other hand, they see the most admirable choice riskier then their own" (Levinger & Schneider, 1969, p. 167).

ATTRITION

The literature dealing with attrition that will be discussed in this section deals primarily with attrition of students in higher education. A good deal of information is obtained from studies of attrition at both two and four year institutions. A number of theories and models have attempted to explain the phenomenon of student attrition.

Much of the attrition research is plagued with ambiguity and inconsistency. A confusing issue with the attrition literature is that the term "dropout" is used quite differently by a variety of authors. Most of the studies focus on students who simply leave and do not come back. Many of the studies do not account for students who transfer, move, or quit school to join the work force (Rummel, Acton, Costello, & Pielow, 1999).

Some authors suggest that all college attrition should not be viewed as a failure or a negative phenomenon. Rummel et al. (1999) question the desirability of 100 % retention in their recent study. The study found that the University was viewing students who were leaving college as a negative event even if the students were leaving for positive reasons.

Several models attempt to explain student attrition in a university environment (Bean, 1982; Iwai & Churchhill, 1982; Jensen, 1981; Waterman & Waterman, 1972).

However, there seems to be very little research that attempts to explain attrition in an outdoor adventure educational setting. Some past and present models which have been used to attempt to explain student attrition in a university setting are reviewed here.

Psychological models of student attrition have relied on a student's abilities and dispositions such as intellectual attributes and ability to meet academic demands as a predictor of student drop outs (Tinto, 1993). Rose and Elton (1966) used a psychological model when they compared personality attributes of four different groups. Groups of freshman students were labeled as Defaulters (withdrawn during freshman year), Successful Persisters (those who completed two or more semesters with a "C" or better average), and Probation Persisters (those who completed two semesters with less than a "C" average). These three groups were analyzed and then compared to a fourth group labeled dropout. Dropouts were identified as students who were in good academic standing at the end of their second semester and chose not to return for the second year.

Rose and Elton found the groups had a clear difference in personality measures. The authors found that "students who drop out of college are significantly more hostile...tend to show the most maladjustment; to be least interested in literature, art and philosophy; to be illogical, irrational, uncritical in their approach to problem solving; and to dislike reflective and abstract thought" (Rose & Elton, 1966, p. 245). The authors reached these conclusions by administering the Incomplete Sentences Blank and the Omnibus Personality Inventory to participants in the study.

One theory that deals little with psychology is the economic theory of educational attainment. This theory stresses the importance of finances on attrition decisions (Tinto,

1993). A study by Iwai and Churchill (1982) compared five groups of undergraduate students and found that Persisters relied on more forms of support than Withdrawers. In a study that examined economic forces within the university, Jensen (1981) split the Washington State University freshman class of 1971 into three categories: students who received financial aid; students who applied for financial assistance, but were not eligible; and a control group. The students were compared among themselves using socioeconomic status, academic background variables and financial aid as distinguishing attributes. After an analysis of the findings, the researchers concluded that student financial assistance makes a small contribution to the persistence of recipients who receive it in their freshman year of college (Jensen, 1981)

Among all of these theories and models, none have guided and inspired research more than the Tinto model. His model assumes that persistence/withdrawal behavior is largely determined by the student's integration into the social and academic systems of the institution (Pascarella, Smart, & Ethington, 1986). Tinto's model has roots in Durkheim's suicide theory.

According to Durkheim (1951), suicide relies heavily on one's psychic dispositions and the nature of the physical environment. Durkheim's model of egotistical suicide provides the foundation for Tinto's work with institutional departure from higher education (Tinto, 1993). This is not to say that Tinto is using the model as if to imply that quitting school leads to committing suicide or that it represents some kind of suicidal behavior. Tinto explained, however, that the two situations had enough similarities to warrant a discussion. One similarity Tinto pointed out is that both suicide and early

departure from higher education represent a form of voluntary withdrawal from local communities that is as much a reflection of the community as it is the individual who withdraws. He added that both suicide and college attrition can be seen to signal somewhat similar forms of rejection of conventional norms regarding the value of persisting in those communities (Tinto, 1993).

Durkheim, a French academician and intellectual, was considered by many to be the founder of the discipline of sociology (Tinto, 1993). His 1951 work, Suicide is considered to be a classic study of sociology (Tinto, 1993). In this book Durkheim describes four types of suicide: altruistic, anomic, fatalistic, and egotistic. The first type of suicide discussed was altruistic. Altruistic suicide is what Durkheim describes as a type of suicide which society finds morally desirable. An example of Altruistic suicide could be a Japanese Kamikaze airplane pilot of World War II (Durkheim, 1951).

The second form of suicide which Durkheim discusses is anomic suicide. This type of suicide describes a situation where a society is plagued by war, religious or economic upheaval and people are left without adequate guidelines to conduct their personal daily lives. Anomic suicide may have occurred as a result of the great depression. Durkheim explained that suicide rates increased during this and other times of social turmoil (Durkheim, 1951).

The third form of suicide discussed by Durkheim is known as fatalistic suicide. Fatalistic suicide can be thought of as the opposite of anomic suicide. Rather than a lack of societal control, fatalistic suicide is associated with too much regulation and control. Durkheim reported that societies that are highly regulated experience higher suicide rates

than societies that are not highly regulated (Durkheim, 1951).

The final type of suicide described by Durkheim is known as egotistical suicide. This type of suicide arises when a person is unable to become integrated and established within a communities of society (Durkheim, 1951). It is this type of suicide that Tinto focuses on in his study of student attrition (Tinto, 1993). The integration described by Durkheim is comprised of both social and intellectual membership within the community. In Durkheim's view, individual integration into social and intellectual life of society and the social and intellectual membership which that integration promotes are essential elements of social existence in human society. Societies with high rates of suicide are those whose social conditions do not promote such membership (Durkheim, 1951).

Tinto suggests that "one has to enquire as to the social and intellectual character of an institution and the student and faculty communities that comprise it and the mechanisms which enable individuals to be integrated as competent members of those communities" (Tinto, 1993, p. 115). Tinto's thesis is that, all things being equal, the greater the student's level of involvement in the social and academic life of the college, the more likely the student is to continue at that particular institution (Chapman & Pascarella, 1983).

Tinto's most recent model (Appendix C) is longitudinal in nature and argues that individual departure from institutions can be viewed as arising out of a longitudinal process of interactions between an individual with given attributes, skills, financial resources, prior educational experiences, and dispositions (intentions and commitments) and other members of the academic and social systems of the institution. The individual

experience in the social and academic systems, are indicated by their intellectual (academic) and social (personal integration) intentions and commitments (Tinto, 1993).

A longitudinal study by Chapman and Pascarella (1983) attempted to extend Tinto's (1993) research. The researchers administered the Student Involvement Questionnaire and collected demographic information and personal characteristics from full time freshman students from 11 institutions. Chapman and Pascarella noted that the size and structure of college types were characterized by different patterns of student participation in the social and academic life of the college. However, they also noted that the model design did not allow for different sizes and type of institutions (Chapman & Pascarella, 1983). The researchers also explained that high levels of social integration were paired with greater institutional commitment, and lower levels were connected with greater commitment to graduation (Chapman & Pascarella, 1983).

Another study by Napoli and Wortman (1988) attempted to assess the validity of Tinto's model on attrition and retention at two-year community colleges. This study expanded the scope of measurement by including goal commitment as well as some psychological and psychosocial factors that the authors hypothesized influence the relationship among constructs. The researchers found that social and academic integration had both direct and indirect influences on persistence through goal and institutional commitment. Napoli and Wortman support the hypothesis that negative events occurring in school would have an adverse influence on social integration which eventually would influence persistence (Napoli & Wortman, 1998). John P. Bean also has established theories in the area of student attrition.

In Bean's first model, organizational determinants were expected to affect satisfaction, which consequently affects attrition (Bean, 1979). The model is longitudinal and takes into account background variables, organizational determinants, and intervening variables (Appendix D). A 1979 study used path analysis to determine student satisfaction (Bean, 1979). Students were asked to rank the importance of 23 variables. In his conclusions, Bean stated that the model tested in this research proved useful in analyzing the process of student attrition (Bean, 1979).

In a more recent model, Bean asked participants in a study to rank ten different variables. The variables included: intent to leave, practical value, certainty of choice, loyalty, grades, courses, educational goals, major and job certainty, opportunity to transfer, and family approval of institution (Bean, 1982). In this study, intent to leave was determined to be the chief predictor of student attrition. Also, Bean reported that the model had substantial value in understanding the dropout process among relatively higher ability freshman students at one major land grant university in the Midwest (1983). Unlike Tinto, Bean used no background variables. Instead, he used two variables from organizational, personal and environmental areas. Also, three attitudinal variables were utilized and intent to leave was the immediate pre-curser to dropout. Bean reported that each of the variables in the model contributed significantly to the understanding of the dropout process (Bean, 1982).

SUMMARY

The literature reviewed in this chapter began with a discussion of some general theories of motivation. A presentation of the definition of motivation preceded a

discussion of Maslow's contribution to the field of motivation. In addition, this section covered aspects of Herzberg's and McClellend's views on motivation.

This chapter also included an investigation of various aspects of risk. After definitions of real and perceived risk were presented, the chapter focused on the risk shift phenomenon and risk as value. In addition, a diffusion of responsibility theory of risk behavior was discussed.

This chapter ends with a summation of some theories associated with student attrition. The initial portion of the chapter includes information associated with Tinto's student attrition model and Durkheims' suicide theory. Also, a look at John Bean's evolving theory of student attrition is included.

Chapter 3

Methodology

This was a descriptive study using empirical data to gain a greater understanding of the attributes of finishers and non-finishers of COBS courses in 1998 and 1999. The researcher hoped to gain insight about the differences or similarities in students who complete a COBS course and students who have to, for any reason, leave a course and not return. The process involved retrieving information from the years of 1998 and 1999 about incidents that involved a student leaving a COBS course and not returning. The information collected about the non-finishers was compared to a group of selected finishers.

PROCEDURES

To make this study possible it was first necessary to contact COBS and gain approval from administration (Appendix E). Approval from COBS administration was arranged and a plan was made for the data collection process to begin (Appendix F).

Oklahoma State University Institutional Review Board (IRB) approval was obtained before the data collection process began. This included completing a form involving a series of questions and attaching a letter from COBS establishing the relationship and documenting agency approval. Also, a copy of the COBS student waiver

form, along with a form outlining the information being researched, were included with the IRB paperwork. A copy of the approval form is included in Appendix G.

It would be unrealistic for all the data to be sent to the researcher; therefore, it was decided that the information must be obtained from its location at the COBS central office in Denver, Colorado. The investigator arrived at the COBS headquarters office in Denver, Colorado and was briefed on the location and storage of the archived data. The researcher then went to each course individually and retrieved the appropriate data (see next section "SAMPLING" for details on which participants were selected). The data were then recorded onto a questionnaire which the researcher completed for each participant in the study (Appendix A).

SAMPLING

All archived information at COBS is filed according to course. Each student has an individual folder that is filed alphabetically with other paperwork from each course. Each file contains information about that student on a medical form that was completed by the student and returned to COBS before the beginning of the course (Appendix H). To determine which forms were to be selected for the study, it was necessary to look at every course file from 1998 and 1999.

First, the researcher retrieved paperwork related to each particular course. From each file the researcher first determined which individuals, 18 and older, were the early departures by viewing each incident report form (Appendix I). If the incident involved a departure from the course and the participant did not return, the researcher recorded the information about this student. If the incident report stated that the student did return to

the course then the form was replaced into the stack. After this process took place a total number of non-finishers was determined.

After the non-finishers were selected (N=92), the researcher retrieved an equal number of white poker chips from a plain square box (i.e., if there were three non-finishers, three chips would be selected). The box was filled with chips that were marked with the numbers 1 though 20 (i.e., one chip has the number 1 written on it, another chip has the number 2 written on it, etc...). The number on the chip represented which student was selected to participant in the study. The student files are kept alphabetically in a folder with other course information. The number on the chip represented the file which was selected to participate based on the position within the stack. For example, if the researcher selected a chip with a number seven on it, the seventh file (starting with the file closest to the researcher or near the "A's") was pulled from the stack and the vital information was recorded. In this way, 92 subjects who were finishers were chosen.

To keep the process as close to random as possible it was necessary for the researcher to select chips from the box only once. Therefore, some questionnaires contain areas of incomplete data. Selecting an equal number of finishers and non-finishers from each individual course allowed the researcher to gather information about two different groups that had similar weather, terrain, leadership, and group experiences on their COBS courses.

STATISTICAL TREATMENT

After all usable forms were collected, data were manually entered into a computer software program to undergo statistical analysis. The software used for this study was

SPSS 9.0 for Windows (graduate pack)(SPSS, 1999).

The information gathered about each participant was divided into three different groups based on the type of information being measured. The information was grouped as follows: 1) demographic variables included age at course start, height, weight, sex, and ethnicity; 2) medical variables included past medical problems, allergies, medications, current counseling, and past counseling; and 3) lifestyle variables consisted of alcohol use, tobacco use, current substance use, past substance use, fitness level, and previous Outward Bound experience.

The statistical treatment used in this study varied according to the level of data measured. A T-test was used to determine statistically significant differences in all ratio level data. These variables include age, height, and weight. Also, a frequency distribution was provided to illustrate data gathering results from both groups. For all nominal level data a crosstabs analysis using Pearson's Chi-square was used to compare the two groups. For all measures, the variable "early departure" was entered into the column section of the crosstab and all other variables were individually measured in the row portion of the crosstab. The nominal data consisted of sex, ethnicity, past medical problems, allergies, medications, counseling history, substance abuse history, and previous Outward Bound experience. To measure statistical significance in ordinal level data, a Mann-Whitney U test was incorporated. Ordinal level data included alcohol use, tobacco use, and fitness level.

All other information gathered for this study (course number, year, etc.) was for the purpose of maintaining consistency and accountability within the data collection

process. The information was used to ensure a matched number of finishers and non-finishers that could be easily verified and/or corrected.

Chapter 4

Results

The purpose of this study was to discover if there were any differences between students who finished and students who did not finish Colorado Outward Bound School courses in 1998 and 1999. Data were gathered and variables were grouped according to demographic, medical, and lifestyle variables. Data were collected from a group of course finishers and a group of course non-finishers.

This chapter will present the results of the data collection process in three major headings to address the three null hypotheses. The sections are labeled demographic variables, medical variables, and lifestyle variables. There were a total of 92 finishers and 92 non-finishers in the sample.

In this study, three null hypotheses were tested. No significant differences were found anywhere within the data; therefore, the null hypotheses could not be rejected. The This study addressed the following hypotheses:

HO_1. There were no demographic differences between finishers and non-finishers

HO_2. There were no medical differences between the finishers and non-finishers

HO_3. There were no lifestyle differences between finishers and non-finishers

DEMOGRAPHIC VARIABLES

DEMOGRAPHIC VARIABLES

For the purpose of this study the following items were grouped and labeled as demographic variables: age, height, weight, sex, and ethnicity. The mean age of the finishers was 22 and 24 for nonfinishers. The finishers ages ranged from 18 to 45. The non-finishers had an age range from 18 to 62. Both groups had close to an equal number of males and females. The finishers had 42 males (45.7 %) and 49 females (53.3 %) (one participant did not report sex) while the non-finisher group was comprised of 45 males (48.9%) and 47 (51.1%) females. The individuals in the group of finishers had an average height of 149 inches and the non-finishers mean height was slightly higher at 154 inches (Table 1).

The alpha level chosen for this study was .05. A T-test was used to determine if statistically significant differences existed among the ratio level data. These items include: age, height, and weight (Table 2). No significant differences were found. Therefore, the null hypothesis which states there were no demographic differences between finishers and non-finishers was accepted.

Table 1

Group Means

	Finishers	Non-finishers
age	22 years	24 years
weight	149.77 pounds	154.85 pounds
height	149 inches	154 inches

Table 2

Independent sample t-test

	t	df	Sig. (2-tailed)	Mean Difference	Std. Error Difference
Age	1.673	182	.096	1.82	1.08
Height	.182	179	.856	.11	.60
Weight	1.094	180	.275	5.08	4.64

A Pearson Chi-square measurement was used on all nominal level demographic variables. The test yielded no significant differences between finishers and non-finishers in relation to sex and percentage of ethnic breakdown. A raw numbers and percentages chart illustrates the frequencies (Table 3).

Table 3

Demographics

		Finisher	Non-finisher
SEX	Male	42 (45.7%)	45 (48.9%)
	Female	49 (53.3%)	47 (51.1%)
ETHNICITY	Asian	2 (2.2%)	7 (7.6%)
	Black/African American	0 (0%)	1 (1.1%)
	Hispanic/Latino	4 (4.3%)	1 (1.1%)
	Native/ American Indian	1 (1.1%)	0 (0%)
	White/ Caucasian	79 (85.9%)	81 (88%)
	Other	4 (4.3%)	0 (0%)
	missing data	2 (2.2%)	2 (2.2%)

MEDICAL VARIABLES

For the purposes of this study the following items were grouped and labeled as medical variables: past medical problems, allergies, medications, and counseling history. The first part of this section deals with the 67 item list of past medical problems that can be found on the third page of the student medical form (Appendix H). The second part of this section examines the results of the analysis of student allergies, medications, and counseling data.

A frequency distribution table was developed to highlight differences among the past medical problems of finisher and non-finishers (Table 3). Not included in this table are items that received no response from either group. These items included: heart disease, irregular heart beat, tuberculosis, recent exposure to active TB, positive TB test, active hepatitis, history of hepatitis, seizure with past year, bleeding disorder, cancer, stomach ulcers, difficulty urinating, endocrine problems, currently pregnant, unexplained weight loss, chest pain/pressure, unexplained sweating, frequent shortness of breath, frequent dizziness, frequent fainting, and intolerance of warm temperatures.

Table 4

Past Medical Problems

PAST MEDICAL PROBLEM	FINISHERS	NON-FINISHERS
High Blood Pressure	1	0
Heart Murmur	2	4
Family History of Heart Attack	14	9
Seizure Disorder	1	1
Blood disorder/anemia/sickle cell trait	2	1
Chronic cough	0	1
Recurrent lung infections	0	1
Asthma	7	11
Diabetes	0	1
Hypoglycemia	1	2
Anorexia Nervosa	0	1
Bulimia	1	1
Skin Problem	4	2
Frostbite	1	3
Circulation Problems	0	1
Active Bedwetting	1	0
Headaches	10	8
Head injury with neurological	2	1
Intestinal Problems	0	1
Heatstroke	0	1
Bladder Infection	2	7
Kidney Problems	1	2
Thyroid Problems	1	0
Hearing Impairment	2	2
Vision Impairment	12	14
Motion Sickness	6	6
Sleep Walking	2	1
Broken Bones	20	21
Neck Problem	3	4
Back Problem	5	11
Arm Problem	2	1
Shoulder Problem	5	8
Knee Problem	9	8
Ankle Problem	12	7
Leg Problem	2	1
Foot Problem	6	5
Special Diet	6	8
Learning Disability	1	6
Medical Equipment Devices	0	1
Other past medical problems	3	2
Heart Palpatations	1	0
Heartburn	2	1
Muscle Cramps	3	0
Intolerance of cold temperatures	2	2
PMS or menstrual problems	3	8
Other current medical problems	2	0

A Pearson Chi-square test was conducted on all items in the list that had a difference of four or more units between each group for an individual variable. This selection criteria was established because anything under a four unit difference had no chance of being statistically significant. The following tables display the variables that include a four or more unit difference. These tables display the Pearson Chi-square score, degrees of freedom (df), and the alpha level, (p) as well as the raw numbers from the crosstab tables.

Table 5

Crosstab for family history of heart attack

		ED	ED	Total
		yes	no	
FAMILY HISTORY OF HEART ATTACK	yes	9	14	23
	no	83	78	161
Total		92	92	184
$X^2 = 1.242$	df = 1	p=0.265		

Table 6

Crosstab for asthma

		ED	ED	Total
		yes	no	
ASTHMA	yes	11	7	18
	no	81	85	166
Total		92	92	184
$X^2 = .985$	df = 1	p = .321		

Table 7

Crosstab for bladder infection

		ED	ED	Total
		yes	no	
BLADDER INFECTION	yes	7	2	9
	no	85	90	175
Total		92	92	184
$X^2 = 2.921$	df = 1	p = .087		

* 2 cells have expected count less than 5 - calculation invalid.

Table 8

Crosstab for back problem

		ED	ED	Total
		yes	no	
BACK PROBLEM	yes	11	5	16
	no	81	87	168
Total		92	92	184
$X^2 = 2.464$	df = 1	p = .116		

Table 9

Crosstab for ankle problem

		ED	ED	Total
		yes	no	
ANKLE PROBLEM	yes	7	12	19
	no	85	80	165
Total		92	92	184
$X^2 = 1.467$	df = 1	p = .226		

Table 10

Crosstab for PMS or menstrual problems

		ED	ED	Total
		yes	no	
PMS OR MENSTRUAL PROBLEMS	yes	8	3	11
	no	84	89	173
Total		92	92	184
$X^2 = 2.417$	df = 1	p = .120		

Table 11

Crosstab for learning disability

		ED	ED	Total
		yes	no	
LEARNING DISABILITY	yes	6	1	7
	no	86	91	177
Total		92	92	184
$X^2 = 3.713$	df = 1	p = .054		

* 2 cells have expected count less than 5 - calculation invalid.

Also in the medical variables section, allergies, medications and counseling history were measured. Because all of the data were nominal level, a Pearson Chi-square was adopted to determine any significant differences in the data. No significant differences were found between any medical variables and early departure. Therefore, the null hypothesis which stated that there were no medical differences between finishers and non-finishers was accepted. The following tables illustrate the scores of each group and presents the Chi-square calculation.

Table 12

Crosstab for allergies to food

		ED	ED	Total
		yes	no	
ALLERGIES TO FOODS	yes	5	2	7
	no	87	90	177
Total		92	92	184
$X^2 = 1.337$	df = 1	p = .248		

* 2 cells have expected count less than 5 - calculation invalid.

Table 13

Crosstab for allergies to animals

		ED	ED	Total
		yes	no	
ALLERGIES TO ANIMALS	yes	7	10	17
	no	85	82	167
Total		92	92	184
$X^2 = .583$	df = 1	p = .445		

Table 14

Crosstab for allergies to environment

		ED	ED	Total
		yes	no	
ALLERGIES TO ENVIRONMENT	yes	13	12	25
	no	79	80	159
Total		92	92	184
$X^2 = .046$	df = 1	p = .830		

Table 15

Crosstab for allergies to medications

		ED	ED	Total
		yes	no	
ALLERGIES TO MEDICATIONS	yes	14	15	29
	no	78	77	155
Total		92	92	184
$X^2 = .041$	df = 1	p = .840		

Table 16

Crosstab for medications for psychological conditions

		ED	ED	Total
		yes	no	
MEDICATION FOR PSYCHOLOGICAL	yes	7	7	14
	no	84	85	169
Total		91	92	183
$X^2 = .000$	df = 1	p = .983		

Table 17

Crosstab for medications for chronic physical conditions

		ED	ED	Total
		yes	no	
MEDICATION FOR CHRONIC PHYSICAL	yes	18	14	32
	no	73	78	151
Total		91	92	183
$X^2 = .660$	df = 1	p = .417		

Table 15

Crosstab for allergies to medications

		ED	ED	Total
		yes	no	
ALLERGIES TO MEDICATIONS	yes	14	15	29
	no	78	77	155
Total		92	92	184
$X^2 = .041$	df = 1	p = .840		

Table 16

Crosstab for medications for psychological conditions

		ED	ED	Total
		yes	no	
MEDICATION FOR PSYCHOLOGICAL	yes	7	7	14
	no	84	85	169
Total		91	92	183
$X^2 = .000$	df = 1	p = .983		

Table 17

Crosstab for medications for chronic physical conditions

		ED	ED	Total
		yes	no	
MEDICATION FOR CHRONIC PHYSICAL	yes	18	14	32
	no	73	78	151
Total		91	92	183
$X^2 = .660$	df = 1	p = .417		

Table 18

Crosstab for medications for acute physical conditions

		ED	ED	Total
		yes	no	
MEDICATION FOR ACUTE PHYSICAL	yes	6	2	8
	no	85	90	175
	99	1		1
Total		92	92	184
$X^2 = 3.143$	df = 2	p = .208		

* 4 cells have expected count less than 5 - calculation invalid.

Table 19

Crosstab for medication for ADD/ADHD conditions

		ED	ED	Total
		yes	no	
MEDICATION FOR ADD/ADHD	yes	2	1	3
	no	89	91	180
	99	1		1
Total		92	92	184
$X^2 = 1.356$	df = 2	p = .508		

* 4 cells have expected count less than 5 - calculation invalid.

Table 20

Crosstab for current counseling

		ED	ED	Total
		yes	no	
COUNSELING NOW?	yes	12	15	27
	no	80	77	157
Total		92	92	184
$X^2 = .391$	df = 1	p = .861		

Table 21

Crosstab for counseling history

		ED	ED	Total
		yes	no	
COUNSELING IN PAST TWO YEARS?	yes	21	22	43
	no	70	69	139
Total		91	91	182
$X^2 = .030$	df = 1	p = .861		

LIFESTYLE VARIABLES

The lifestyle section of this analysis contains both ordinal and nominal data. The nominal data were treated the same as all other nominal items previously discussed in this chapter. The ordinal level data, which consists of alcohol and tobacco use as well as fitness level, were treated with a Mann-Whitney U Chi-square test for two independent samples. No significant differences were discovered between the two groups on any of these variables.

Table 22

Ranks

	Early departure	N	Mean Rank	Sum of Ranks
Alcohol use	yes	88	89.48	7874.00
	no	92	91.48	8416.00
	Total	180		
Tobacco Use	yes	89	93.66	8335.50
	no	92	88.43	8135.50
	Total	181		
Fitness level	yes	87	81.52	7092.50
	no	89	95.32	8483.50
	Total	176		

Table 23

Test Statistics

	Alcohol use	Tobacco Use	Fitness level
Mann-Whitney U	3958.000	3857.500	3264.500
Z	-.287	-1.023	-1.862
Asymp. Sig. (2-tailed)	.774	.306	.063

Grouping Variable: Early departure

A Chi-square statistical treatment was used to determine if current substance abuse, past substance abuse, and previous Outward Bound experience resulted in statistical significance in differences between finishers and non-finishers. No differences were found. Therefore, the null hypothesis which stated that there were no lifestyle differences between finishers and non-finishers was accepted. A table has been provided to show the size of the groups and illustrate the Chi-square scores for each item. No statistically significant differences were found.

Table 24

Crosstab for current substance abuse

		ED	ED	Total
		yes	no	
CURRENT SUBSTANCE ABUSE	yes	3	2	5
	no	87	88	175
Total		90	90	180
$X^2 = .206$	df = 1	p = .650		

* 2 cells have expected count less than 5 - calculation invalid.

Chapter 5

Conclusions, Recommendation, and Summary,

The purpose of this study was to discover if there were any differences between students who finished and students who did not finish Colorado Outward Bound School courses in 1998 and 1999. Data were gathered and variables were grouped according to demographic, medical, and lifestyle variables. Data were collected from a group of course finishers and a group of course non-finishers.

CONCLUSIONS

Overall, this study found no statistically significant results. In fact, the group of finishers and the group of non-finishers were extremely homogeneous. These findings may be a benefit to the body of knowledge in this field for a number of reasons.

The research surrounding this topic is very limited. No studies involving early departure in adventure education programs were uncovered in the literature review. Thus, this study contributes to the virtually non-existent body of literature surrounding adventure education and the variables that might indicate potential early departure. The introduction of this study and its results establishes a foundation upon which to base further research.

The lack of statistical significance between the variables examined could indicate

an inadequate sample size, an insensitive instrument, or indicate the self report data collected from the medical forms were inaccurate. However, a strong likelihood exists that the variables being measured in this study have little or no power when predicting early departures from COBS courses.

Anecdotal information suggests that medical screeners, course directors, and instructors have anxious feelings about dealing with a student who, for example, is in counseling or taking medication for depression. These feelings might be due to the thoughts that more time and energy will likely be spent dealing with students who possess these attributes. Also, some instructors and course directors may have preconceived biases about the students with these attributes because they believe that these students may create trouble or disrupt the flow of a course.

The results of this study indicate that students over eighteen years of age who experience an early departure have nearly identically measured demographic, medical, and lifestyle attributes as those individuals who remain for the duration of the course. Consequently, information that typically is analyzed before the student arrives actually provides little assistance in predicting which students might become early departures. Therefore, it is important that the pre-trip information gathered from students be viewed with as few preconceptions as possible.

The demographic information related to participants in adventure programs found in the data of this study share some similarities and differences with the limited demographic information related to risk taking populations uncovered in the literature review. As discussed in Chapter 2, Klausner found that the profile of parachutists, whom

he considered a risk taking population, were nearly all men, young, single minded, and lived mostly in the Western states (Klausner, 1967). In comparison, the researcher of the current Outward Bound study did not measure a person's residence or marital status, however, data were tabulated concerning sex and age. This study examined two separate groups of potential risk taking populations and found that both groups had a nearly identical number of men and women. The finishers consisted of 42 men and 49 women (with one non-report) while the non-finishers had 45 men and 47 women. These data are inconsistent with Klausner's findings. The findings indicate that females have equal representation in the risk taking populations of 1998 and 1999 COBS. On the other hand, Klausner (1967) stated that the participants in his study were mostly "young". He explained, reporting that 54 percent of the participants in his study were 25 or younger. The study at hand observed groups with mean ages of 22 and 24. In this context, the mean ages of the Outward Bound students would also be considered "young". In this instance the findings are similar to those of Klausner. Perhaps the demographic change is related to the increasing number of women participating in adventure programs over the past 30 years.

As mentioned, the literature associated with early departures in outdoor adventure education p rograms is very limited. For the purpose of this study the investigator imagined a model which was designed to illustrate the flow of events on an Outward Bound Course (Figure 1). This model has been named the GBAEM (Greg Bunn Adventure Education Model). The model contained three columns. The left column consists of antecedents. These antecedents were thought to be factors in the prediction of

early departure. The flow of the model moves from left to right with antecedents impacting an individual's behaviors, which consequently influences results. Therefore, the antecedents are present before the course begins. Within the course students are exposed to motivation, risk, and persistence factors; and at various times throughout the course for different individuals a result is eventually reached. In this model five results are possible: injury departure, illness departure, motivational departure, behavioral departure, and successful course completion.

Figure 1

GBAEM (Greg Bunn Adventure Education Model)

Antecedents	Behavior	Result
Demographic - Age Height Weight Sex Ethnicity *Medical* - Past medical problems Allergies Medications Counseling history *Lifestyle* - Alcohol consumption Tobacco use Substance abuse Fitness level Outward Bound experience	Motivation Risk Persistence	Injury departure Illness departure Motivational departure Behavioral departure Successful course completion

RECOMMENDATIONS FOR FURTHER RESEARCH

After an extensive review of the data, a reexamination of the antecedents in the GBAEM model was necessary. The group of finishers and the group of non-finishers examined in this study were so similar, that different antecedents have been proposed. The model containing the revised antecedents is called the Revised GBAEM (Figure 2). It will be important to research this model to see if it fits the reality of early departures and finishers of COBS and other outdoor adventure programs.

Figure 2

Revised GBAEM (Greg Bunn Adventure Education Model)

Antecedents	Behavior	Result
Measures of real motivation	Motivation	Injury departure
Perceived risk	Risk	Illness departure
Risk shift phenomenon	Persistence	Motivational departure
Risk as value		Behavioral departure
Student/environment fit		Successful course completion

Actively studying factors affecting student attrition in adventure education has beneficial implications for everyone involved with this field-based educational process. In chapter one, it was suggested that knowing attributes that are common among individuals who do not finish COBS courses could be a tremendous asset to a number of individuals. Therefore, continuing extensive research in this field could offer a significant and

meaningful contribution.

Also, discussed in chapter two of this study, is the belief by some that basic needs have a tremendous influence on human motivation. The term "motivation" was derived from a Latin word *movere*, which means "to move" (Mannell & Kleiber, 1997). In this sense, motivation deals with why and how individuals move, or don't move from one state of being to another. In COBS courses, the motivation is to complete the course Elements of Maslow's theory might apply to the experiences of students on COBS courses. The theory purports the necessity to satisfy one level before moving to the next higher level ultimately seeking self actualization (Appendix B). The first level of the hierarchy is physiological needs, such as food and water, which are satisfied within the scope of a COBS course. The next level on Maslow's hierarchy is safety. Some participants on COBS courses may never make it past the second stage depending on how they perceive the risk of the situation. This could result in an early departure from the course. Therefore, future research should include a close look at motivation.

The literature reviewed in chapter two of this study suggests a number of possible variables that could influence early departures. One factor mentioned was motivation. Included with the paperwork that students receive prior to the beginning of the course is a question relating to their motivation or excitement level. The students responded by circling a number on a scale between 1-10 (1 represented a low level of motivation and excitement and 10 represented a high level of motivation and excitement). Originally, this study included an analysis of that question. The question relating to the students motivation or excitement level can be found on a sheet titled "Information for Instructors"

(Appendix L). Unfortunately, the scale was phased in to the form midway through the 1999 season. Therefore, not enough data were available to use that particular measure for this study. Future research involving that scale or other measures of psychological motivation, could help researchers better understand the motivational drive of finishers and non-finishers. In addition, perhaps utilizing more precise wording could help isolate a desired variable. Currently, the scale on the form is worded in a fashion that does little to measure actual motivation level.

Another topic mentioned earlier in this study was individual perception of risk (e.g. perceived risk). The students on an Outward Bound course deal with risk and perceived risk on a regular basis. For example, nearly every course involves a rock climbing element. Some students may perceive this situation to be dangerous or risky even though ropes, and other climbing equipment are employed to make the activity safe. If a student was unaware of the strength and effectiveness of the climbing gear, an elevated perception of the level of risk involved could be present. In this situation, a student's level of perceived risk might interfere with their ability to advance to Maslow's next level. Therefore, the motivation in this student is focused more on safety needs than the need to achieve self-actualization. Consequently, advancement to the next level of Maslow's hierarchy is impeded which could result in an adverse effect on an individual's involvement in the duration of the course. An examination of risk could be beneficial areas to direct further research.

Another possible area of future research interest is the risk shift phenomenon. The risk shift phenomenon takes place when a group engages in a riskier task than which an

individual would choose to participate. The nature of adventure education, particularly in Outward Bound, is to push individuals to the limits of their ability. If a person was already at their limit of risk taking potential and was then put into a group setting where the level of overall risk was increased, then one could assume that the student would again revert back to dealing with safety needs. In this situation, advancing to the level of self actualization would be hindered.

Another theory about risk could also have implications in future research. The idea of risk as value observes risk as being a desirable attribute. Undoubtedly, part of human nature is intrigued by the daredevil or risk taker. On Outward Bound courses, the opportunity to demonstrate risk taking behavior is quite prevalent. If risk is viewed as a valuable attribute, then one may assume extra effort would be used to engage in more risk taking opportunities. Consequently, an Outward Bound student who engages in more risk taking behaviors could increase the possibility of becoming an early departure (most likely from an injury). Conversely, the emotional risk required to leave a course early may encourage a participant to remain and participate in a program for which they are not prepared or able to complete successfully. Future research in this area could help in understanding more about early departures.

The attrition literature examined in this study focused primarily on students in college environments. The focus of much of the research dealt with student/environment fit. This idea could have direct implications for future research pertaining to adventure education attrition. In Tinto's 1993 longitudinal model (Appendix E) it was noted that a participant had attributes present before entering into a learning environment. After a

participant is engaged in that environment, then the pre-existing variables within an individual interact with that environment and affect a certain departure decision.

The second stage in Tinto's longitudinal model is goals/commitments. A direct connection could be made with COBS students; goals and commitments are directly associated with motivation, risk, and persistence. These areas should be examined for further research.

The next stage, which is labeled institutional experiences, again had a large number of attributes that could directly apply to a model predicting attrition of adventure education courses. These attributes include performance, faculty/staff interactions (translates to: instructor/course director interactions), and peer group interactions. This could be another interesting area for future research. Tinto's model continues with social and academic integration and then revisits goals and commitments before ending with an outcome. Even though this study did not examine these particular variables, it is likely a productive avenue of future research. With some slight modification, the Tinto longitudinal model of institutional departure could directly apply to many of the factors which are likely involved with adventure education early departures. Future studies involving Tinto's model and how it could apply to adventure education experiences is warranted.

Future research could also include strategies for alleviating possible limitations of this study. A larger sample size could potentially help illustrate more differences between the two groups. Future research could include data from a larger number of years to include in the study as well as include all participants regardless of age. The current study

was restricted to participants 18 years of age and older. Including all ages would significantly increase sample size and might find age related differences not found here.

Another step toward a greater understanding of early departures could begin with a more broad research question or hypothesis. The researcher in this study was very specific in the wording of the null hypotheses. Consequently, only limited analyses of the data were possible. There is a possibility that a more broad and in-depth analysis of the same data could bring about some small level of significance. However, based on the results of this study the researcher strongly believes that the observation of an entirely new set of variables is necessary.

Student follow-up could be another area of interest to the future researcher. In this study, no observable measures were taken to understand the variables involved with an early departure after the course ends.

SUMMARY

This was a descriptive study using empirical data to gain a greater understanding of the attributes of two different groups participating in COBS courses. The different groups examined were finishers and non-finishers of COBS courses in 1998 and 1999. The researcher hoped to gain insight about the uniquenesses or similarities among students who make it to the end of a course and students who have to, for any reason, leave a course and not return. The process involved retrieving written information about incidents during the years of 1998 and 1999 that involved a student leaving a COBS course and not returning. The information collected about the non-finishers were compared to a group of selected finishers.

After measuring the data, no statistical differences emerged between the two groups. The lack of significance indicates a need to seek other possible variables in an attempt to predict early departure on Outward Bound courses. Some suggested areas of future research include measures of real motivation, perceived risk, risk shift phenomenon, risk as value, and student/environment fit.

References

Bean, J. P. (1979). Dropouts and turnover: The synthesis and test of a causal model of student attrition. Research in Higher Education, 12(2), 155-187.

Bean, J. P. (1982). Student attrition, intentions, and confidence: Interaction effects in a path model. Research in Higher Education, 17(4), 291-320.

Beck, R. C. (2000). Motivation theories and principles (4th ed.). Upper Saddle River: Prentice Hall.

Belovicz, M. W. (1971). A critical analysis of the "risky shift" phenomenon. Organizational Behavior and Human Performance, 6, 150-168.

Bem, D. J., & Wallach, M. A. (1965). Group decision making under risk of aversive consequences. Journal of Personality and Social Psychology, 1(5), 453-460.

Chapman, D. W., & Pascarella, E. T. (1983). Predictors of academic and social integration of college students. Research in higher Education, 19(3), 295-322.

Clark, R. D. I. (1971). Group-induced shift toward risk: A critical appraisal. Psychological Bulletin, 76(4), 251-270.

COBS. (1997). Colorado Outward Bound School instructor's manual. Denver, CO: Colorado Outward Bound School.

Durkheim, E. (1951). Suicide (Spaulding, John A., Simpson, George, Trans.) New York: The Free Press.

Ewert, A. (1983). Outdoor adventure and self-concept. Eugene: University of Oregon, Center of Leisure Studies.

Furlong, W. (1969). Danger as a way of joy. Sports Illustrated, 30, 52-53.

Guthrie, S. P. (1997). Actual risk and perceived risk: Implications for teaching Judgement and Decision-Making to Leaders. ERIC Documents. Eric No. 419 652

Hattie, J., Marsh, H. W., Neill, J. T., & Richards, G. E. (1997). Adventure education and Outward Bound: Out-of-class experiences that make a lasting difference. Review of Educational Research, 67(1), 43-87.

Hazelworth, M. S., & Wilson, B. E. (1990). The effects of an outdoor adventure camp experience on self-concept. Journal of Environmental Education, 21, 33-37.

Herzberg, F. (1966). Work and the nature of man. Cleveland: The World Publishing Company.

Herzberg, F., Mausner, B., & Snyder, B. B. (1959). The motivation to work (2nd ed.). New York: John Wiley & Sons, Inc.

Hunt, S.J. (1990). Philosophy of adventure education. In J. C. Miles & S. Priest (Eds.), Adventure Education . State College, PA: Venture Publishing, Inc.

James, T. (1980a). Education at the edge. Denver, CO: Colorado Outward Bound School.

James, T. (1980b). Sketch of a moving spirit: Kurt Hahn. Journal of Experiential Education, 3(1), 17-22.

Jensen, E. J. (1981). Student financial aid and persistence in college. Journal of Higher Education, 52(3), 280-294.

Katzell, R. A., & Thompson, D. L. (1990). Work motivation: Theory and practice. The American Psychologist, 45, 144-153.

Keyes, R. (1985). Chancing it: Why we take risks. Boston: Little, Brown and Company.

Klausner, S. L. (1967). Sport parachuting. In R. Slovenko & J. A. Knight (Eds.), Motivations in play, games and sports (pp. 670-694). Springfield, IL: Charles C. Thomas.

Kogan, N., & Wallach, M. A. (1967). Risky-shift phenomenon in small decision-making groups: A test of the information-exchange hypothesis. Journal of Experimental Social Psychology, 3, 75-84.

Levinger, G., & Schneider, D. J. (1969). Test of the "risk is a value" hypothesis. Journal of Personality and Social Psychology, 11(2), 165-169.

Mannell, R. C., & Kleiber, D. A. (1997). A social psychology of leisure. State College, PA: Venture Publishing, Inc.

Maslow, A. H. (1943). A theory of human motivation. Psychological Review, 50, 370-396.

McClelland, D. C. (1965). Achievement motivation can be learned. Harvard Business Review, 43, 6-24.

McClelland, D. C., & Burnham, D. (1976). Power is the great motivator. Harvard Business Review, 54, 100-111.

McGrath, J. E. (1977). Settings, measures and themes: An integrative review of some research on social psychology factors in stress. In A. Monat & R. S. Lazarus (Eds.), Stress and Coping: An Anthology . New York: Columbia University Press.

Meier, J. (1985). Injury countermeasures in outdoor adventure programs. Parks and Recreation, 20(4), 10-74.

Meir, J., Morash, T W., & Welton, G. E. (1980). High adventure outdoor pursuits: Organization and leadership. Columbus, Ohio: Publishing Horizons, Inc.

Miles, J. C., & Priest, S. (1990). Adventure education. State College, PA: Venture Publishing, Inc.

Mills, A. S. (1985). Participant motivations for outdoor recreation: A test of Maslow's theory. Journal of Leisure Research, 17(3), 184-199.

Miner, J. L., & Boldt, J. (1981). Outward Bound U.S.A.: Learning through experience in adventure-based education. New York: William Morrow and Company, Inc.

Murray, H. A. (1938). Explorations in personality: A clinical and experimental study of fifty men of college age. New York: Oxford University Press.

Napoli, A. R., & Wortman, P. M. (1998). Psychosocial factors related to retention and early departure of two-year community college students. Research in Higher Education, 39(4), 419-456.

Nelson, D. L., & Quick, J. C. (1994). Organizational behavior (2nd ed.). Minneapolis/St. Paul: West Publishing Company.

Pascarella, E. T., Smart, J. C., & Ethington, C. A. (1986). Long-term persistence of two-year college students. Research in Higher Education, 24(1), 47-71.

Priest, S., & Baillie, R. (1987). Justifying the risk to others: the real razor's edge. Journal of Experiential Education, 10(1), 16-22.

Priest, S., & Gass, M. A. (1997). Effective leadership in adventure programming Human Kinetics.

Rabow, J., Fowler, J., Bradford, D. L., Hofeller, M. A., & Shibuya, Y. (1966).

The role of social norms and leadership risk taking. Sociometry, 29, 16-27.

Random House Dictionary, (10th ed.) (1980). Springfield, MA: Random House Publishing

Richards, G. E. (1977). Some educational implications and contributions of Outward Bound. Australia: National Outdoor Education and Leadership Services.

Roos, Billy (Personal Communication, November 1999)

Rohrs, H., & Tunstall-Behrens, H. (Eds.). (1970). Kurt Hahn. Great Britain: Routledge & Kegan Paul.

Rose, H. A., & Elton, C. F. (1966). Another look at the college dropout. Journal of Counseling Psychology, 13(2), 242-246.

Rummel, A., Acton, D., Costello, S., & Pielow, G. (1999). Is all retention good? An empirical study. College Student Journal, 33(2), 241-246.

Sage, G. H. (1977). Introduction to motor behavior: A neuropsychological approach. Reading, MA: Addison-Wesley.

Schachter, S. (1959). The psychology of affiliation. Stanford, California: Stanford University Press.

Shore, A. (1977). Outward Bound: A reference volume. Greenwich, CT: Topp Litho.

SPSS. (1999). SPSS (Version 9.0). Chicago, IL: SPSS Inc.

Tinto, V. (1993). Leaving college: Rethinking the causes and cures of student attrition (2nd ed.). Chicago: University of Chicago Press.

Wallach, M. A., Kogan, N., & Bem, D. J. (1964). Diffusion of responsibility and

level of risk taking in groups. Journal of Abnormal and Social Psychology, 68(3), 263-274.

Weinberg, R. S., & Gould, D. (1995). Foundations of sport and excercise psychology. Champaign, IL: Human Kinetics.

Wilshire, B. (Ed.). (1971). William James: The essential writings. New York: Harper & Row.

Wurdinger, S. D. (1997). Philosophical issues in adventure education (third ed.). Dubuque, Iowa: Kendall/Hunt Publishing Company.

QUESTIONNAIRE FOR MEDICAL FORM

Year: A B

Course #: _____

Course length in days: A B C D E A. 7 B. 14 C. 21 D 28 E. 29 +

Early departure: A B

Type of incident: A B C D E A. Injury B. Illness C. Behavioral D. Motivational E. Other

Time medical form was received: A B C D E

A. within a week B. within a month C. within 3 months D. within 6 months E. within 1 year

Participant number: _____

Age at course start: _____ Height in total inches: _____ Weight in whole pounds: _____

Sex: A B Ethnicity: A B C D E F

A. Asian B. Black/African American C. Hispanic/Latino D. Native/American Indian E. White/Caucasian F. Other

Past medical problems: 1-67 (see Part II pg. 3 of medical form) / / / / / / /

Allergies: A B To what: A B C D E A. Food B. Animal C. Environment D. Medication E. Other

Medications: A B For what: A B C D A. psych B. Chronic Physical C. Acute Physical D. Other

Counseling now: A B Counseling in past two years: A B

Alcohol: A B C D E A. none B. use 1-2/wk C. use 3-4/wk D. use 4-5/wk E. use 6-7/wk

Tobacco: A B C D E A. none B. pack 1-2/wk C .pack 3-4/wk D. pack 4-5/wk E. pack 6-7/wk

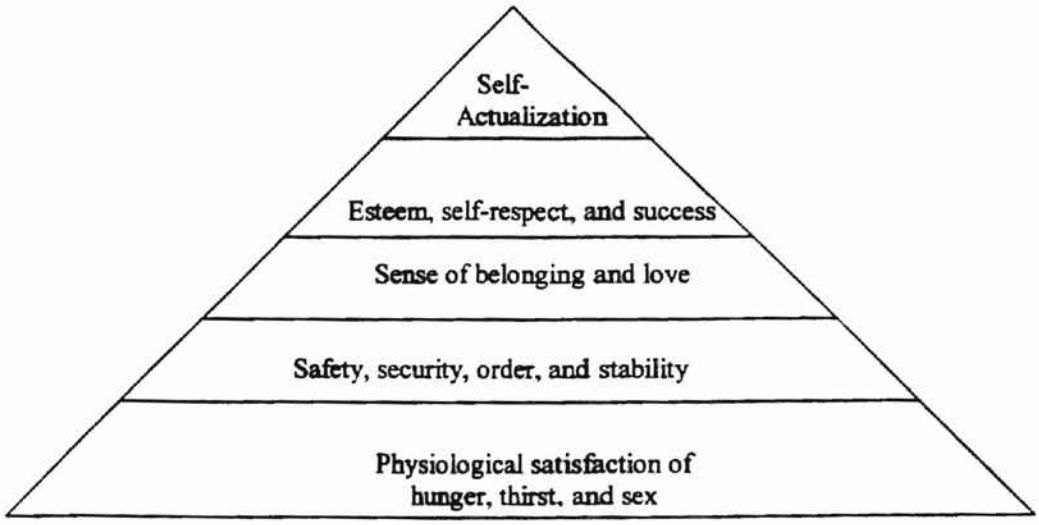
Current substance abuse: A B Past substance abuse: A B

Fitness Level: A B C D E F

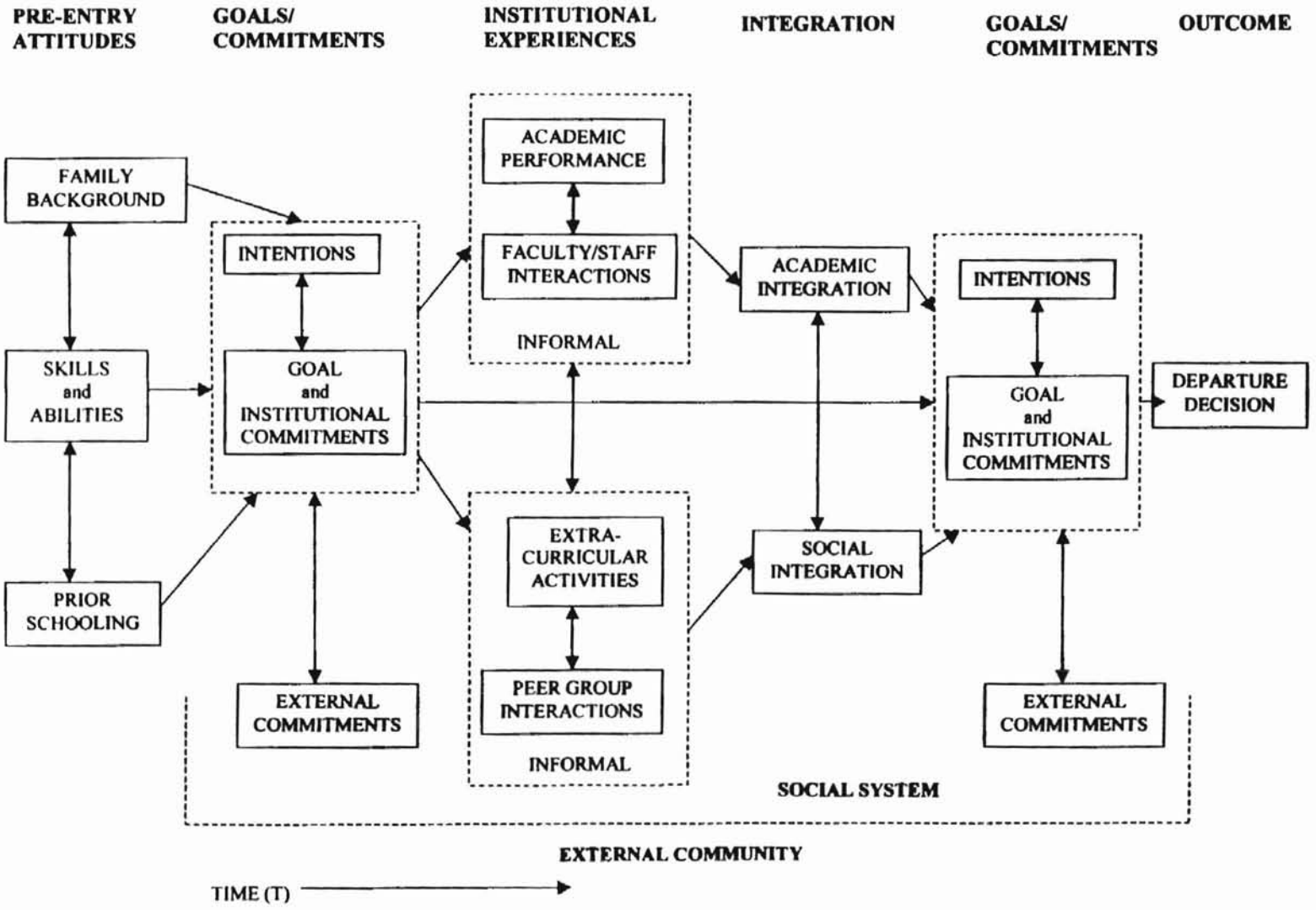
A. light 1-2/wk B. light 3-4/wk C. moderate 1-2/wk D. moderate 3-4/wk E. heavy 1-2/wk F. heavy 3-4/wk

Previous OB experience: A B

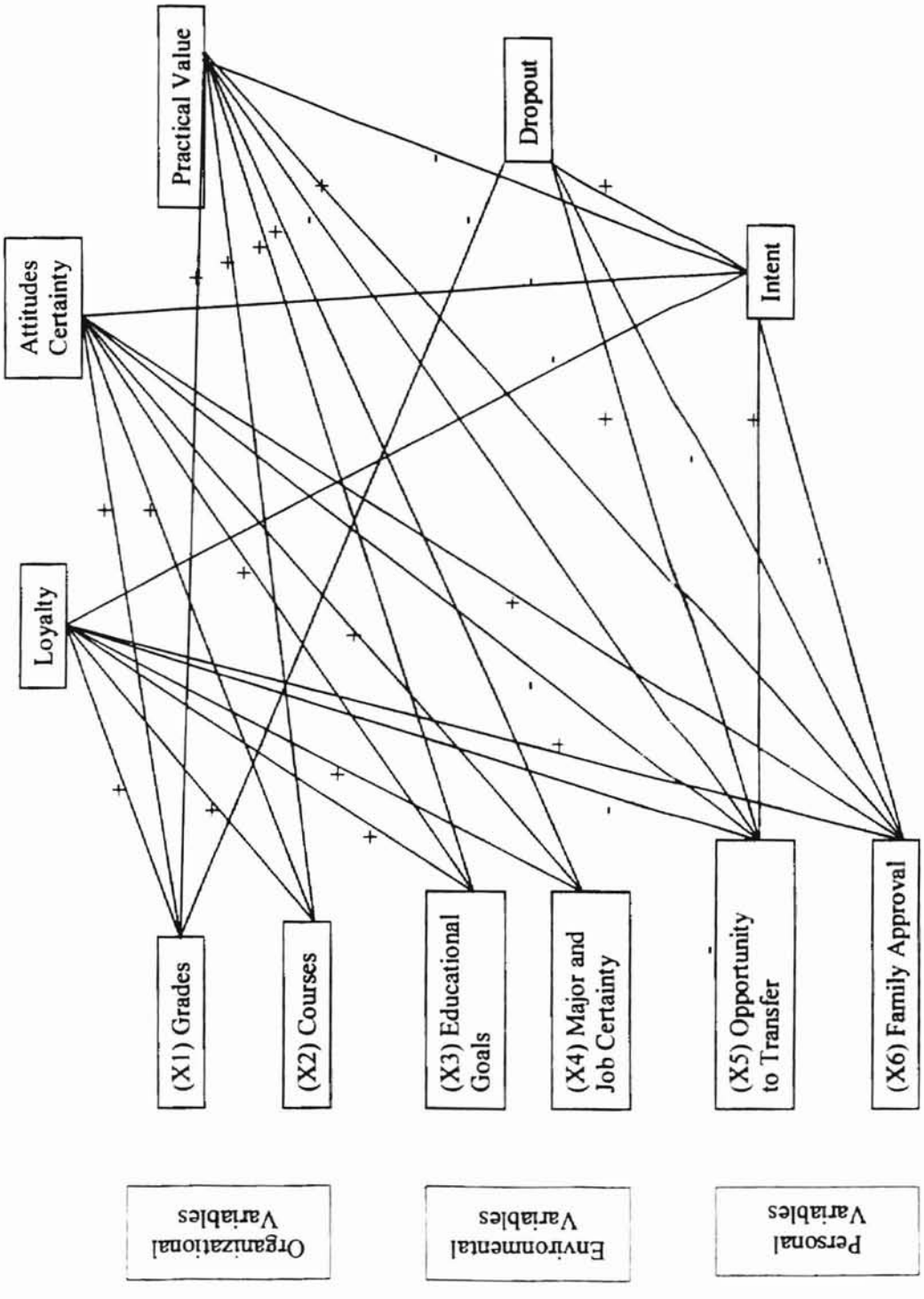
Motivated and excited: A B C D E A. 1-2 B. 3-4 C. 5-6 D. 7-8 E. 9-10


Self-
Actualization
Esteem, self-respect, and success
Sense of belonging and love
Safety, security, order, and stability
Physiological satisfaction of
hunger, thirst, and sex

(Maslow, 1943)


PRE-ENTRY ATTITUDES
GOALS/ COMMITMENTS
INSTITUTIONAL EXPERIENCES
INTEGRATION
GOALS/ COMMITMENTS
OUTCOME
FAMILY BACKGROUND
SKILLS and ABILITIES
PRIOR SCHOOLING
INTENTIONS
GOAL and INSTITUTIONAL COMMITMENTS
EXTERNAL COMMITMENTS
ACADEMIC PERFORMANCE
FACULTY/STAFF INTERACTIONS
INFORMAL
EXTRA-CURRICULAR ACTIVITIES
PEER GROUP INTERACTIONS
INFORMAL
ACADEMIC INTEGRATION
SOCIAL INTEGRATION
INTENTIONS
GOAL and INSTITUTIONAL COMMITMENTS
EXTERNAL COMMITMENTS
DEPARTURE DECISION
SOCIAL SYSTEM
EXTERNAL COMMUNITY
TIME (T)

(Tinto, 1993)


Practical Value
Dropout
Attitudes Certainty
Intent
Loyalty
(X1) Grades
(X2) Courses
(X3) Educational Goals
(X4) Major and Job Certainty
(X5) Opportunity to Transfer
(X6) Family Approval
Organizational Variables
Environmental Variables
Personal Variables

(Bean, 1979)

Greg Bunn
424 S. Hester #8, Stillwater, OK
(405) 372-2866
bunng@okstate.edu

October 29,1999

Bill Roos
Colorado Outward Bound School
945 Pennsylvania St.
Denver, CO 80203-3198

Dear Bill and all other COBS administration,

I am currently in the final phases of a Master's Degree in Leisure Management at Oklahoma State University. I have built into my program an emphasis on outdoor recreation and education. A large portion of the degree requirements include a thesis study. My past few seasons with COBS as an instructor and course director have heightened my curiosity and awareness about certain aspects of the organization; in particular: early departures. After talking with you (Mr. Roos) and other administrative staff, I became excited about the prospects of doing some research with Outward Bound and fulfilling my degree requirements at the same time.

I am sincerely interested in working with you in continuing with some of the efforts you have started in gaining a greater understanding of the profile of a person who leaves an Outward Bound course early. My hope is to help create a data base that can be easily maintained and updated. Also, I hope to use the data compiled to assist in my thesis project as well as provide usable information to COBS.

Currently, I am in the process of reviewing literature and submitting my proposal to the University. I have the ability to spend up to two weeks in Denver around late December and early January (and other sporadic dates after that) to participate in data entry and other activities necessary for the project. Because my thesis is due in April, it can be assumed that some usable data would be available well before that time.

I would greatly appreciate the opportunity to participate in this project. If you have any questions please feel free to contact me at any time.

Sincerely,

Greg Bunn

COLORADO OUTWARD BOUND SCHOOL

Greg Bunn
424 S. Hester #8
Stillwater, OK

Greg,

I have received your letter about your thesis study for your Master's degree in Leisure Management at Oklahoma State. We understand that you want to do some research into the students that are "early departures" on our courses. I have spoken with Ms. Dale Whyte, the Operations Director here at COBS, and discussed your project with her. She has approved it, and I look forward to working with you on it.

If you have any questions, please give me a call or email.

Respectfully,

Billy Roos

cc: Dale Whyte

Colorado Outward Bound School - 945 Pennsylvania Street, Denver, CO, USA, 80203
Billy Roos, Medical Screener - Phone (303) 831-6988 - Fax - (303) 837-4910 - billyr@cobs.ed

Appendix G IRB Approval

OKLAHOMA STATE UNIVERSITY
INSTITUTIONAL REVIEW BOARD

Date: December 13, 1999 IRB #: ED-00-185

Proposal Title: "FINISHERS AND NON-FINISHERS IN OUTWARD BOUND COURSES: A COMPARATIVE ANALYSIS"

Principal Investigator(s): Dr. Debra Jordan
Greg Bunn ✓

Reviewed and Processed as: Exempt

Approval Status Recommended by Reviewer(s): Pending Revision

You will need to make the following revisions to your research project **before approval is granted.** When these changes are made, please submit a revised IRB application under the IRB number listed above. Once these changes are incorporated into your research project, IRB approval will be granted, and you may begin your study. If you have questions or wish to discuss the reviewers' comments, please schedule a meeting or call Dr. Carol Olson, Director of University Research Compliance (405-744-7076), or Sharon Bacher, IRB Executive Secretary (405-744-5700) in 203 Whitehurst.

The reviewers' comments are listed below. To receive approval, they must be addressed and/or incorporated into the research protocol. Please prepare a revised application, and resubmit to the IRB office.

1) One part of the application states records of all participants 18 years or older will be used. Another section says information will be selected at random from archived records. Please clarify.

2) On the questionnaire data sheet, to what does "Participant Number" refer? If it refers to a subject, is that a necessary piece of information? If it is tied to a subject, you will need to ensure that the questionnaire sheet and master list of names are kept separately. Also, if this is the methodology, clarify how long the data will be kept and how/when it will be destroyed.

3) The reviewer does not believe that the blanket consent form was meant to mean the medical records could be made public -- or at least it would not be that reviewer's interpretation of the consent wording.

Signature: Carol Olson

Carol Olson, Director of University Research Compliance

December 13, 1999
Date

Approvals are valid for one calendar year, after which time a request for continuation must be submitted. Any modification to the research project approved by the IRB must be submitted for approval with the advisor's signature. The IRB office MUST be notified in writing when a project is complete. Approved projects are subject to monitoring by the IRB. Expedited and exempt projects may be reviewed by the full Institutional Review Board.

OKLAHOMA STATE UNIVERSITY
INSTITUTIONAL REVIEW BOARD

Date:	December 13, 1999	IRB #:	ED-00-185

Proposal Title: "FINISHERS AND NON-FINISHERS IN OUTWARD BOUND COURSES: A COMPARATIVE ANALYSIS"

Principal Investigator(s): Dr. Debra Jordan
Greg Bunn

Reviewed and Processed as: Exempt

Approval Status Recommended by Reviewer(s): Approved

Signature:

Carol Olson, Director of University Research Compliance

December 13, 1999
Date

Approvals are valid for one calendar year, after which time a request for continuation must be submitted. Any modification to the research project approved by the IRB must be submitted for approval with the advisor's signature. The IRB office MUST be notified in writing when a project is complete. Approved projects are subject to monitoring by the IRB. Expedited and exempt projects may be reviewed by the full Institutional Review Board.

MEDICAL FORM

FOR OFFICE USE ONLY

Follow-up
Approval

Outward Bound.

Confidential Medical History and Physical Examination Record for Participant and Physician

Colorado Outward Bound School
945 Pennsylvania St., Denver, CO 80203

PARTICIPANT PLEASE NOTE:

- Every item in every section must be completed. • Mark N/A if any section is not applicable to you.
- Any item or section that is not completed will require written or telephone follow-up. This may jeopardize your place on the course.
- Keep a photocopy of your completed medical form. We cannot readily access this information if you should need it in the months or years following your course.

Important: Part III of this form must be completed and signed by a physician, licensed nurse practitioner or physician assistant:

If: You are going on an Outward Bound land course of 7 days or longer or a river course of 6 days or longer;
or: You are 45 years of age or older;
or: You have a history of chronic illness, high blood pressure, Diabetes, obesity, long sedentary lifestyle, cardiac illness, cardiac events, physical infirmity;
or: You smoke more than 1 pack per day and have at least one other risk factor on this list;
or: You would prefer a physician's advice prior to course participation;
or: If the school requires it. REQUIRED _____

PART I: GENERAL INFORMATION (To be completed by applicant)

Your place on the course you choose is confirmed when we receive all forms, filled out and signed, and your full tuition payment. This medical form is a particularly important way we ensure a safe experience for you. The physician's examination (if applicable) must take place within 12 months prior to the course. If we have any question about your capability to complete the course, we will call and discuss it with you and/or your physician. If we think you should not participate in the course, we will refund all tuition payments made to Colorado Outward Bound School. We cannot refund costs of medical examinations or other expenses you incur preparing for a course.

1. Name_____ Course #_____ Course Start Date _____
2. Occupation_____ 3. Birthdate_____/_____/_____ 4. Age at course start_____
3. Height_____ft._____in. Weight_____lbs. 6. Male_____ Female_____ 7. Participant Soc. Sec. # _____
8. Address _____ City/state/zip_____
9. Home Phone ( )_____ Business phone ( )_____ FAX ( )_____
10. Family Physician_____ Phone ( )_____ FAX ( )_____
11. In case of emergency contact_____ Relationship_____
    Address_____ Daytime Phone ( ) _____
    City/state/zip_____ Evening Phone ( )_____
12. Father/Guardian_____ Mother/Guardian _____
    Address _____ Address _____
    City/State/Zip _____ City/State/Zip _____
    Employer _____ Employer_____
    Title/Occupation_____ Title/Occupation _____
    Home Phone ( ) _____ Home Phone ( ) _____
    Work Phone ( ) _____ Work Phone ( )_____

13. Do you speak and understand English? ❒ Yes ❒ No

14. Ethnic Background (optional)
❒ Asian ❒ Black/African American ❒ Hispanic/Latino
❒ Native/American Indian ❒ White/Caucasian ❒ Other _____

Please Note: Each participant is responsible for any medical expenses and should be covered by their own sickness and accident insurance. For those not covered by their own insurance, Colorado Outward Bound School provides coverage up to $45,000.00 for course-related expenses resulting from an accident (Subject to $500.00 deductible).

For our insurance records, answers to the following questions ARE REQUIRED to be supplied in detail.

15. Is applicant covered by any hospitalization and medical care policy? ❒ Yes ❒ No

16. Insurance Company Name _____

Policy or Certificate # _____

Address of Insurance Company _____

17. Does the insurance company require pre-authorization? ❒ Yes ❒ No

If yes, please give phone # ( ) _____

All information will remain confidential, and you should know that over the years, many students with a variety of medical/psychological difficulties have successfully completed our courses, but we must be aware of these conditions for the applicant's benefit. Failure to disclose such information could result in serious harm to the applicant and his or her fellow students.

If you arrive at the course start with a pre-existing condition or injury which is not indicated on your medical form and you are subsequently forced to leave the course because of that condition, you will be charged an evacuation fee and will not receive a refund of tuition.

Signature Required

Consent is hereby given for the applicant to attend an Outward Bound course and permission is given for any emergency anesthesia, operation, hospitalization or other treatment which might become necessary. I have read the description of Outward Bound in Part III, Physician Section, of this Medical Form, and I understand that the program is a physically and mentally strenuous activity in a remote wilderness area, far removed from the facilities of civilization.

The information provided on the following pages is a complete and accurate statement of the physical and psychological factors which may affect my participation in Outward Bound. I realize that failure to disclose such information could result in serious harm to myself and fellow students and agree to indemnify and hold Outward Bound harmless if all relevant information is not disclosed. I also agree to notify Outward Bound should there be any change in my health status prior to my course start.

Parent/Guardian's Signature (if applicant is under 21) Date

Applicant's Signature Date

PART II. PARTICIPANT HISTORY: PAST AND PRESENT MEDICAL PROBLEMS
(To be completed by applicant. Fill in EVERY blank. Use additional pages, if necessary.)

A. Conditions and Symptoms – Do you have, or have you had, any of the following conditions or symptoms?

	YES	NO
1. High Blood Pressure	☐	☐
2. Heart Disease	☐	☐
3. Heart Murmur	☐	☐
4. Irregular Heartbeat	☐	☐
5. Family history of heart attack	☐	☐
6. Tuberculosis	☐	☐
7. Recent exposure to active TB	☐	☐
8. Positive TB test	☐	☐
9. Active Hepatitis	☐	☐
10. History of Hepatitis	☐	☐
11. Seizure Disorder	☐	☐
12. Seizure with past year	☐	☐
13. Bleeding Disorder	☐	☐
14. Blood disorder/anemia/ sickle cell trait	☐	☐
15. Chronic cough	☐	☐
16. Recurrent lung infections	☐	☐
17. Asthma	☐	☐
18. Diabetes	☐	☐
19. Hypoglycemia	☐	☐
20. Anorexia Nervosa	☐	☐
21. Bulimia	☐	☐
22. Cancer	☐	☐
23. Skin Problem	☐	☐
24. Frostbite	☐	☐
25. Circulation Problems	☐	☐
26. Active Bedwetting	☐	☐
27. Headaches	☐	☐
28. Head injury with neurological impairment	☐	☐
29. Stomach Ulcers	☐	☐
30. Intestinal Problems	☐	☐
31. Heatstroke	☐	☐
32. Bladder Infection	☐	☐
33. Difficulty Urinating	☐	☐
34. Kidney Problems	☐	☐
35. Thyroid Problems	☐	☐

	YES	NO
36. Endocrine Problems	☐	☐
37. Hearing Impairment	☐	☐
38. Vision Impairment	☐	☐
39. Motion Sickness	☐	☐
40. Sleep Walking	☐	☐
41. Broken Bones	☐	☐
42. Neck Problem	☐	☐
43. Back Problem	☐	☐
44. Arm Problem	☐	☐
45. Shoulder Problem	☐	☐
46. Knee Problem	☐	☐
47. Ankle Problem	☐	☐
48. Leg Problem	☐	☐
49. Foot Problem	☐	☐
50. Currently Pregnant	☐	☐
51. Special Diet	☐	☐
52. Learning Disability	☐	☐
53. Medical Equipment Devices	☐	☐
54. Unexplained weight loss	☐	☐
55. Other		

Do you currently or regularly have any of the following symptoms?

56. Chest Pain/Pressure	☐	☐
57. Heart Palpitations	☐	☐
58. Unexplained Sweating	☐	☐
59. Frequent Shortness of Breath	☐	☐
60. Frequent Dizziness	☐	☐
61. Frequent Fainting	☐	☐
62. Heartburn	☐	☐
63. Muscle Cramps	☐	☐
64. Intolerance of warm temps.	☐	☐
65. Intolerance of cold temps.	☐	☐
66. PMS or menstrual problems	☐	☐
67. Other		

If you have answered "YES" to any of the above items, please explain below. Include the following.
- What specific symptoms are occurring
- How long symptom/condition lasts
- Date of last occurrence
- How often symptom/condition occurs
- How you care for symptom/condition
- How symptom/condition restricts your activity in any way, including your ability to run, lift and climb.

Item #	Detailed Description (including restrictions, if any)

B. Allergies (including medicines, foods, bites and stings) NONE ☐

Allergy - list below	Reaction	Medication Required

C. Medications

List any medications your are using, including psychiatric and over-the-counter medication below. NONE ☐

Medication	Condition	Dosage (size & freq.)	Current Side Effects

NOTE: If you are receiving medication, bring double amounts in separate, non-breakable waterproof containers along with dosage instructions.

D. Required Immunization

Immunization	Requirement	Date of Last Immunization
Tetanus	Within 10 years of course start date	

E. Hospitalization/Emergencies

Please list any hospital or emergency department visits in the last two years.

Dates	Reason	Length of Stay

F. Personal History

1. Have you been in counseling with a psychiatrist, psychologist, or other counselor within the past two years? Yes ☐ No ☐
2. Are you currently in counseling/treatment? Yes ☐ No ☐
3. When was counseling terminated? Date_____
4. Reason for counseling (check appropriate responses)
   ☐ Academic ☐ Family Issues ☐ Depression ☐ Substance Abuse
   ☐ Career ☐ Divorce ☐ Suicide ☐ Other_____
5. Please arrange for a release of information with your counselor so we may contact him/her. Have you done so? Yes ☐ No ☐
6. Name of most recent counselor? _____

Address_____

City/State/Zip _____

Phone ( )_____ FAX ( ) _____

G. Lifestyle

1. Do you use alcohol? ❒ YES ❒ NO How much/how often?_____
2. Do you use tobacco? ❒ YES ❒ NO How much/how often?_____
3. Do you currently have a substance abuse problem (alcohol, drugs, etc.) ❒ YES ❒ NO

   If yes, please describe_____
4. Do you have a history of chemical dependency ❒ YES ❒ NO Drugs_____ Last used?_____ (date)

H. Current Exercise Activity/Fitness

1. Please list current exercise activity. Note: As you know, you do not have to be an athlete to attend OUTWARD BOUND. Our students come at varying levels of condition. (Refer to your enrollment packet for a recommended training program).

Activity	Frequency	Approximate Time/Distance	Leisurely	Moderately	Intensely

Comments (optional)_____

2. Swimming Ability ❒ Non-Swimmer ❒ Cannot swim more than 100 yards ❒ Moderate Swimmer ❒ Strong Swimmer ❒ Current lifesaving certificate

3. Blood Pressure_____ Resting Pulse_____

Additional Participant Comments

PART III - PHYSICIAN SECTION

(To be completed by Physician, Licensed Nurse Practitioner or Physician Assistant)

To the Examining Physician:

We need your HELP! The Colorado Outward Bound School operates year-round wilderness courses as long as 83 days, which are physically and mentally demanding. Students sleep in tents or under improvised shelters. We provide suitable equipment and ample meals, but we may not be able to meet special dietary requirements. Many programs include a solo exercise of up to three days with no food or a minimum of food (but with adequate water). Students are expected to refrain from using tobacco, alcohol or drugs other than prescribed medication. Strenuous physical activity may include:

- walking on uneven terrain
- carrying 45 lb. packs
- immersion in cold water
- adjusting quickly to altitudes of up to 14,000 ft.
- high altitude hiking
- running

The Colorado Outward Bound School is dedicated to ensuring thorough and comprehensive medical evaluation and screening for all course applicants. In the past, many of our student medical forms were incomplete which necessitated followups and resulted in delays in completing the screening form. The most common problems have been:

- Insufficient detail in Section II – Student Medical History;
- Inadequate description of abnormalities found in the Physical Exam;
- Unanswered questions throughout the screening form.

As the applicant's primary health care provider, you know your patient best and you are in the best position to evaluate and advise the applicant on medical issues; your input is vital; so this year we are trying something new. We are asking you to carefully review the student's medical history and we are asking you to summarize and evaluate any currently active medical problems that can affect the applicant on a Colorado Outward Bound School course.

PROCEDURE

1. Please review Part II – Student History. Check it for accuracy and completeness and make any necessary corrections or additions.

2. After reviewing Part II (Student History) and after completing your exam, use the space provided to list any currently active medical problems. Summarize any restrictions that you feel are required on a Colorado Outward Bound School course. Please pay particular attention to heart, lung and musculoskeletal issues.

3. If you feel that any further tests, immunizations, or specialty referrals are required before the applicant comes to Outward Bound, please indicate in the section provided.

Any individual 14 years or older, with normal physical and mental capacity can usually expect to complete a Colorado Outward Bound School course, but preliminary conditioning is strongly advised. Our goal is to provide this applicant with a rewarding, but safe experience.

Thank you for you help.

William R Hiatt

William R. Hiatt, M.D.
Board of Trustees: Colorado Outward Bound School Safety Committee

A. Physician Exam (This form MUST be used – alternate forms will NOT be accepted)

1. Patient's Name _____
2. Height _____ft. _____in. 3. Weight _____lbs. Overweight? _____lbs. Underweight? _____lbs.
4. Blood Pressure _____/_____ If BP is over 150/90 repeat. Second Reading _____/_____ Date _____
5. Pulse Rate _____ 6. Pulse Irregularities ❒ YES ❒ NO

   If yes, please describe and indicate clinical significance _____
7. Exam date _____/_____/_____ **Must be within one year of program start date** (See Page 1)

Check if normal, describe ONLY if abnormal

	Normal	Describe if abnormal
Eyes	❒	
Ears	❒	
Nose	❒	
Throat & Mouth	❒	
Neck	❒	
Thyroid	❒	
Thorax & Lungs	❒	
Heart	❒	
Heart murmur (if present)		
Functional	❒	
Peripheral Vessels	❒	
Abdomen	❒	
Hernia	❒	
Genitals	❒	
Back	❒	
CNS	❒	
Lymph Nodes	❒	
Skin	❒	
Scars	❒	
Extremities	❒	
Shoulder	❒	
Knees	❒	
Ankles	❒	
Feet	❒	
Other		

B. Summary of Active Medical Problems and Restrictions NONE ❒ or list below:
(To be filled out by physician, use additional page if needed)

C. Pre Acceptance Testing

1. **Cardiovascular Testing:** If either of the following conditions apply to your patient, we strongly recommend and may require an Exercise Test be administered prior to the course:
   A. Patient is 45 years of age or older. Patients who are currently engaged (longer than 3 months) in an aerobic exercise program which includes the exercise equivalent of jogging 10 minute miles, 12 miles per week are not subject to this rule (see Section H. page 5 of this form for patient's current exercise activity).
   B. Patient, regardless of age, with any of the following cardiovascular risk factors:
   - High Blood Pressure + one other risk factor on this list
   - Overweight or Obesity + one other risk factor on this list
   - Long term sedentary lifestyle + one other risk factor on this list
   - Smokes cigarettes + one other risk factor on this list
   - History or prior heart disease + one other risk factor on this list
   - Diabetic requiring insulin and over 50 years of age
   - Known abnormally high cholesterol (over 250) + one other risk factor on this list
   - Current cardiovascular disease
   - Symptoms of chest pain, pressure, SOB (Shortness of Breath), palpitations, sweats or weak spells.

(a) Do you feel a Stress EKG is needed? ❒ YES ❒ NO

(b) If yes, date administered _____/_____/_____ (c) Results ❒ normal ❒ abnormal

Please forward a copy of the Exercise Test Report. If a test has been administered, acceptance into an OUTWARD BOUND course will depend upon interpretation of the test.

2. Further Tests: If you feel further diagnostic tests are indicated prior to coming to OUTWARD BOUND, please schedule and provide results including TB Skin Test, medication blood levels and other tests.

Test	Date	Results: Normal/Abnormal (describe)

D. Required Immunization

Immunization	Requirement	*Year of Last Immunization
Tetanus	Within 10 years of course start date	

*If greater than 10 years or unknown, please schedule tetanus booster.
Date to be administered: _____/_____/_____ PLEASE CALL OR SEND CONFIRMATION.

E. Physician Recommended Referrals

Explain _____

Consulting opinion: ❒ Enclosed ❒ To be forwarded to Admissions Office

How long have you known the applicant _____

On the basis of your past knowledge, the applicant's medical history and the present physical examination of this applicant, do you feel this individual can participate in an OUTWARD BOUND Course? ❒ YES ❒ NO

Name of examining physician (please print) _____

Address _____

Telephone ( ) _____ FAX ( ) _____

_____

Physician's Signature — Date of Exam (must be within one year of course starting date)

Outward Bound. INCIDENT REPORT FORM REV. 4/96

Subject Name: _____ Age: _____ Male/Female Student/Staff

Course #: _____ Course Dates: _____ Area: _____ Course Type: _____

Temp (°F): _____ Precipitation: _____ Wind (mph): _____ Visibility: _____

TYPE OF INCIDENT (Check One)

- ☐ Injury
- ☐ Illness
- ☐ Behavioral
- ☐ Motivational
- ☐ Near Miss
- ☐ Other

Date of Incident: _____ Time of Day: _____ am/pm

Outcomes of Incident

A. Did the subject leave the course?	☐ NO	☐ YES	Date: _____
B. Was outside assistance used?	☐ NO	☐ YES	
C. Did subject go to a medical facility?	☐ NO	☐ YES	Date: _____
D. Did subject return to the course?	☐ NO	☐ YES	Date: _____

TYPE OF INJURY OR ILLNESS

O Abrasion	O Cardiac	O Fever	O Infection	O Sprain
O Anaphylaxis	O Concussion	O Fracture	O Laceration	O Strain
O Allergy, other	O Contusion	O Frostbite	O Pre-existing Ill/Injury	O Tendonitis
O AMS (altitude)	O Dental	O Gastrointestinal	O Puncture	O Tickbite
O Blister	O Dislocation	O Hyperthermia	O Respiratory	O Urinary Tract
O Burn	O Exhaustion	O Hypothermia	O Skin problem	

LOCATION OF INJURY

O Head	O Shoulder	O Stomach	O Lower Arm	O Knee
O Face	O Chest	O Buttock	O Wrist	O Lower Leg
O Eyes	O Upper Back	O Genitals	O Hand	O Ankle
O Mouth	O Lower Back	O Upper Arm	O Finger	O Foot
O Neck	O Hip	O Elbow	O Upper Leg	O Toe

ACTIVITY AT THE TIME OF INCIDENT

O Backpacking	O Cycling	O Mountaineering	O Running	
O Base	O Dog Sledding	O Mountain Biking	O Sailing	O Swimming/Dip
O Camping	O Hiking	O Portaging	O Service	O Unaccomp. Travel
O Canoeing	O Initiative	O Rafting	O Skiing	O Urban Activity
O Catamaraning	O Kayaking (inflatable)	O Rappelling	O Snowboarding	O Vehicle/Van
O Caving	O Kayaking (hard)	O Rock Climbing	O Snowshoeing	
O Cooking	O Kayaking (inflatable)	O Ropes Course	O Solo	

BEHAVIORAL

O Assaultive Behavior	O Drug/Alcohol Use	O Harassment	O Refused to Participate	O Suicide Ideation
O Bias Behavior	O Verbal Abuse	O Sexual Activity	O Runaway	O Fail to Follow Instruction

PRIMARY CAUSE

O Altitude	O Exceeded Ability	O Fast water	O Misbehavior	O Technique
O Avalanche	O Exhaustion	O Hazardous Animal	O Missing/Lost	O Unclipping
O Clothing	O Fail to Follow Instruction	O Hostile Bystander	O Person Overboard	O Unfit
O Darkness	O Fall/Slip	O Immersion	O Pre-existing Ill/Injury	O Weather
O Dehydration	O Fall on rock	O Instruction	O Psychological	
O Drugs/Alcohol	O Fall on snow	O Lightning	O Screening	
O Equipment	O Falling rock	O Medication	O Supervision	

Course #: _____ Subject Name: _____ Date: _____

DRUG ADMINISTERED

Date	Drug Amount	Problem	Administered By

Were body fluids spilled? ☐ NO ☐ YES If so, were universal precautions followed? ☐ NO ☐ YES

NARRATIVE: Concisely describe how the incident happened in 4 or 5 sentances. Attach medical report if one was generated. ***If early course departure was due to behavior: 1) have the student write the reason for leaving; 2) instructors need to write their comments; 3) be sure to document any conversations with parents or guardians and attach to this form.***

ANALYSIS: Include any observations or suggestions regarding how the incident could have been prevented.

Report prepared by: _____ Position: _____ Date: _____

Staff involved: _____

Analysis by Chief Instructor/Course Director: _____

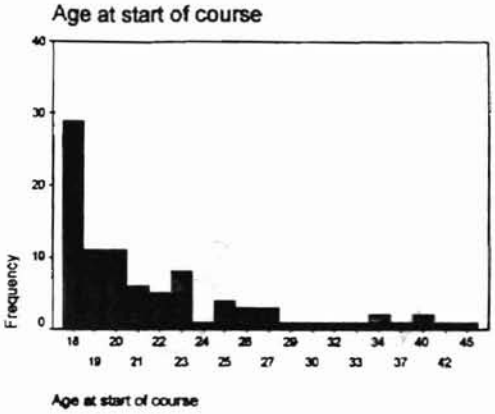
CI/CD Signature: _____ Date: _____

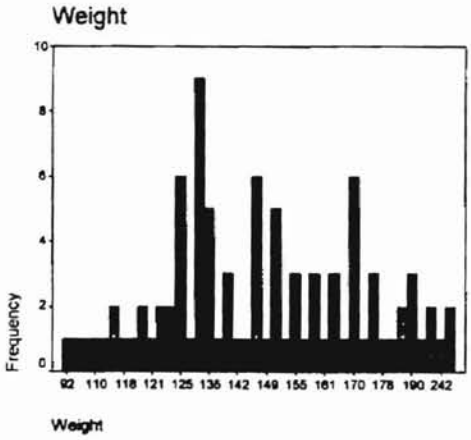
Analysis by Program Director/Manager: _____

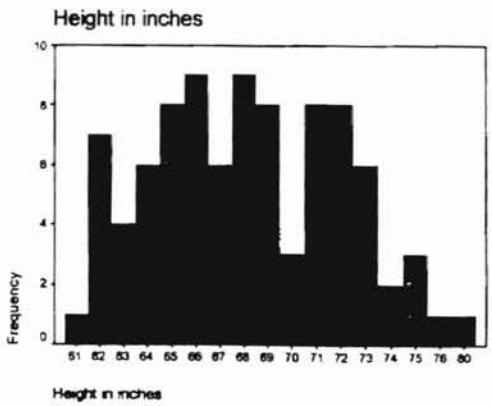
Program Director/Manager Signature: _____ Date: _____

Appendix J Demographic Bar Charts

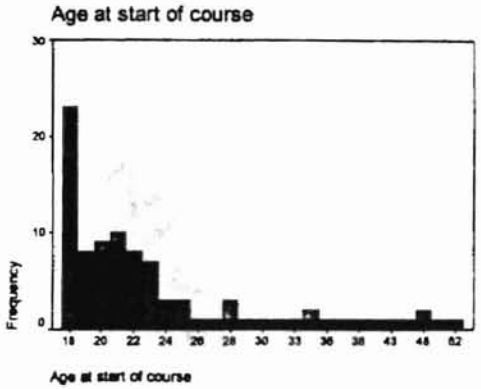
FINISHERS

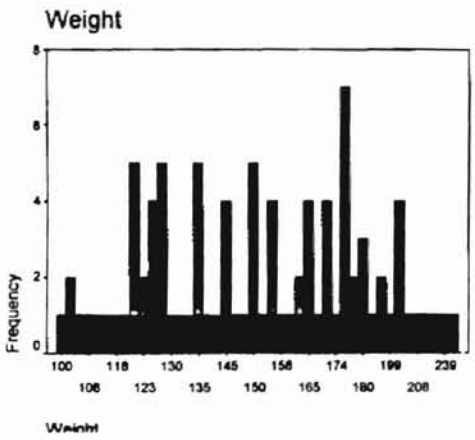


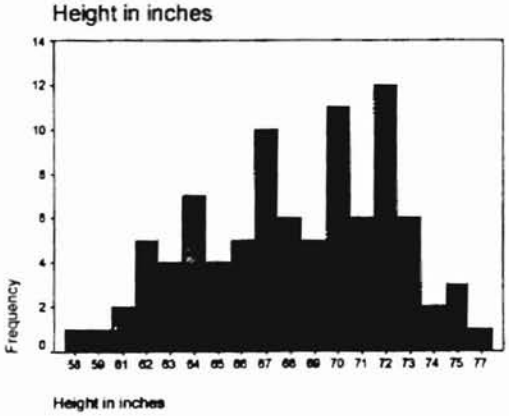




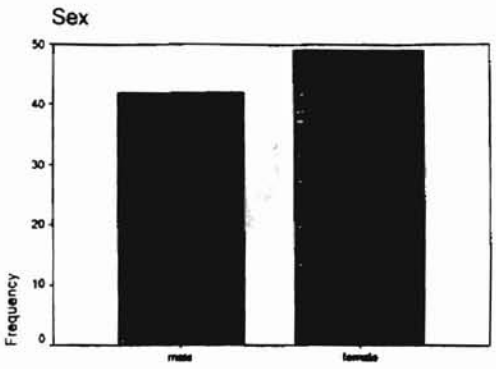
NON-FINISHERS

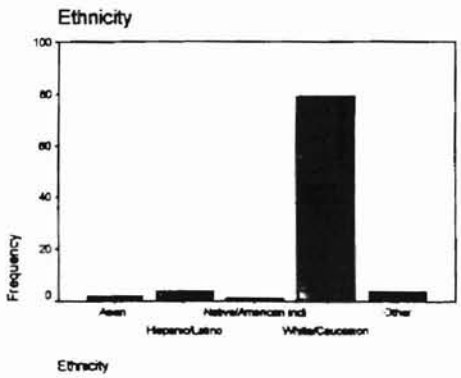






FINISHERS





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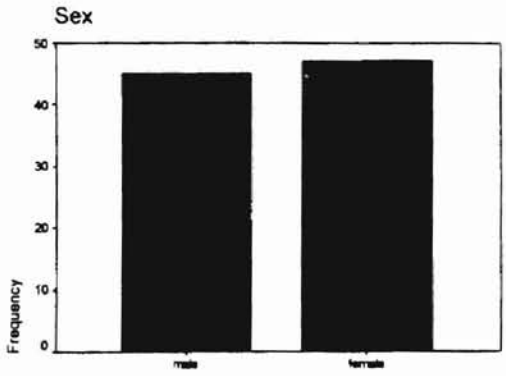
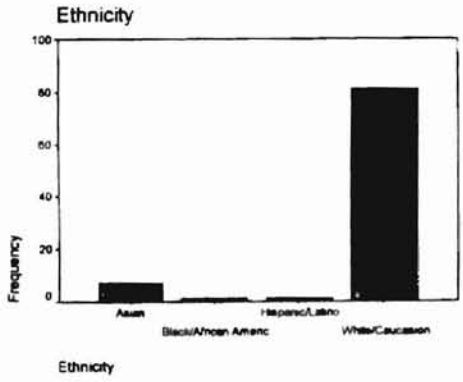
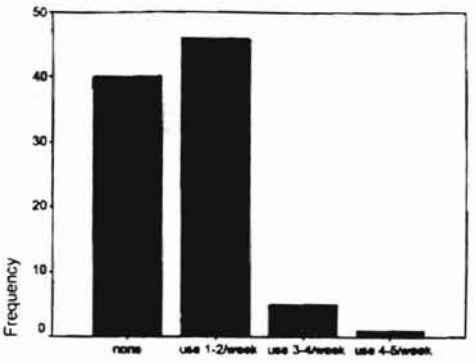




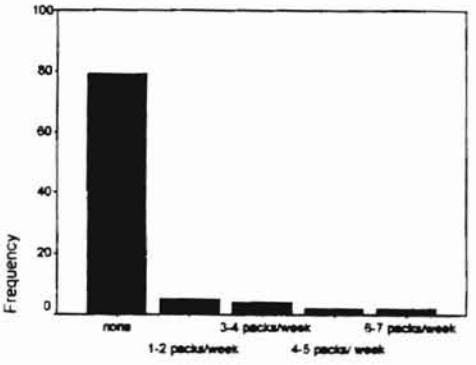
FINISHERS

Alcohol use



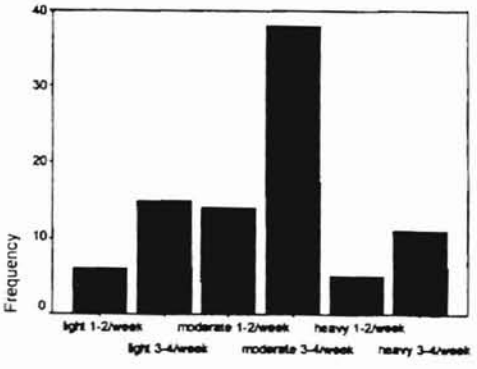
Alcohol use

Tobacco Use



Tobacco Use

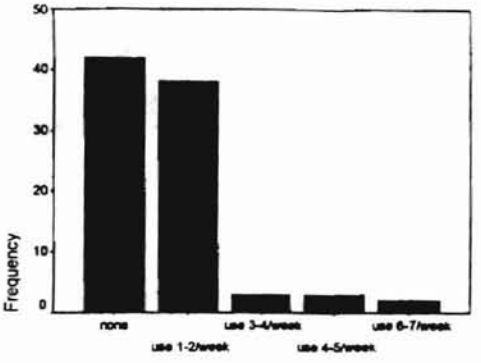
Fitness level



Fitness level

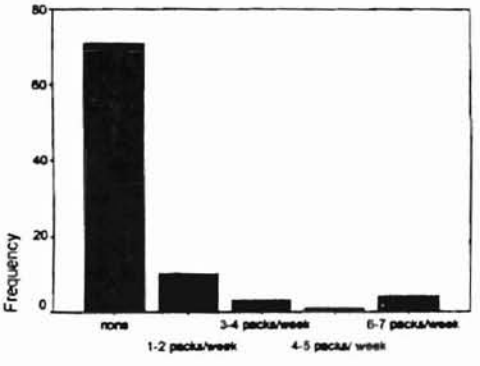
NON-FINISHER

Alcohol use



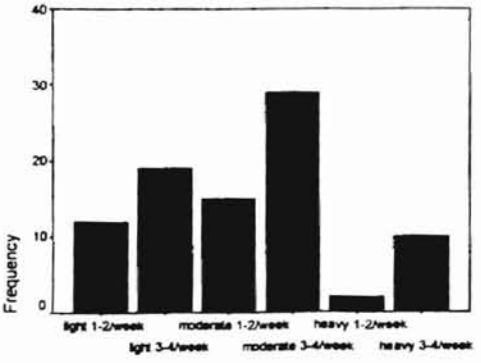
Alcohol use

Tobacco Use



Tobacco Use

Fitness level



Fitness level

RETURN **INFORMATION FOR YOUR INSTRUCTORS**

Name_____

Course #_____

We want to know more about you and your interests.
Your answers to the following questions will help us in our preparation for your course.

1. Have you ever attended an Outward Bound School? ❒ Yes ❒ No

2. If so, which school and what type and length of course? _____

3. Why are you coming on this Outward Bound course? _____

_____

_____

_____

_____

_____

4. Describe your school or work experience and tell us about any experiences or accomplishments you are proud of: _____

_____

_____

_____

_____

_____

over

5. How did you learn about Outward Bound? (Please be specific) _____

_____

_____

6. Describe your athletic and/or outdoor experience. _____

_____

_____

_____

7. List your interests and skills. _____

_____

_____

_____

_____

_____

8. On a scale of 1 to 10, how excited and motivated are you for this course? (Circle)

1.....2.....3.....4.....5.....6.....7.....8.....9.....10

(I'm not too sure about this) (I can't wait to get there)

VITA

Gregory Eugene Bunn

Candidate for the Degree of

Master of Science

Thesis: AN EXAMINATION OF EARLY DEPARTURES ON COLORADO OUTWARD BOUND SCHOOL COURSES

Major Field: Health, Physical Education, and Leisure Studies

Education: Graduate from Union High School, Tulsa, Oklahoma in May of 1990; received a bachelor of Science degree in Leisure Studies form Oklahoma State University, Stillwater, Oklahoma December 1995. Completed the requirements for the Masters in Health, Physical Education and Leisure at Oklahoma State University in May, 2000.

Experience: Staff and Administration at resident summer camp in Choteau, Oklahoma, Recreation assistant for United States Air Force, Mountain Home, Idaho, Recreation graduate assistant for Outdoor Adventure at Oklahoma State University. Teaching Graduate assistant for the Leisure department, Oklahoma State University. Instructor and Course Director for the Colorado Outward Bound School.

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