A FOCUS GROUP INVESTIGATION OF A WILDERNESS ADVENTURE PROGRAMME

by

WESLEY JAMES BARTEL

B.A., Trinity Western University, 1986

A THESIS SUBMITTED IN PARTIAL FULFILLMENT OF THE REQUIREMENTS FOR THE DEGREE OF

MASTER OF ARTS

in

THE FACULTY OF GRADUATE STUDIES

(Department of Counselling Psychology)

We accept this thesis as conforming to the required standard

THE UNIVERSITY OF BRITISH COLUMBIA

December 1995

© Wesley James Bartel, 1996
In presenting this thesis in partial fulfilment of the requirements for an advanced degree at the University of British Columbia, I agree that the Library shall make it freely available for reference and study. I further agree that permission for extensive copying of this thesis for scholarly purposes may be granted by the head of my department or by his or her representatives. It is understood that copying or publication of this thesis for financial gain shall not be allowed without my written permission.

Department of Counselling Psychology

The University of British Columbia
Vancouver, Canada

Date April 23/96
Abstract

The focus of this masters thesis was to examine wilderness adventure programming from the perspective of the participants through use of the focus group technique. This study has revealed that the field of wilderness programming as a therapeutic intervention has a great deal of work to do in the areas of theory and research. Researchers need to begin using qualitative methods such as the focus group technique to build a theoretical base that can guide practice. Furthermore, programme descriptions must become more detailed so that research can be adequately evaluated and compared. The results of this study indicate that there are critical factors such as group work and difficulty that are crucial to the design of wilderness adventure programmes. They further suggest that the programmes examined help to build the self esteem of participants and to deter them from further involvement with the criminal justice system.
# Table of Contents

Abstract .......................................................................................................................... ii  
Table of Contents ........................................................................................................... iii  
List of Tables .................................................................................................................. vii  
List of Figures ............................................................................................................... viii  
Acknowledgements ....................................................................................................... ix  

Chapter 1: An introduction to Wilderness Adventure Programmes ............ 1  
   The problem .............................................................................................................. 1  
   What's In A Name?.................................................................................................... 2  
   The Wilderness Environment .............................................................................. 2  
   Outward Bound ..................................................................................................... 3  
   Wilderness Adventure Programmes as Therapy .............................................. 4  
      Programme outcomes ....................................................................................... 4  
      Programme theory ............................................................................................ 4  
      Programme design. ............................................................................................ 5  
   Research ............................................................................................................... 6  
      Programme outcomes ....................................................................................... 7  
   Summary ................................................................................................................. 7  

Chapter 2: Literature Review ............................................................................. 9  
   Research ............................................................................................................... 9  
      Outward Bound .................................................................................................. 9  
      Quantitative studies .......................................................................................... 11  
   Qualitative Research .............................................................................................. 19  
      Combination Studies. ........................................................................................ 23  
   Programme Examples ............................................................................................. 28  
      Preble Chapel Teen Adventure ....................................................................... 28
Chapter 5: Interpretation of results

Content Analysis

The programme as a whole

The programme components

Hiking
List of Tables

Table 1:
Percentage of therapeutic adventure programmes using specific activities with substance abusers ................................................................. 44
List of Figures

Figure 1: Programme Components ................................................................. 64
Figure 2: Critical Factors ................................................................. 75
Figure 3: Themes ................................................................. 88
Acknowledgements

This thesis marks the end of a significant period in my education and life. The time and effort involved would not have been possible without the support and assistance of several individuals whom I would like to acknowledge.

I would like to thank my thesis advisor, Dr. Marvin Westwood for his flexibility and helpfulness in my time of stress. His guidance and assistance especially through the final process of putting this work together was most appreciated.

I would also like to thank my friend and business partner Frans Barnard who not only introduced me to the power of wilderness programming but also picked up the slack while I sat at my computer.

Lastly and most importantly, I would like to thank my wife Ulrike, for her unwavering support, and willingness to share her husband with his computer over the last three years and especially the last few weeks.
Chapter 1

An introduction to Wilderness Adventure Programmes

The purpose of this study is to examine the field of wilderness adventure programming through a process of literature review as well as a focus group study of one of these programmes. The popularity of these programmes has grown immensely over the last several years, yet research and theory have being sorely neglected. Wichmann (1991) suggests that wilderness programmes as therapeutic interventions have become a popular aspect of various programmes designed to teach and or rehabilitate delinquent youth. This study will look at the question of whether this practice is justified or not.

The problem

The dictates of a wilderness environment combined with a therapeutic group provides a powerful context in which growth and education can take place. Studies have shown that using wilderness group experiences as part of therapy or rehabilitation is a powerful and effective means of bringing about positive change in both behaviour and attitude (Sakofs and Schuurmann, 1991). The problem is, however, that the specific design of these programmes is so greatly varied that it is difficult to say what the critical components are and what their corresponding effects on the participants are (Wichmann, 1991). The basic problem with wilderness adventure programming as a therapeutic intervention is that there is no underlying theoretical base to guide practitioners in their design and application of programmes. Two important questions which remain to be addressed are one:
what is it that changes for the participants because of such programmes, and two: what is it within a given programme which is responsible for this change?

**What's In A Name?**

A clear indication of the lack of theoretical consensus is the absence of agreement on a name for this therapeutic approach. Schoel, Prouty, and Radcliffe (1992) use the term "Adventure Based Counselling" to describe the practices of Project Adventure. Variations of this term include Adventure Based Therapy (Kolb, 1992) or Adventure Therapy (Sakofs & Schuurman, 1991; Gass, 1991), Therapeutic Adventures (Kimball, 1983), Outdoor Adventure Programming (Cason & Gillis, 1994), Adventure Programming (Durgin & McEwen, 1991), Adventure Recreation (Attarian, 1991) and the list goes on. Other practitioners use variants of the term "Wilderness Therapy Programme" (Davis - Berman & Berman, 1994; Sakofs & Schuurman, 1991) and still others have combined the terms to make Wilderness Adventure Programmes (Wichmann, 1991).

To further complicate matters, much of the literature that would cover the practice of these programmes as therapeutic approaches is simply filed under the umbrella of Experiential Education. This is due to the fact that wilderness therapeutic programmes were born largely out of the practices of the experiential educators. The failure of Wilderness Therapy to develop a unified theoretical base is perhaps a result of the failure to cut the apron strings which continue to bind these programmes to experiential education.

**The Wilderness Environment**

The idea of education in a wilderness setting is not new to mankind. In fact there was a time when not only education, but all aspects of life were carried out in
cooperation and or competition with the wilderness and it's dictates. This environment was a teacher, rule maker, friend or enemy depending on the situation. In order to deal more effectively with such a demanding environment, people lived and moved in groups which through cooperation could assume more control over the powerful environment. In the wilderness environment participants who might be hesitant to enter into a cooperative group process are persuaded by the realities of the environment to accept what the group can offer. As groups are known to be an effective medium for educational and therapeutic purposes, the combination of wilderness and group is a natural one for therapy.

The result of putting groups into the wilderness environment is that the element of challenge is naturally and inescapably added to the mix. The use of challenge to develop individuals mentally as well as physically also dates back to ancient history (Johnson, 1992). Rites of passage for adolescents passing into adulthood often involved extreme physical challenges which when mastered gave participants a sense of accomplishment and self worth. Outward Bound schools have, since their inception, also used challenge to develop and push participants to a greater awareness of their capabilities. Wilderness interventions, therefore, also bring in the element of challenge which is a powerful tool in any therapeutic relationship.

Outward Bound

In 1941 Kurt Hahn founded the first Outward Bound (OB) school to train British seamen how to survive the demands of naval warfare. Since then over 35 schools have been opened world wide in over 15 countries with courses designed to be both mentally and physically challenging (Marsh, Richards, & Barnes, 1986). Adventures may involve travelling up to 300 km of mountain trails or negotiating
powerful currents in a canoe or raft. While the goals of the different OB programmes may vary, the proponents of these schools are convinced that OB has a clear effect on the self-concept and growth of participants (Marsh et al. p. 196).

Wilderness Adventure Programmes as Therapy

Programme outcomes. Based at least partially on the assertions of the OB people, counsellors and psychologists are making attempts to capitalize on the benefits of outdoor adventure experiences for their clients. Some have chosen to send clients on regular Outward Bound (OB) programmes while others have alone or in conjunction with OB schools developed programmes specifically targeted at the needs and characteristics of specific client groups. The vast majority of studies in this area report that Outdoor Adventure Interventions are effective in promoting growth and enhancing the traditional programmes used with younger populations. Positive outcomes such as increases in self esteem, cooperative behaviors, prosocial attitudes and self control are some of the benefits reported by researchers. Parker (1993), however, claims that most research in this area has been "plagued by design difficulties" and that from his own studies, there is no evidence that what he calls "adventure interventions" enhance traditional counselling approaches. Although Parker is not alone in his criticism of some of the research (Wichmann, 1983, 1991; Ewert, 1987), most of the evidence does not support Parker's assertion that these interventions are not effective (Gass and McPhee, 1990., Kimball, 1983., Wichmann, 1991).

Programme theory. A part of the reason for Parker's conclusions is the lack of a firm theoretical foundation on which the use of wilderness interventions is based (Wichmann, 1991). School, Prouty, and Radcliffe (1992) have suggested that outdoor adventure interventions are amenable to different theoretical schools
depending on which aspect of the process is emphasised. They suggest that the processing of the experience in the debrief can be explained by a cognitive behavioral approach while the experiential aspects and the insight they provide are similar to gestalt techniques. From their perspective, an eclectic approach is the one which is best able to provide theoretical underpinnings for outdoor adventure interventions. While this may be a convenient short term answer, the subject must be approached systematically for a more adequate explanation.

**Programme design.** The programme context and specifics of the intervention may also play a role in whether or not the programme is effective. Some programmes use these interventions on a weekend basis with the idea of giving clients an "experience" that may be physically and mentally demanding (Stich and Sussman, 1981). These programmes generally use some variation of ropes courses, rock climbing or hiking over several weekends with a regular therapeutic component during the week. Other programmes stress a longer more intensive experience from 6 to 40 days which also includes activities with high perceived risk such as rock climbing or high ropes courses but usually with the addition of a minor canoeing, trekking or mountaineering expedition (Gass and McPhee, 1991). It would appear, however, that the effectiveness of the intervention rests more on the specifics of the programme built around the activities than the specifics of the activities themselves. Marx (1988) has suggested that "without a strong counselling perspective, outdoor challenge-adventure programming can become basically recreation programming ( p. 518)." Marx suggests that qualified counsellors be used to facilitate all aspects of service delivery especially group debriefs and follow up sessions.

A counselling perspective with regard to these activities looks beyond the activity itself to the experience of the participant as he or she is participating. The
concern is less with the mechanics of the skills being used than with the psychological processes involved in approaching and completing the task. These processes are then highlighted through the group debrief. The activities are important to the extent that they are able to elicit the desired intensity and personal and group commitment. Research into such aspects of the outdoor adventure interventions has been lacking in the past (Wichmann, 1991), yet it is precisely these process variables which are likely keys to the success of the interventions.

**Research.** The nature of the wilderness setting provides special challenges for researchers and design is often difficult in this area given the large number of potentially confounding variables ranging from weather and other environmental characteristics to individual differences in group members and programme personnel. Although research design has proved difficult in this area, the overwhelming opinion of those working and researching in adventure or wilderness interventions is that they are a powerful and effective tool. Research that has and is being done suggests that several components as well as expected outcomes are common to the successful programmes.

The common components listed by Wichmann (1991) are: "(1) a wilderness environment; (2) a primary peer group; (3) stress and perceived risk; (4) problem-solving; (5) a humanistic style of instruction; (6) challenge, mastery and reflection; (7) some form of reality therapy" (p. 44). Most of these components correspond well with Kimball's (1980) analysis of wilderness programmes for adjudicated youth indicating that the general approach has not changed a great deal in the last 10 years. Although these components are generally accepted as important to programme success, there has been little research to test this assumption. In addition there is also a consistent lack of a firm theoretical grounding for the inclusion of the various components in outdoor adventure therapeutic programmes.
The problem according to Kolb (1992) is that there is a basic lack of programme theory on which practice is based.

Gass describes the relationship between theory and practice within the field as "strained at best" (1992, p. 6). He goes on to suggest that an attitude persists which suggests the black box analogy to describe experiential interventions. He takes this idea from A. Parchem's paper presented at the 1975 national conference on outdoor and experiential education which stated that "we put people in one end of the black box and they come out better at the other, but we don't really know what happens in the box." If outdoor adventure interventions are to find acceptance in the mainstream, then the connection between theory and practice must be strengthened.

Programme outcomes. Many studies have demonstrated the fact that the outdoor adventure interventions have a definite positive effect on the level of self-esteem (Kelly and Baer, 1971; Kolb, 1988; Wichmann, 1983, 1991) and are a powerful and effective means of bringing about positive change in both behaviour and attitude (Sakofs and Schuurmann, 1991) This evidence combined with the wealth of evidence from other studies suggests that the success of the outdoor adventure interventions in working with the delinquent adolescent population is indisputable.

Summary

The effectiveness of the outdoor adventure interventions is not in dispute here, however the relationship between programme design, critical components and programme outcomes has yet to be adequately addressed in the research. This is reflected in the lack of a real grounded theory of outdoor adventure interventions. What can be said is that the foundation of the success rests on the double edged
sword of environment and task. These are the two edges of the sharp sword of the outdoor adventure interventions which cuts away many of the hindrances to client growth in traditional settings. The problem is that the specific design of these programmes varies so greatly that it is difficult to say what the critical components are and what effects they have on the participants (Wichmann, 1991). The questions which need therefore to be addressed are therefore one: what changes for the participants because of the programme, and two: what is responsible for this change?

The purpose of this study is to examine a wilderness therapeutic programme using the focus group technique. The goals are to gain insight into the effects of one such specific programme from the perspective of the participants and further to give the same participants opportunity to relate their understanding of how such change is brought about. This is an important aspect that has remained unaddressed in the research to date and offers the potential for great insights into the mechanisms which drive the success of this therapeutic medium.
Chapter 2

Literature Review

The purpose of this chapter is to present an overview of the literature that is available on the subject of wilderness adventure programmes. There has been an immense amount of paper devoted to writing on this subject over the last 25 years. Unfortunately, very little of it was devoted to sound research (Cason & Gillis, 1994). The following pages will be divided into three major sections. The first will be devoted to the research available on wilderness adventure programmes; quantitative, qualitative and combination studies will be examined. The second section will examine specific programmes that have been described in the literature and the last section will present some of the attempts to link theory with practice in this field.

Research

Outward Bound. Although wilderness therapeutic programmes cover a wide spectrum of programme components, the outward bound (OB) model is clearly the basis for virtually all of the work being done in the area of wilderness interventions. The goals of OB include improving self awareness and self confidence. In order to help participants reach these goals, the various exercises they are required to perform call for initiative and self reliance to be exercised throughout. These activities encourage individuals to take responsibility for themselves as well as learn cooperation and awareness of other's needs (Marsh et al., 1986). Kelly and Baer (1969) suggest that a fundamental assumption of OB is that an individual "should not just be told that he is capable of more than he thinks he can do, but rather a set of circumstances must be devised in which he
demonstrates such competence to himself" (p. 719). The goals of OB are some of
the same goals, it could be argued, that many counsellors have for the youth they
desire to assist. The research that has been completed to date would suggest
that OB is at least partially successful in attaining these worthy goals (Boudette,

While the specifics vary from programme to programme, in general each
programme stresses:

1) physical conditioning such as running, hiking and
swimming; 2) technical training such as the use of
specialized tools and equipment, camping, cooling, map
reading, navigation, life saving, drown-proofing, and solo
survival; 3) safety training; and 4) team training such as
rescue techniques, evacuation exercises, and fire fighting
(Kelly and Baer, 1969, p. 720).

In practice, therefore, these programmes may look very different from each
other depending on the mix of activities. The commonality which unites them is
the use of physical and mental challenge in a wilderness environment.

In order to develop an understanding of programmes using wilderness
interventions it is important to examine specific programmes and their reported
results. There are some who view the OB experience in isolation as a therapeutic
intervention. Other programmes have taken a step further by integrating an
existing OB programme as a wilderness component in the context of a separate
community, school or hospital based programme. A third kind of programme does
not use OB at all but rather is developed as a integrated therapeutic programme
which the wilderness is used as one aspect of the therapeutic plan. As logic would
indicate, these three types of programme are largely a result of the evolution of the use of the medium. Where once youth were simply sent to OB for an experience that might "smarten them up", there is now an understanding that the process which occurs in the medium must be carefully managed in order to maximize it's helpfulness.

**Quantitative studies.** The first real investigation into the use of a wilderness programme as a means of remediation was conducted by Francis Kelly and Daniel Baer (1969). In their study, Kelly and Baer took 60 volunteer delinquents from the Massachusetts Youth Service and had them go through a regular 27 day Outward Bound programme. These programmes, according to Kelly and Baer, would expose "young adults to severe physical challenges and push individuals to their physical limits in order that they may demonstrate competence to themselves and to others". The purpose of the study was to measure any change in the delinquent's self-concepts and attitudes toward social adjustment as a result of participation in such a programme (Kelly and Baer, 1969, p.719).

Kelly and Baer used the Jesness Inventory (Jesness, 1966) which provides measures on 11 personality characteristics. The 11 scales are social maladjustment, value orientation, immaturity, autism, alienation, manifest aggression, withdrawal, social anxiety, repression, denial, and asocial index. Subjects were randomly assigned to one of three different OB programmes with one delinquent per 12 member OB group. Each participant was administered the Jesness Inventory on the day prior to the experience and one day after completion of the project.

In addition to the Jesness Inventory, a Semantic Differential Format (Osgood, Suci, and Tannenbaum, 1957) was used to measure possible changes in
self concept. Nine concepts were selected including boys my age, adults, girls my age, people who are afraid, I am, I would like to be, boys who don't get into trouble, I will be, and boys who do get into trouble (Kelly and Baer, 1969, p. 720). Each of the concepts was rated by participants on a seven point bi-polar scale for each of smart-dumb, sad-happy, good-bad, crazy-normal, clean-dirty, losers-winners, calm-angry, childish-grown-up, honest-dishonest, weak-strong, and women-men. Low scores indicated the more favourable response and the sum of the 10 scale values represented the participants score for the corresponding concept.

The results of the Jesness Inventory suggested a significant difference in scores pre test to post test on 6 of the 11 scales. Four of the scales demonstrated a significant difference at $p < .001$. These were social maladjustment, value orientation, alienation, and manifest aggression. Two of the scales showed significant differences at $p < .05$. these were autism and repression. According to Kelly and Baer, these results suggest that as a result of the OB programme, the delinquent participants had developed more favourable social attitudes (social maladjustment), along with a reduction in egocentric thoughts (autism). In addition, the there was a reduced level of distrust and hostility (alienation) coupled with a reduction in concern over feelings of anger and hostility (manifest aggression). These researchers also interpreted an increase on the repression scale to indicate "a more uncritical acceptance of the self and a lessening of awareness of feelings normally experienced" (Kelly and Baer, 1969, p. 721.). This was hypothesized to indicate a reduction in impulsive behavior as subjects moved to more socially acceptable methods of dealing with conflict (Kelly and Baer, 1969, p. 722).

Of the 10 concept measures, only 3 indicated significant changes from pretest to post test. Perhaps most significant of the 3 was the "I am" scale ($p < .001$) which suggests that the programme significantly altered the way participants
viewed themselves (Kelly and Baer, 1969. p. 722.). The change in the concept boys who don't get into trouble \((p < .01)\) indicated that participants had also re-evaluated the way they viewed non delinquents as a result of the programme. The third significant change was on the I would like to be concept scale \((p < .05)\). The researchers interpreted this as an indication of increased maturity and level of aspiration in participants (Kelly and Baer, 1969, p. 722).

Kelly and Baer (1969) started the research ball rolling in the area of wilderness therapeutics or wilderness as therapy. Of course the experimental design of this study as well as many of those that have followed leaves the door wide open for questioning of results. The problem is that research has not been approached in a very systematic fashion if it has been approached at all in the myriad of different programmes in existence today in Canada and the United States. Davis - Berman, Berman, and Capone (1994) conducted a survey of all wilderness therapeutic programmes who were members of the Association for Experimental Education in 1991 and 1992. Their findings demonstrated a general lack of theoretical foundation for practice and an almost total lack of methods for evaluation or description of the therapeutic process (Davis - Berman, Berman, and Capone, 1994, p. 52).

For most of the programmes which are actually evaluated, research design is usually limited to simple pretest post test designs without adequate controls. The bulk of the information available is largely anecdotal and rests on the opinions of the persons running the programmes. In spite of the afore mentioned difficulties, the body of information and research that has been accumulating since the initial claims of Kelly and Baer (1969) suggests that the wilderness medium is an effective one for therapy.
The two most commonly researched and reported successes of the wilderness programmes since Kelly and Baer (1969) are in the areas of increased self esteem and reduced rates of recidivism for delinquent youth (Wichmann, 1991). One of the largest studies of a wilderness programmes effect on self-esteem was conducted in Australia by Marsh, Richards and Barnes (1986). In this study 361, 16 to 31 year olds were given the Self Description Questionnaire - III (SDQ-III) one month before, on the first day, and on the last day of a 26 day Outward Bound programme. The SDQ-III is an instrument with 13 scales to measure what Marsh sees as the different aspects of self concept (Marsh, Richards, & Barnes, 1986). These scales include, math, verbal, general academic, problem solving, physical ability, appearance, relations with same sex, relations with the opposite sex, relations with parents, religion, honesty, emotional stability, and general self.

The results of the study demonstrated a significant positive change on all scales of the SDQ-III from test 2 (first day of programme) to test 3 (last day of programme). There was also no significant change from test 1 (1 month prior to programme) to test 2 which supports the reliability of the measure. The authors also observed a difference in the amount of change between scales indicating that the changes that occurred were not due to a general euphoria but rather actual change in self concept (Marsh, Richards, & Barnes, 1986, p. 201). According to Marsh and the others, the reason many studies of self concept fail to show any change is that often poor measures are used which fail to consider the multi-dimensionality of this construct. For instance those scale items which were not specifically addressed by the programme such as religion and the academic scales, were not affected to the same degree as the other scales. Also, mixed sex groups
demonstrated significantly higher scores on the "relationship with opposite sex" scale (p.202).

In a follow-up study performed 18 months later, Marsh, Richards and Barnes (1986) reported that changes observed in self-concept at the end of the OB course had been maintained at the time of follow-up testing. The authors concluded that "Outward Bound is a powerful intervention" (1986, p. 491).

At outward bound in Australia, a programme was developed for low achieving high school students. This programme is referred to as the Outward Bound Bridging Course (OBBC) (Marsh and Richards, 1988). This programme consists of a six week residential experience using innovative games and initiatives to challenge the students to learn, tackling problems which increase in difficulty over time (p. 283).

Over the course of 5 years, 66 male participants participated in the OOBC and were administered the Self Description Questionnaire III to evaluate change in self concept. This study contrasts with the study cited above (Marsh, Richards and Barnes, 1986) in that in this instance the scales referring to academic aspects of self concept were being specifically addressed in the programme. Results of the study showed that participants demonstrated significant improvement on the academic self-concept scales as well as in academic achievement as measured by standardized tests of reading and Mathematics (Moreton Mathematics Test - Level III and GAPADOL test of reading ability). A further finding was the importance of parental involvement which correlated strongly and positively with improvements in participant scores (Marsh and Richards, 1986, p. 296).

More recently, Boudette (1990) studied 69 juvenile offenders to explore the effects of the standard 24 day OB course (a standard OB course would include
several days of instruction on hard skills such as map and compass work, wilderness travel, proper use of equipment etc. There is then some sort of expedition to put skills into use followed by a solo for reflection). Subjects were randomly assigned to an experimental group which went through the 24 day programme, and a control group which simply continued on with regular probation plans. The results demonstrated a significant increase in ratings of self esteem according to the Global Self-Esteem scale in the experimental group. Rates of recidivism and self awareness were the same for both groups.

Although the areas of recidivism and self concept or self esteem have dominated the research into wilderness therapeutics, other aspects of behavioral change have also been investigated. Sachs and Miller (1992) investigated the effects of an outdoor challenge programme for behaviourally disordered adolescents who were charges of the Illinois Department of Mental Health. Eight adolescents with an average age of 13 were sent on a 3 day camping experience which included hiking, spelunking, trail making, setting up camp-sites, initiative activities in which students were presented problems to be solved by the physical and or mental effort of the group, trust activities, and relaxation exercises.

The 3 days were designed to correspond with Bandura's theory of Self Efficacy which suggests that there are 4 sources which influence an individual's expectation for success. These are: 1) performance accomplishments, 2) vicarious experiences, 3) verbal persuasion, and 4) emotional arousal (Sachs & Miller, 1992, p. 90). The structured activities provided ample opportunity for performance accomplishments as well as vicarious experiences as the youth participated and observed peers and teachers participating in the various activities. Verbal persuasion was used when some participants were fearful or reluctant to participate in some of the activities. These participants were first assured that they could
successfully complete the task and if still reluctant they were encouraged to at least
give it a try. Finally, the emotional arousal was provided by the fearful nature of
some of the activities (Sachs & Miller, 1992, p. 94).

The researchers applied 4 dependant measures to assess the effects of the
3 day programme. Each participant was observed for 15 minutes per day for one
week prior to the intervention to establish a baseline. The same observation
procedure was then repeated during the week following the intervention and one
month later to gather follow-up data. Observation focused on the cooperative and
aggressive behaviors of the participant in the classroom setting. Inter-observer
reliability for cooperative behaviors had a mean of 92.5% agreement among
observers while reliability for aggressive behaviors had a mean of 94% agreement
among observers.

The second dependant measure used was the Behavior Problem Check-list
(BPC) (Quay & Peterson, 1979). Although the entire check-list was completed by
the teachers after each of the 3 observation periods, only the scores from the
conduct disorder component were used for the purposes of this study. The conduct
disorder component focuses on non-compliance and aggressive behaviors. Test
retest reliability for the conduct disorder sub-scale of the BPC is reported to be 0.85
(Sachs & Miller, 1992, p. 92).

The third dependant measure of behavior change was a modified version of
the Jessor Expectancy Questionnaire (MJEQ) (Jessor, Graves, Hanson, & Jessor,
1968). The MJEQ was completed by the participants one day prior to each of the
observation periods. Test retest reliability of the version modified for the language
of an adolescent population as established by the researchers before the study was
0.72.
The last dependant measure was referred to by the authors as a micro-analysis of cooperative and aggressive behaviors. Essentially what is meant by this is a direct comparison between participant expectations for cooperative and aggressive behavior and their actual behavior. This was made possible by adding two questions to the MJEQ which were designed to ascertain the participants expectations for cooperative and aggressive behaviors. Test retest reliability for the additional questions was very low, 0.74 and 0.42 respectively, however, the researchers felt them to be adequate sources of information for the purposes of their study.

The results of the study revealed that there was a significant increase in cooperative behavior from baseline to test 2 \( (p < .02) \) for the treatment group as compared to the control. This difference was, however, no longer significant at follow-up although the experimental group continued to exhibit more cooperative behavior. The lack of significance at follow-up may be in part due to the loss of 2 experimental and 1 control group subjects. There were no significant differences in cooperative behaviors between the experimental and control groups at any of the test times.

The investigators also found no significant difference between the control and experimental groups at any of the test times on scores on the BPC or the MJEQ. Furthermore, the results of the micro-analysis of cooperative and aggressive behaviors revealed no consistent relationship between participants expectations and their actual behavior.

Of course the key finding of this study is that cooperative behaviors were increased and arguably maintained through the implementation of three days of outdoor programming. The shortcomings of this study, however, lie in the low
number of subjects (n=16) who participated in the study and the relatively short outdoor programme of only 3 days. The low n unfortunately played an even larger part in the results of this study when 3 participants were unavailable for testing at follow-up.

The strength of the intervention must also be questioned since the participants were only exposed to a 3 day experience. Although research on the optimum length of such programmes is virtually non-existent, it stands to reason that longer programmes would have a greater effect on participants.

This research serves as another demonstration that the state of affairs of the theoretical base for wilderness therapeutic programming leaves much work to be done. Although these researchers may be applauded for some aspects of their rigour, the size of their study as well as the specifics of the intervention leave them open to criticism both from proponents as well as opponents of this therapeutic approach.

**Qualitative Studies.** There is another approach to research which has much to offer in the debate over the effectiveness of wilderness or outdoor therapeutic programmes. The qualitative research corner is finding growing support but has as of yet, failed to generate a great deal of quality research. This in spite of the fact that the qualitative approach has long been advocated as the "best" method for conducting research in the wilderness environment (Chenery, 1987; Rowley, 1987; Kolb, 1991). The dearth of quality qualitative research is puzzling however, it may be a reflection of the desire for quantitative research by the funding bodies of many of the wilderness therapeutic programmes. Indeed the bulk of the research generated in the past has focused on outcomes (Ewert, 1987) which are coincidentally the passion of funding bodies.
Chenery (1987) is one author that proposes qualitative methods to be the best way to learn about outdoor experiences. She has conducted several qualitative investigations of a child's experience of summer camps. One study (Chenery, 1985) used participant interviews and observation in a private summer girls camp. It was discovered that there was a distinct difference between the older and younger girls in their type of play. It was also revealed that the children felt that they had learned to "get along better with others" as well as how to make friends.

In a separate study of inner city youth, Chenery (1987) again used participant observation and interviews. It was discovered that the programme which stressed participant responsibility helped participants to believe in themselves, have fun, not to fight and to be honest. When participants were questioned as to what brought about the changes in themselves, the responses were "meeting fun people", "doing things by yourself" and "the counsellors". Unfortunately, Chenery did not provide any additional information on the details of her research to establish rigour.

A better example of a qualitative approach is provided by Durgin and McEwen (1991). They present 4 case studies from detailed records kept by staff of the Touch of Nature Environmental Center at Southern Illinois University as part of the follow-up programme for the adventure course. The course itself consisted of 30 days divided up into an initial orientation section and a 3 week expedition. The orientation included initiatives for team building as well as individual growth. In addition, participants were taught basic skills in back-packing, canoeing, rock climbing, rappelling, caving, orienteering and camp craft. The expedition also included a solo experience for the participants.
At the end of the experience, an "advocate" was assigned to each participant to meet with them weekly and check progress on the goals that had been set at the end of the experience as well as to support the changes that the participant had made during the programme.

The records that were kept for the case histories came from 3 sources. The first of these was the Wickman Andrews Behavior Intervention Scale (WABIS). This inventory of 40 behaviors typical to delinquents was filled out by the advocate on a regular basis as a monitor of the progress being made towards stated goals. A second source of information was the weekly form filled out by the advocate after their meetings with the participants. This form gathered information on progress towards goals in the areas of family, school, work, peers and counselling. The final source of information was the biographical data collected by the Touch of Nature Environmental Center staff. This information which included family and social history was useful for checking for consistency with the other sources of information.

The four case studies presented (Durgin & McEwen, 1991) were chosen based on the fact that out of all the records that were kept, only the four had detailed unbroken reports for a period of 6 to 18 months (p. 32). Unfortunately, according to the authors, each of the four cases, as well as many of the incompletely documented ones, told a similar sad story. As an example, the story of Steve.

Tom was a fifteen year old who had completed the eighth grade. He had a history of chronic truancy, disruptive behavior in class, running away, and smoking marijuana. For a period he lived with his aunt and uncle in Florida but then he moved back with his father, step-mother, seventeen year old brother, and stepsister. The stepsister became a drug dealer, moved out and Tom would join her
for extended periods of time. The parents tried to help him by increasing family rules and talks, but these changes were short and inconsistent.

After being charged with battery, the court forced him to enrol in the adventure course as an alternative to jail. Thus Tom entered the course with a negative attitude and felt that he had no real problems that needed changing. Throughout the course he exhibited very negative behavior that included running away, fighting, not doing his duties, sniffing white gas, and throwing his pack over a cliff. Ultimately he decided to improve his behavior and complete the course. His instructors felt that Tom had gained some feeling of accomplishment and a new attitude toward home and school. However, they felt he needed constant counselling to complete goals and make appropriate decisions.

After the course, Tom's goals were to attend school, stop fighting, meet weekly with his advocate, and live with his parents. For the first month Tom appeared to make great progress. He and his father gained each other's trust. Tom no longer associated with detrimental friends except for his girlfriend. However, at the end of the first month he was accused of exposing himself. By the end of the ninth month after the adventure course, Tom had left home and was staying with a transient. Tom knew he was in error but would not return home to the strict discipline of his parents. He felt they didn't provide a sincere family environment; spending too much time at bars and not trying to communicate with him.

After Tom ran away from home and refused to attend school, the court initiated a new advocacy programme. However, he refused to cooperate, missed appointments, walked out of meetings, refused counseling, refused offers for jobs, and continued to associate with very undesirable young people. Much of his behavior at this time could be attributed to the use of drugs supplied by his stepsister. Finally, the second advocacy programme was terminated and the agency recommended a residential drug treatment programme to help Tom overcome his dependency on drugs and work through his many emotional problems.

In summary, Tom had a long history of multiple behavior problems. While the adventure course temporally improved his attitude and actions, his undesirable family environment and his stepsister's drug culture made it too easy for Tom to regress. He saw no real need to change and despite constant counseling support, he sunk into a drug culture. The final report described Tom's attitude as "I do not care". (Durgin & McEwen, 1991, p. 33).
The authors suggest that the outcome for Tom was typical for most of the records which were examined.

Durgin and McEwen (1991) propose that their study raises some fundamental questions about the value of adventure programmes for troubled youth (P. 35). They suggest that this study underlines the necessity of a strong community follow-up for adventure programmes and argue that it is unethical to run such programmes without adequate follow-up. They also suggest that programmes target younger populations which are less entrenched in their patterns of dysfunctional behavior and that the programmes be lengthened in order to have more time to reinforce behavior changes which have taken place during the programme. The authors acknowledge a lack of a body of research to support their suggestions however, these are important subjects for future research into these programmes.

**Combination Studies.** In addition to pure qualitative or pure quantitative studies, some researchers have combined the approaches to increase the power of their investigations. Sackofs and Schuurman (1991) used standardized measures as well as a structured interview process to evaluate the effectiveness of the Wilderness Alternatives for Youth (WAY) programme conducted by the Pacific Crest Outward Bound School.

Subjects for the research consisted of volunteers referred by court counsellors and approved by programme staff. Volunteers who were on psychotropic medication or with a recent history of suicide ideation were disqualified from the pool (Sackofs and Schuurman, 1991 p. 4). Those
participants chosen for the programme were randomly assigned to a treatment and a control group. The treatment consisted of a 3 week wilderness programme including camping, hiking, mountaineering, caving and rock climbing. In addition, there was also a community service component to the treatment programme.

Subjects in the treatment group were administered a battery of 33 scales selected from 6 different standardized tests. These were administered before the programme (T1) immediately following the programme (T2), three months after the programme (T3) and one year after the programme (T4). In addition, parents, teachers and counsellors were asked to complete a Child and Adolescent Adjustment profile as well as a behavioral data form which assessed drug and alcohol use as well as school attendance at times T3 and T4. The results of the study revealed "statistically significant interactions at or beyond the 0.05 level" for 10 of the scales (Sackofs and Schuurman, 1991, p. 5). Significant positive changes were measured for locus of control, asocial orientation, values orientation, immaturity, withdrawal depression, social anxiety, repression, parental assessment of their child's dependency, and a counselor's assessment of a child's peer relations (Sackofs and Schuurman, 1991, p. 16). Furthermore, this positive change was still observable or had even increased one year after the completion of the programme.

The results of the behavioral measures were not as favourable, in fact there was no difference between the treatment and the control group on alcohol or drug use, discipline problems in school, and pending criminal allegations. The authors point to some of the information gained by structured interviews as an aid to understanding the differences between the psychological and behavioral measures. For example, this quote obtained from a follow-up interview with one of the WAY programme participants:
When I got back from WAY I still ended up doing drugs and getting in trouble. I wanted to go back so badly after the course. When I told people what I did, nobody understood and I started to think maybe it wasn't as great as I thought. But Outward Bound gave me a glimpse of what I could do. It showed me how good I could be. Before that everything was hopeless. Outward Bound was my one time I could point to that I excelled (Sackofs and Schuurman, 1991, p. 16)

The researchers suggest that such interviews revealed the true value of the experience for participants however they fail to provide information on the specific structure of their interviewing process. There is no information on who conducted the interviews or when they were conducted. The authors also fail to provide reliability and validity information on the standardized tests from which the 33 scales were taken and even more importantly they fail to discuss how these scales are affected when they are administered separately from the tests from which they come and as part of an entirely different test.

Sackofs and Schuurman (1991) present strong arguments for the effectiveness of wilderness interventions for delinquent populations, however their failure to provide more details with regard to psychometric instruments used as well as their qualitative methods, leaves many questions unanswered. The problem is that virtually all of the literature available on wilderness adventure programmes is incomplete in one way or another (Cason & Gillis, 1994). For instance none of the programmes reviewed above provided details of the wilderness adventure intervention beyond naming some of the activities and this is typical of research in this field (Cason & Gillis, 1994). If wilderness adventure
interventions were a standardized entity, this would be less of a problem however since they are not, it is impossible to tell whether one is even comparing apples to apples.

In spite of disparities in design between wilderness adventure programmes, Cason and Gillis (1994) attempted to conduct a meta-analysis of all the research conducted on these programmes in the last 25 years. From their search, 90 potential articles were identified however only 43 of these were usable for their study (Cason & Gillis, 1994, p. 42). Using the 43 studies, the authors identified 147 effect sizes on which to conduct the analysis.

In order to conduct the comparison, the authors codified the programmes according to duration of the programme, participant categories ("normal" adolescents, delinquent adolescents with emotional and physical handicaps, and population not specified), average age of the participants, type of outcome measure (e.g., self-concept, locus of control, behavioral measures), date of publication, form of publication, and design rating (a score based on the amount of rigour present in the study). This system enabled the researchers to examine the effects of such variables as the length of the adventure programming experience or the difference in effect for non-delinquent youth as compared to delinquent youth. The last step was to compute average effect size for the variables and then to determine correlations among effect sizes and programme variables.

Analysis of the effect sizes revealed a very large range among values. The actual numbers ranged from -1.48 to 4.26 with a mean of .31 and a standard deviation of .62. The outcome measures for which the greatest effect sizes were presented were clinical scales, school grades, school attendance, and attitude
surveys. Locus of control, behavioral assessments and self concept were the other significantly distinct categories of effect size.

In addition to the information already reported above, Cason & Gillis (1994) examined the relationship between effect size and the quality of the research based on a rating system that took into account assignment (random vs non-random) timing (pretest, post test, follow-up vs no follow-up vs only post test), use of control group, and follow-up for control group. They discovered that those studies with the highest rating for rigour demonstrated smaller effect sizes than studies which scored lower on the rigour scale. However, when length of programme is added to the mix, it becomes clear that there is a definite relationship between length of programme and effect size. For both rigorous and less rigorous studies, longer programmes correlated positively with larger effect sizes (Cason and Gillis, 1994, p.45).

Cason and Gillis (1994) attribute a large measure of the variation in effect sizes to the lack of standardized protocols for investigating wilderness adventure programmes. They also submit that simple outcome studies which offer little information beyond programme length, average score, and change in a variable, are no longer useful in the advancement of research in the field. They propose that new research must pay attention to such variables as, the length of programme, the type of activities, size of group, as well as the qualifications and the characteristics of the group leadership. They also suggest the generation of more qualitative data as an additional source of information (Cason & Gillis, 1994, p. 43).

In the section following, several programmes shall be presented which do a better job of describing the programme details which are helpful not only for
replication in research situations but also in understanding what actually takes place in the programme. Unfortunately, these reports do not make any real attempt to describe the methods by which they arrive at their evaluative conclusions.

**Programme Examples**

**Preble Chapel Teen Adventure.** Many organizations in addition to Outward Bound use wilderness adventure experiences as an aid to therapy. In the state of Maine, social workers have designed the Preble Chapel Teen adventure around three basic premises. The first suggests that properly structured outdoor adventure activities provide adolescents with a means to overcome initial resistance to treatment. Furthermore, the excitement of the experience may be alluring enough to maintain interest while the outdoor environment often provides a new perspective for the teen to view his or her life from (Marx, 1988, p. 517). The second premise involves the cognitive principle of reframing. Participants are encouraged to take the view that their problem behaviour is self defeating and it is therefore in their best interest to change it. Counsellors then work with the participants to develop a strategy to bring about change. The third premise emphasizes the active role of parents in the therapeutic process, encouraging regular parental visits. This continuity with the home is seen as necessary and helpful (Marx, 1988, p. 517).

The programme participants are mostly 13 -15 year old males, 75% of which are social services referrals and most of whom had been abused. Marx's approach combines an experiential wilderness-based adventure programme and psychosocial community based counselling which lasts through the four months of summer and includes an eight month extension of community follow-up. This programme marks a departure from the use of OB programmes in that the
community based counselling and the outdoor experience are not separate entities but rather integrated facets of the ongoing programme.

For example, the community counsellors are also responsible for the outdoor leadership in order to maintain continuity through the whole programme. This provides an extra challenge for personnel but is important for the effectiveness of the programme (Marx, 1988, p. 519). Marx rightly asserts that without a strong counselling perspective, outdoor challenge-adventure programming can become basically recreation programming" (1988, p. 518). Trained counsellors are more able to take advantage of the fact that outdoor experience helps to build trust, self image, communication skills, self-control and appropriate interaction skills.

The design of the programme requires that outings be limited to four days in length so that participants may be continually reintegrated back into their home with support and debriefing. This ensures that the participants do not get to far ahead of the expectations of the family and also allows the family to take part in the progress of the participant (Marx, 1988, p. 519). This reintegration into the home is also facilitated by home visits by the counsellor which are maintained in the follow-up portion of the programme. Through these home visits the counsellor is able to tie progress made during the outdoor experience to goals that have been set in the home and community.

Unfortunately, little has been done in the way of evaluation of the Preble Chapel Teen Adventure, however the author reports that on a nominal rating scale, 95 to 100 percent of parents and teens involved with the programme rated it positively, 89 percent felt good about themselves while in the programme, and 59 percent rated their progress towards their goals as good or excellent. Eighty-five
30 percent of participants were still involved in the programme at the end of the eighth month (Marx, 1988, p. 520).

While it is very probable that the Preble Chapel programme is at least as successful as Marx suggests, the lack of research or more stringent evaluation procedures underlie a basic problem in this field. With no firm theoretical base on which to build research, the programmes remain unaccountable for the elements which compose their content.

**Sage Hill.** Sage hill is another variation of the wilderness experience that would perhaps be better classified as an outdoor summer camp with year round follow-up. The setting is a relatively isolated camp which is constantly being developed through camper work projects each summer. Each year, depending on the situation, most of the previous years campers return. Since only 10 to 30 percent of the campers are new there is a continuity in the community at the camp as well as a sense of ownership (Durkin, 1988, p. 66). The constant development of the camp provides each camper with an opportunity to work to "earn his keep". This opportunity further instils a sense of ownership and gives leaders and campers a superordinate goal which helps to unite them as well (Durkin, 1988, p. 69). In addition, an evening meeting which occurs every night after dinner is held to make decisions about the camp projects and day to day affairs of the camp. This democratizes the operation which in turn increases camper involvement and stake in the programme (Durkin, 1988, p. 70).

Durkin feels that much like other wilderness camp situations, "the closed system of the camp with its rapid feedback forces campers to live with the consequences of their actions." (1988, p. 75). The follow-up during the rest of the year and the possibility of return each summer further help to solidify the success of
the programme. Follow up which includes regular meetings at events such as birthday parties or barbecues serve to maintain the community that has been established over the summer months. Comparison with a control group suggests that the programme "significantly enhanced self-esteem and self-discipline and developed a sense of self control over one's life while reducing the alienation and cynicism of the participants." (Durkin, 1988, p. 80). Durkin is convinced that the Sage Hill approach, which he refers to as milieu therapy, is the answer to the problems of working with adolescents.

**Hope Center.** The Hope Center Wilderness Camp (HCWC), in contrast to Sage Hill's summer month approach, is a long term residential facility where the length of stay varies between eight and eighteen months with an average stay of 14 months. The camp, which receives 52 percent of referrals from the juvenile court system, houses campers 12 - 17 years of age who are emotionally disturbed but not mentally handicapped. Separate camps are run for girls and for boys (Clagett, 1989, p. 79).

Participants must go through a relatively long process of application after being referred to the programme. The first step is for an intake worker to establish extensive background information including psychometric testing, a family profile, speech, sight, hearing and neurological tests, as deemed necessary. From the information gathered a detailed plan of service is developed with specific goals for the child in the area of family, education etc (Clagett, 1989, p. 84). The next step is for the individual to visit the camp and be introduced to the facility as well as the person that would be his counsellor, the members of the living team (other participants), and the director of the programme. If this is satisfactory the last step is to sit down with the director and set up a plan of action aimed at resolving the personal problems resulting in their present predicament (Clagett, 1989, p. 85).
Each participant is assigned to a living group of 12 participants with 2 counsellors. The living groups have a camp site that is at least 1/4 of a mile away from the other living groups and approximately 1/2 mile away from the dining center which is referred to as the chuck-wagon. Campers are responsible to build and maintain their own tents which sometimes requires such tasks as going into the forest to collect new poles (Clagett, 1989, p. 86). Campers are also responsible for planning all events and daily projects a week ahead of time and are held responsible for keeping the goals as planned. They are free to plan anything within budget including hikes, longer trips and special events. The plan is their own with the stipulations that food must meet specified nutritional standards and be within budget (Clagett, 1989, p. 87).

Organized into the programme are three activities which serve as the mechanisms which make the machine run. These are labelled "After Talk", "Huddle Up" and Pow Wow". The first of these, After Talk, is a kind of community meeting which takes place after the noon meal. Various topics are chosen by participants or counsellors to give opportunity to draw attention to group or individual successes and air topics which need to be discussed (Clagett, 1989, p. 81). Huddle Up is a group discussion of a problem or problems that have arisen or arise during the day. It is spontaneous and anyone may call it. Before the group may move on from a huddle, unanimous consensus must be achieved causing some huddles to last up to 8 hours (Clagett, 1989, p. 81). The third activity, Pow Wow, is a nightly campfire discussion round held separately for each living group. It involves a debrief of the days events as well as a pre-brief of the next days activities. These activities keep the participants very involved with the events of the day and build confidence and a sense of responsibility in them (Clagett, 1989, p. 81 and 95).
The HCWC boasts an impressive rate of 85 percent completion and virtually no recidivism after six months (Clagett, 1989, p. 92). This may be in part due to the stringent criteria that are in place which a participant must meet before he is permitted to leave (or enter) the programme. Criteria for permission to leave includes unanimous appraisal by the group, the counsellors and the director that the initial goals of the individual's plan have been met and that he is ready to move on (Clagett, 1989, p. 90). The participant is also assigned a child care worker for a minimum of six months to ensure proper transition into the home and community.

**Private Practice.** In contrast to the programmes described above, some practitioners have chosen to simply add a wilderness therapeutic component to their current practice, rather than making it their entire practice. D. Berman and J. Davis-Berman use wilderness trips with their adolescent patients because of the observation that "rapid therapeutic change" is achieved (Berman and Davis-Berman, 1989). These practitioners use several backpacking trips spaced throughout the year as an adjunct to regular therapy. These trips are run without the extra activities integrated into most outdoor therapeutic programmes yet for these practitioners offer all of the same benefits by way of psychological and psychosocial benefits. The trips are seven to ten days in duration with a staff to participant ratio of one to three. The trips are also offered to other practitioners as a possible option for their clients as well.

In order to evaluate the efficacy of the wilderness trips, these practitioners use a combination of informal client feedback and standardized measures (Berman and Davis-Berman, 1989). The standardized measures include the Wilderness Therapy Check-list (developed for the programme), the Behavioral Symptom Inventory (Derogartis, 1972), and the Locus of Control Scale (Rotter, 1966). In
order to compensate somewhat for the lack of a control group, a repeated measures pretest, post test design is used. Follow-up data is also collected to check for stability of results over time (Berman and Davis-Berman, 1989).

The results of their studies have indicated that participation in a wilderness programme has the effect of moving the participants to a more internal locus of control as measured by Rotter (1966) (Berman and Anton, 1988). This is consistent with other research into this aspect of psychological effects (Sakofs and Schuurman, 1991, Marsh et al. 1986). From the other standardized measures it is suggested that participation in a wilderness programme may also bring about other positive behavioural and psychological effects including raised self esteem (Berman and Davis-Berman, 1989, p. 66).

Berman and Davis-Berman (1989) write that personal growth and change has been demonstrated as a result of an intense outdoor experience in groups and that the literature suggests that adolescents who have taken part in wilderness training experiences score better on a variety of psychological and behavioural measures than those who participate in traditional programmes alone (Berman and Davis-Berman, 1989, p. 66).

Theoretical Underpinnings of Wilderness Adventure Programmes

As stated above, the theoretical underpinnings for outdoor adventure interventions are generally a loose eclecticism of theoretical considerations used to support the practice in the field (Johnson, 1992). This is not to say that many practitioners have not attempted to connect theory with their particular practice of wilderness therapeutics. For instance Marsh and Richards (1988) look to the motivation theory of McClelland for theoretical support of the Outward Bound Bridging Course as it is run in Australia. The programme is based on the
motivation theory of McClelland who proposed that programmes designed to improve motivation and performance should provide:

a setting where the individual is removed from his/her everyday routine, isolated from the outside world and made to feel he/she is warmly but honestly supported and respected by others as a person capable of guiding and directing his own future behaviour (Marsh and Richards, p. 282).

While this applies nicely to wilderness therapeutic programmes, it could also apply to institutional settings or residential settings that have little in common with wilderness therapeutic programmes.

McClelland’s theory also recommends that participants be assisted in maintaining contact with other group members after such an experience to retain the reference group established during the programme (Marsh and Richards, p. 282). Once again, this aspect has more to do with the peer reference group than the wilderness setting.

Marsh and Richards (1988) also write that the work of Adelman and Taylor (1983) may be applied to support the methods at the OBBC. Aldeman and Taylor (1983) have suggested that giving students an active role in decision making enhances feelings of competency and responsibility. They further suggest that a structure be put in place that will promote communication and cooperation (Marsh and Richards, 1986, p. 283). Aldeman and Taylor (1983) also promote the idea of expanding the classroom beyond its four walls as a way to enrich learning and improve motivation.
The theoretical supports which Marsh and Richards call on are consistent with the practices of many of the wilderness therapeutic programmes in existence. Virtually all programmes take advantage of the novelty of the environment and combine this with supports and encouragements to explore and experience their "self" in a new way. Many programmes, such as Hope Center (Clagett, 1989), Sage Hill (Durkin, 1988), and Preble Chapel (Marx, 1988) also have some kind of mechanism to keep past participants in some way connected to the group and the experience once they complete the programme. From a group theory perspective, these arrangements assist in the creation of plans for the post group stage of the programme and help ease the difficulty as the group moves into the termination stage of it's existence (Amundson, Borgan, Westwood and Pollard, 1989).

As indicated above, the application of group theory to adventure interventions also offers a possible framework for interpretation of what makes them effective. A further example of this is the dynamic introduced by one of the most powerful aspects of the wilderness environment which is provided or perhaps more to the point imposed upon the group; isolation. This isolation provides a source of motivation to work to belong to the group since there are not a lot of other options. At the initial stage of a group when members are hesitant to commit to people they do not know or trust this is an extremely helpful dynamic. Amundson, Borgan, Westwood and Pollard (1989) describe trust as one of the major concerns for participants in the initial stage of group development.

In the wilderness situation the participants have something which is somewhat threatening in common. This shifts defenses towards the common threat and helps to bond the participants together in a type of alliance. The result is that
participants are motivated to get to know and trust each other, thus enabling the process to move on sooner than it might in a counselling room.

In much the same way the wilderness environment helps to maintain group cohesion and cooperation in the working stage (Amundson et al., 1989). The isolating nature of the wilderness environment causes clients to be continually confronted with the consequences of their behaviour and thus encouraged to make necessary changes (Kimball, 1980; Durkin 1988). The increase in intensity brought about by the more difficult environment also works to energize participants and helps to keep them goal directed. Further to this, the wilderness environment brings about immediate positive and negative feedback so participants learn to change their behavior more quickly (Berman and Davis - Berman, 1989).

According to Johnson (1992), wilderness adventure therapy, owes much to the work of Kurt Lewin. He is referring not only to the group psychotherapy aspect but also Lewin's contributions to environmental psychology "which has gradually come to include the non-psychological environment beyond the intrapersonal boundaries of cognition and emotion that Lewin himself defined" (Johnson, 1992, p. 24) Johnson also sees Lewin's field theory as influential as an "early prototype of systems theory that emphasized action as well as reflection" (Johnson, 1992, p. 24). The systems approach may very well provide a very good theoretical account of the effectiveness of these programmes.

Berman and Davis-Berman (1989) have also suggested that using outdoor adventure interventions is consistent with systems based models which emphasize social and environmental contexts and the role of the individual's relationship to the environment. They feel that the wilderness setting causes participants to rethink the use of old defense mechanisms which are often rendered ineffective in the
wilderness setting. "Physical fatigue, coupled with a renewed openness to new experiences appears to facilitate change and risk taking in this setting" (1989, p. 73). The interaction of inter and intrapersonal factors with the social and environmental context, heightened by the intensity of the wilderness environment, works powerfully for change in the lives of participants.

For many practitioners the factor which ties the wilderness experience with the reality of everyday life is that of the metaphor (Gass, 1991). Often it is the metaphor of the hike, the climb, the rock or the river that provides the deepest insights for participants. Indeed the whole of the wilderness setting can be a metaphor for the larger context to which the participants must return and practice the newly learned behaviors. The extent to which the participants are aware of this metaphor is often the measure of the success of the participants when they return to their home communities (Gass, 1991).

Gass (1985) has suggested that there are three different kinds of transfer that operate between the learning situation and actual life situations. These are 1) specific transfer, 2) non-specific transfer and 3) metaphoric transfer (p. 19). Specific transfer is, as the name suggests, a reference to specific skills or abilities which have been learned by the participant such as knot tying or paddling. Non specific transfer refers to more generalized skills such as communication and problem solving. Metaphoric transfer has to do with the phenomena of "parallel processes in one learning situation becoming analogous to learning in another different yet similar situation" (Gass, 1991, p. 6). For example, a participant in a programme might view the steeper grades on a hike to be analogous to some of the obstacles in their own life. The steeper grades may make them want to turn back, or turn off on an easier trail but once they reach their goal, they are glad to have
persevered. The rewards of persevering becomes a lesson of the metaphor of "life is a hike".

Bacon (1987) suggested 4 components of an effective metaphor in therapeutic adventure experiences. He suggests that the experience must be of sufficient intensity that it holds the attention of the participant, that it have a different successful ending than the corresponding real life experience, that it be isomorphic, and that the participant must be able to see enough of a connection that he is able to attach personal meaning to the experience.

The development of the use of a therapeutic metaphor is most often credited to Milton Erickson (Gass, 1991). Erikson (1980) saw the use of a metaphor as a way to reduce client defensiveness in the face of therapeutic suggestions. DeShazer (1982) and Minuchin (1981) added the concept of isomorphism which is, as the word suggests, a concept which draws the likeness in the structures of similar forms together for comparison. It is the degree to which the metaphors share isomorphic properties with client situations that they are successful (Gass, 1991).

Where Gass (1991) chooses to depart from many wilderness or outdoor adventure therapeutic programmes is at the point of integration of the metaphor into the programme. Most programmes use the forum provided in the debrief of each activity to draw out the learning that has taken place. It is usually in the debrief where metaphors are either offered by participants or suggested by the facilitators. For Gass the metaphor needs to be introduced at the beginning of the activity so that in the process of taking part in the activity, the metaphor may be woven into the fabric of the participants behavior. The debrief is then a reinforcement of what has already been experienced by the participant and to some
degree, integrated into their behavior (Gass, 1991). Whichever perspective drives the use of metaphor in wilderness therapeutic programmes, the use of metaphor is a central component to most of them.

Discussion

The selective overview of the various programmes under the umbrella of wilderness adventure programmes demonstrates the variety of expressions that have been spawned from this approach. From the relatively straightforward approach of Outward Bound to the complex programme of the Hope Center, the medium of the outdoor setting for promotion of growth and change is clearly a powerful one. What has also been demonstrated, however, is that the theoretical foundations and specific goals of the programmes do not go beyond broad generalizations which do little to inform us why or how the process works (Wichmann, 1991). It is not surprising, therefore, that there is little agreement on the structure and design of these programmes. There are, however, some common threads that may be drawn from the literature.

Some of the benefits of wilderness programmes may lie simply in the characteristics of the environment itself. The fresh air, and natural beauty which many city dwellers are deprived of can be a powerful positive stimulus even without any help from group process or trained counsellors (John Simpson, 1991). Although not everyone enjoys this environment to the same extent, it is clearly a more healthy setting than a stuffy room with hard chairs.

The wilderness by itself however, is not necessarily therapeutic in itself. Wichmann (1991) cites the work of Cave who investigated the effect of the level of
stress on a wilderness course for young incarcerated males. The results showed that participants in a low stress wilderness experience showed no "psychological improvement" while participants in a high stress experience showed significant "psychological improvement". The suggestion is that the outdoor environment alone is insufficient to bring about change. It would seem however that effectiveness is dependant on how the wilderness environment is used.

The healthy nature of the wilderness environment, the isolation of the group and opportunity for control and structure all help to make the wilderness setting the powerful environment that it is. For instance, the challenging physical experiences in the wilderness programmes provide immediate feedback in a peer group setting. The success in dealing with these challenges while being supported by peers and staff is one of the components suggested by Becker and Fuerstein (1991) in their description of the powerful modifying environment. These authors also suggest that positive expectations are another key component to this concept (Becker and Fuerstein, 1991, pp. 32 - 34). Expectations of success are built into each aspect of the wilderness adventure programmes. Participants also learn cooperation, communication and mutual support in a continuous and natural structured teaching environment (Berman and Davis-Berman, 1989, p. 74).

The other edge of the wilderness sword is the tasks which are naturally provided by the environment. Some of the wilderness tasks such as setting up and maintaining the camp, fetching supplies and cooking meals are a continuous part of the growth promoting experience. These activities call on the participants to cooperate and communicate in situations that are real and provide immediate feedback for both success and failure. For instance, failure to gather wood for a fire means a cold night or no warm food. In the same way, however, there is nothing more rewarding than the enjoyment provided by a well maintained camp
and fire. Of course, these situations need to be worked through properly with a trained facilitator (Marx, 1988). Often, the maturity and skill level of the group may require that the counsellor be very active in regulating the interactions between members to ensure that these are positive (ie. learning) and not negative experiences (Kimball, 1983).

An outdoor adventure experience is one long and comprehensive structured learning experience that has the advantage of using real as well as contrived situations. Experiences may be built around interesting and exciting projects or activities which engender enthusiasm and commitment (Marx, 1988), often with a certain degree of anxiety (Fersch and Smith, 1973; Drebing, Willis and Genet, 1987). Generally, the outdoor adventure tasks are also such that feedback is immediate and clear (Kaplan, 1979). An example of this could be the feeling of accomplishment after a participant has struggled to the top of a mountain peak or successfully rappelled down a hundred foot cliff. These feelings would seem to correspond well with Maslow's (1970) concept of "peak experiences" or Csikszentmihalyi's (1990) optimal experiences which for both these men are valuable in promoting psychological health.

Research would seem to support the proposition that the wilderness interventions have a definite positive effect on such variables as level of self-esteem (Kelly and Baer, 1971; Kolb, 1988; Wichmann, 1983, 1991), rates of recidivism among delinquent youth (Clagett, 1989; Kelly and Baer, 1971; Wichmann, 1983, 1991), locus of control (Sackofs and Schuurman, 1991; Marsh, Richards and Barnes, 1986), as well as a host of others (Cason and Gillis, 1994). The evidence suggests that the success of the wilderness interventions in working with the delinquent adolescent population is indisputable. This remains true in spite of the fact that the design of these programmes varies so greatly and that
there is very little agreement as to what the critical components are. What is surprising is that there has been virtually no attempt to try and remedy this situation through research. The only attempt to even examine this aspect of the puzzle was made by Gass and McPhee (1990) in regard to wilderness adventure therapy programmes for substance abusers.

In their analysis, Gass and McPhee (1990) contacted sixty one programmes in the United States which were identified as using some kind of wilderness adventure approach with substance abusing clients. Of the sixty one programmes, fifty responded by completing a survey which covered five areas of adventure programming. The survey covered clients, programme characteristics, expenses and funding arrangements, staffing, and research. The key area for this discussion is that of programme characteristics; specifically programme length and activities. The results of the activities aspect of the survey are displayed in table 1 on the next page.

A wide variety of activities are used by these programmes to achieve their therapeutic goals. What is lacking, however, is any attempt to connect a particular activity with a specific therapeutic goal. A similar criticism may also be made in regard to the length of the programmes which was also found to be extremely varied. The majority of the programmes were less than one day in length (64%) with the remainder varying from 2 to more than 15 days (Gass and McPhee, 1990, p. 31). There was also no attempt to connect the length of the programme with any therapeutic goal or theoretical considerations.

The diversity of wilderness adventure programmes is indicative of their greatest strength. There are a myriad of permutations for programme design in response to specific needs of clients and practitioners. They can respond to
climate, terrain, population variables, as well as the many other variables that
different settings bring to the mix. On the other hand, this same diversity is a large
obstacle to the development of an adequate theoretical base. From the relatively
straightforward approach of Outward Bound to the complex programme of the
Hope Center, the medium of the outdoor setting for promotion of growth and
change is clearly a powerful one. Much work remains to be done, however, in the
domain of theoretical foundations and specific programme goals. These remain as
broad generalizations which do little to inform us why or how the process works

| Table 1 |
| Percentage of Therapeutic Adventure Programmes Using Specific Activities With Substance Abusers |

The table indicates the percentage of the programmes reviewed using each activity listed below:

- Initiative Games: 92%
- Low ropes course: 92%
- High ropes course: 69%
- Day hikes: 54%
- Meal planning: 50%
- Backpacking: 50%
- Rock climbing: 44%
- Solo: 44%
- Orienteering: 36%
- Journal keeping: 34%
- Service projects: 30%
- Cross country skiing: 28%
- Flat water canoeing: 26%
- White water rafting: 19%
- First aid training: 19%
- White water canoeing: 17%
- Mountaineering: 10%
- Caving: 6%
- Downhill skiing: 4%
- Snow Shoeing: 4%
Chapter 3
Methodology

The purpose of this chapter is to present in detail the method used in this investigation of wilderness adventure programmes. The reason for choosing a qualitative measure will be discussed briefly before presenting the focus group method used in this study; a rationale for the use of this method will also be presented. Finally, important details of the study such as population and a programme outline along with a thorough discussion of the method including data collection and analysis will be presented.

The Case for a Qualitative Study

It is clear from the review of material available on wilderness adventure programmes, that research and theory are in great need of attention. Ewert (1987, p. 8) has gone so far as to suggest that much of the research in this area has become "an exercise in data generation rather than the production of meaningful findings". In order to avoid such black box answers of much of the previous research, qualitative methods have been suggested by several authors (Chenery, 1987; Ewert, 1987; Kolb, 1991; Cason & Gillis, 1994).

One of the reasons that qualitative methods have been suggested for wilderness adventure research is the problem of finding quantifiable methods to measure all aspects of the programme (Kolb, 1988). D. Kolb (1991) has proposed that qualitative measures may provide an alternative solution to this problem. He further submits that these methods are particularly suited to experiential programmes because they are able to take into account the individual differences in experience (p. 41). Another reason that qualitative methods are well suited to
these programmes is that they are also able to take into account the differences from programme to programme.

One of the biggest barriers to understanding this therapeutic medium is that the literature on these programmes tends to assume that wilderness adventure programmes are entities that may be compared and evaluated as though they were all basically the same. There appears to be very little appreciation for the numerous variables that hide under the pretension of the title "wilderness programme" (or any of the many variations). Research needs to take a step back and establish the understanding of what constitutes a therapeutic wilderness adventure programme.

Qualitative methods are very well suited to the task of unravelling the mystery of the black box. Ewert (1987) states that research must begin to ask the why and the how of the established outcomes in order that programme outcomes can be repeated and improved upon. He suggests that qualitative work can provide "theoretical insight" which may help to explain the results of the quantitative studies (p.6). This theoretical insight is the key to the understanding of practice which is precisely what is needed in the field of wilderness adventure programmes.

The Case for a Focus Group Approach

For the purposes of this study, the qualitative method of a focus group interview was judged to be the best method for data collection. It had been observed that participants felt relaxed and willing to share information in the context of the final programme debrief. The difference in the amount of information generated in this forum when compared to the amount generated in a pilot study using individual interviews was significant. Focus groups were therefore a natural
choice for data gathering because of the great similarity to what occurs in group
debriefs held regularly throughout such programmes.

Through the debriefing process, participants had already become
accustomed to sharing information with facilitators and other participants in a group
context. The familiarity and corresponding level of comfort in the group created an
atmosphere which was very conducive to the contribution of information; the result
being that much more information was obtained than might have been in the case
of individual interviews. For the same reason, the group facilitators who had taken
the group through the wilderness experience were also responsible for the
moderation of the focus group.

While some might view the dual relationship of the facilitators in this situation
to be a threat to the validity of the information, it was the opinion of this investigator
that the relationship established with programme participants was actually a great
asset to the information gathering process. Any professional that has attempted to
establish rapport with an adolescent juvenile delinquent for the purposes of
information gathering will attest to the value of an already established, open and
honest relationship. This was the nature of the relationships built with participants
and therefore the information gained through this relationship is equally, if not more
reliable and valid as that which might have been attained by a more "neutral"
investigator.

The ethical issue of the dual relationship of practitioner - investigator is also
one which should be acknowledged here. While this issue is not unimportant, the
importance of the investigation of this programme is more important. I invite others
to join in the evaluation of this and other programmes in order that our
understanding of theory and practice may be broadened. This work stands for what it is: a practitioner's investigation of his own programme.

**The Focus Group Technique**

Although at one time the focus group technique was used primarily by the business community for the purposes of marketing research, health and social science researchers have made increasing use of this technique for research in their fields as well (Basch, 1987). This technique, which falls under the larger category of a structured group interview is, however, more than just an interview with a group. Morgan (1988) states that the "hallmark of focus groups is the explicit use of the group interaction to produce data and insights that would be less accessible without the interaction found in a group". The exploitation of group interaction for data collection is the key to the effectiveness of this method.

The use of this technique to gather information from adolescents is further supported by the widely held position that individuals reluctant to talk extensively one to one will feel more free to contribute in a well moderated focus group (Byers & Wilcox, 1991., Basch, 1987., Folch-Lyon & Trost, 1981). Folch-Lyon and Trost (1981) further suggest that:

Members of the same cultural group have similar cognitive structures, similar perceptions of their social environment, and adhere to similar normative beliefs. In group discussions, the internalized influence of cultural factors and the value structures of the social group to which participants belong and on which they have
modelled their perceptions are reinforced and manifest themselves readily (p. 444).

While this statement represents a rather broad generalization with regard to cultural groups, the underlying truth that the cultural group supports a standardized interpretation of experience is observable. In the context of this support, members are more likely to be willing to talk (Folch-Lyon & Trost, 1981). It must also be noted, however, that it is probably also true that dissenting opinions are less likely to be expressed for the same reasons. If delinquent adolescents may be considered a cultural group, then the position of Folch-Lyon and Trost (1981) supports the use of focus groups for the purposes of this investigation.

The focus group method has been used with this population before. Nix, Pasteur, and Servance (1988) used a focus group study to examine the sexual behavior and attitudes of adolescent males. These authors suggest that the focus group method is an effective way to determine key programme components and that it is an appropriate method for investigations involving teenagers (p. 751).

The focus group technique is therefore a logical and natural approach to investigation of Wilderness Adventure programmes. Anderson and Frison (1992) used recorded final debriefs in order to evaluate the success of an experiential adventure activity with outdoor education students. Rowley (1987) has suggested that post trip discussions offer a "rich research opportunity" for qualitative methods such as the focus group technique. This method can take best advantage of the dynamics already in place in a group that has gone through a wilderness adventure experience. For adolescents, who may find an individual interview intimidating and or uninteresting, the support of the established group offers the
security necessary to speak openly and freely. Lastly, this technique has already proven useful in research with adolescent populations. The focus group technique is therefore most appropriate for this study.

Method

Population. Participants for the programme were provided by the probation offices of Kelowna, Penticton and Vernon in the Okanagan valley. Participants were required to attend as the result of a court order or a diversion agreement with the Attorney General's department of British Columbia. Each group was composed of 8 young offenders between the ages of 12 and 17 with the average age of 14. Of the 24 participants that took part in the programme only three were female.

Programme outline. The outdoor interventions consisted of one fourteen day and two six day outdoor adventure programmes with three different groups of eight participants. Each programme combined the basic activities of outdoor adventure camping with structured experience activities. The programmes began with a night hike of several hours with full packs into the first camp and ended with a two day solo which participants returned from on the morning of the focus group interview. In addition to these standard elements, two of the groups had an opportunity to work with "lady" and to attempt a challenging low ropes course at some point during the programme. The 14 day long programme obviously provided more time for activities and therefore included a five day hike with full packs, spending one night in a snow cave, and the game of life in addition to the
standard elements above (see appendix A for activity descriptions). The six day programmes allowed only two days of intense hiking with packs but were also given a group survival task as a consequence for behavior. Programme Specifics for each programme may be found in Appendix B.

Each of the groups experienced several debriefs during the course of their programme. The debriefs were generally interspersed throughout the programme however a debrief always followed immediately after such activities as the life game, ropes course and group survival. Debriefs followed a loosely structured format during which group and individual performance was analysed along with the corresponding personal issues which arose. All programme participants were present for all debriefs.

**Data collection.** Data collection was conducted through use of a recorded focus group on the final day of each of the 3 programmes. In addition, field notes were kept by the programme facilitators. Structure was provided to the focus groups by the facilitator taking the participants through a retrospective of the experience on a day by day basis. Field notes were kept in which critical incidents were recorded over the course of the programme. These incidents included the various structured events as well as significant occurrences judged on the basis of their contribution to the programme; for example verbal or physical altercations, significant victories or achievements or failures, moments of extreme difficulty. Byers and Wilcox (1991) have suggested that structure provided by the moderator is crucial to the assemblage of useful information.

Each focus group session was prefaced with a short introduction to explain the purpose of the recording and to reiterate assurances of confidentiality. Participants were requested to look back over the programme and offer their
evaluation of the various elements. They were asked to consider what, if anything, the programme had taught them and more specifically, which elements in the programme were the best teachers. The organization of the focus group session was provided by the schedule of events which took place over the programme.

**Data analysis.** The tapes of the focus group sessions were transcribed and analysed through a process of codification referred to as axial coding by Krueger (1994). This process, referred to as content analysis (Morgan, 1988) was carried out with the help of a computer data base which helped to organize data into the emerging categories. In the first step, the text of the transcripts was broken down into short passages based on their representation of a complete thought or idea. In step two, these units were analysed according to content. The information from analysis was organized by dividing the data into broad classifications called headings and more specific classifications within the headings called categories. An example from this study would be the heading "programme component" which would contain such categories as "ropes course", "solo", "hiking", etc.

Content analysis approached the data from two different directions. In the manner that is suggested by Morgan (1988), some of the headings were imposed on the data based on the questions of the study while the rest of the headings were generated from the nature of the data itself. For example, a primary concern for this study was the question of the importance of different programme components. Programme component was therefore one of the headings according to which data was organized. In the same manner, programme outcomes became a second heading. A third heading imposed on the data was suggested by Byers and Wilcox (1991). They assert that the use of Lederman's
technique of classifying information according to whether the responses represented consensus, an idiosyncratic response, or disagreement is helpful in establishing the weight given to different responses. Data was therefore also classified according to consensus.

The second way in which headings were generated was through the process of analysis itself. Each short passage was examined and broken down according to content and coded according to distinguishing characteristics. Analysis evolved into a cyclical process (Morgan, 1988) of applying emerging headings to the data and the data to headings that had already emerged. The process of cycling headings again and again through the process allowed similar headings to be combined and new headings to be developed.

The same process that generated headings from the data was used to develop the categories within them. Once all the data had been classified and no new headings or categories could be found, a simple analysis was carried out according to the total number of responses under each heading or category. The end result is a numerical picture of the data which illustrates in a small amount of space what the participants have said. Details of these results are presented in the results section in the next chapter.

One danger of painting a picture with numbers is that the richness and colour of the data becomes hidden behind the figures. The task of bringing the dry and sterile categories to life is aided the second aspect of analysis referred to by Morgan (1988) as the ethnographic approach. The ethnographic approach has the advantage of telling the story through the actual presentation of the raw data which allows the reader to become an additional measure of reliability. Combining the two approaches of content analysis and ethnographic analysis adds strength to the
study and helps to complete the picture for reader (Morgan, 1988). The presentation of quotations allows the reader to take an active role in the interpretation of the data. This opportunity will be given in the next chapter where results are presented.

The issue of reliability and the related concept of validity are terms basic to establishing rigour in the domain of quantitative research. Rigour is no less important in qualitative studies, although perhaps more difficult to achieve. One primary method used with focus groups and other interview techniques to this end is to conduct validation interviews (Kreuger, 1994; Morgan, 1988). While this would have been a valuable addition to this study, it was decided against because of the difficulty in reassembling groups or individuals for this purpose. In the ideal world the group could be brought back together, and it would not be difficult to bring individuals in for interviews. The practical reality with this population group is that once they leave the programme it is difficult to keep track of their location, let alone trying to reassemble them for purposes in which they have little or no investment. It would, however, be a possible addition for future research of this type if the logistical aspect could be solved.

The process of analysis can therefore be summarized as follows:

1) Tape recorded focus group sessions are transcribed.

2) The transcriptions are broken down into short passages based on their representation of a complete thought.

3) Passages or responses are classified according to broad classifications (headings) and more defined classifications (categories) through a cyclical process that creates, confirms, and combines the classifications until no new classifications are being formed and the data is exhausted.
4) Items in each classification are counted and percentages calculated for each category and each item within a category.

5) Results of content analysis are combined with representative quotations for an ethnographic presentation.
Chapter 4

Results

The purpose of this investigation is to find answers to the questions of what changes for the participants because of Wilderness Adventure programs, and secondly: what is it within a given programme which is responsible for this change? The participants in the discussion of their experience have willingly answered these questions from their own perspective in their own words. This section will attempt to present the data in a meaningful way so that the voice of the participants may be heard answering these questions from the perspective of their individual experience.

The three groups generated a total of 374 responses during three focus group sessions. Through the process of content analysis, the following six headings were generated: (a) programme component, which refers to the specific event which is being referred to; (b) critical factor, which refers to a more specific aspect within the given event; (c) theme, which refers to the concept or outcome being referred to; (d) consensus, which refers to whether the comment appears to be supported by the group; (e) class, which refers to whether the response is a comment or a reference to an outcome and (f) evaluation, which refers to statements of an evaluative nature.

In order to provide a framework for presentation, the results from content analysis shall be presented for the three main headings developed from the data: (a) programme component, (b) critical factor and (c) theme. The percentage of responses associated with each of the categories within each heading, along with corresponding quotations from transcripts will be presented for each heading. This
information will also be summarized in graphic form at the end of each section except for themes which will appear at the end of the chapter. Results from (e) class and (f) evaluation will be integrated into the presentation of the three major headings. A discussion of (d) consensus will follow the presentation of the first three headings. Interpretation of results will be discussed in chapter 5.

**Heading (a) Programme Components**

The key question for practitioners in the field of Wilderness Adventure programming pertains to the composition of the programme itself. Which components are important in order for the programme to be effective. To this point, there have been few answers or even suggestions forthcoming. Content analysis of the participant responses offers some insight into the importance of specific programme components. This process produced 15 distinct programme components within the larger programme. The eight components representing the most participant responses will be presented in detail here (See Figure 1). The programme component will be presented with the percentage of the total responses that it represents along with several quotations to help elucidate the concept further.

**Hiking.** Hiking was the programme component most often referred to in participant statements. It was connected with 20.1% of all responses, significantly more than any other programme component. The hiking was a difficult experience for most of the participants but one which was generally evaluated as positive:

Participant 3.3: It was hard like climbing up that mountain but like when I got there I felt like I had accomplished something, more than any of my friends have, like.. but I can pretty much guarantee that none of them have hiked up a mountain.
The new experience of doing something difficult also seemed to make the metaphorical leap into the larger context for some of the participants:

Participant 3.4: I learnt that when we were walking up the hill that I can do like pretty much anything if I like put my mind to it and if I work hard for it I can accomplish it.

Another example of the participant impressions from hiking comes from a 14 year old girl who had never been in the wilderness or on a mountain:

Participant 3.2: I also learned that you can't judge something until you've tried it. You can't just look up a mountain and go, oh I'll never make it up there, you got to at least try.

Clearly the aspect of hiking was one which made a definite positive impression on programme participants. Indeed, content analysis showed that virtually all of the statements made in regard to hiking were either positive or non-evaluative in spite of the fact that many were in reference to the difficulty experienced by participants.

Lady. The component referred to the second most often was one which only two of the groups received exposure to. The lady activity was associated with 9.9% of all responses and this figure jumps to 13.4% when only the responses of the two groups exposed to the activity are counted. An example of a lady quotation comes from a young man who actually walked away from the activity because he found it too difficult. In retrospect he was able to say "lady was the most thing that taught us a lot... even though we hated it". There seemed to be consensus on the fact that the lady activity was a good teacher of team-work.
Participant 3.1: the more work that each person puts in together as a group, the easier it gets, so I think people just found that it was easier if people worked together as a group, we get it done easier without like the harsh physical part of it.

Participant 3.5: you have to learn to work together or else there's no other way it's not a single person kind of thing it's group.

The lady activity was clearly perceived as a good teacher by the participants

Solo. The third component which was an important part of all 3 programmes was the two day solo. Solo was associated with only 9.9% of the participant responses however some of the participants held very strong feelings in regard to their solo experience. For example, one 17 year old participant stated in reference to his solo, "I think without that the whole trip is pretty much wasted". He, along with several other participants suggested that the solo experience was the most important programme component of all. Discussion of solo brought about some clear indications of it's importance in the lives of several of the participants:

Participant 2.2: like I was thinking about that on solo.... you know when you f--- up and you do like, commit a crime or whatever, I , you think about all the people that are affected by it and all the s--t that has to go through, all the paper work and all the people that have to represent you in court ( yeah)

or

Participant 2.3: I think like the first day solo when I got breached and I came back, like lots of s--t was going through my head and yeah just like
(name omitted) was saying like me committing crimes and stuff is really putting a lot of pressure on my mom and my family and stuff, like almost embarrassing basically... I'm a little s--t disturber at age 12

participant 2.1: Wo you must have been doing some harsh thinking on your two day solo

Clearly these participants have found the solo to be an important component of the wilderness adventure programme.

**Ropes Course.** The ropes course was associated with 8.3% of participant responses. This was in spite of the fact that the third group only had a very brief opportunity on the ropes due to a time shortage. The limited exposure they received seems to be reflected in the small number of references made by this group to the ropes course; only two references were made. If only the first two groups are considered, the percentage jumps to 12.1% of responses. This is probably a more representative figure for this programme component.

Most of the participants who had the longer exposure to the ropes found it to be a useful learning experience:

Participant 1.1: On the ropes course.... it gives you guys a chance to look at us and get to know us more than anything .... and you get to know yourself

Participant 1.5: on the ropes course too it's like... if you give up on life you're not going to make it and if you have determination your life will be OK.
Some of the participants, however, did not see the usefulness in what they perceived as a fun but meaningless event. The group was able to help:

Participant 1.4: I found the ropes course useless, it was just like playin.

Participant 1.2: well for some people it was challenging, like for (name omitted) and (name omitted).

Participant 1.4: well maybe for fear of heights but we're not up here to learn fear of heights

Participant 1.7: it's not just about fear of heights it's about not quitting when you're uncomfortable and not letting fear control you.

This is a good example of how different programme components are viewed differently by different participants. It also reinforces the need for adequate debriefs to help participants make the connection to the larger picture beyond the activity.

**Facilitators.** It is the facilitator's responsibility to help participants make the connection to the larger context beyond activities. In spite of the important role of the facilitators, only 3.5% of responses were associated with programme facilitators. The responses that were associated with facilitators, however, indicate that there was an impression made on at least some of the participants:

Participant 1.2: when I first came here I really hated it... didn't really like you guys but after about a little bit, after half I started to like it and I started to think that you guys are pretty nice guys, you're just doing your job.
Participant 1.3: You're nice when we're not slacking

Participant 1.6: I learned you guys don't put up with much s--t (yeah) and you got to pay attention all the time and give straight answers.

These quotations indicate the participant's impression of the firmness of programme expectations presented by the facilitators. While not all of the participants enjoyed the firmness, most expressed that they thought it was fair:

Participant 1.2: I think though, maybe you should cut a little bit of slack sometimes, you know.

Participant 1.1: no, I disagree, I think that you guys have been hard enough, just hard enough, and if someone does have a question you guys sit down and think about it... you know

Participant 1.2: now that we're done you can say that, but if we were like, if it was like second day you'd be saying 'come on cut us some slack'.

The feeling among facilitators is that in spite of conflicts that may arise because of the firm expectations in the programmes, relationships can still be built with participants. One participant saw the relationship as helpful for his own personal growth:

Participant 1.1: I think this place gives you more of a chance to grow... because you guys actually talk and counsel..... and do these debriefs.

The number of responses may have been increased by more direct probing with regard to the role of the facilitators however given the fact that the facilitators were
conducting the focus group session, it was thought that such information would be of questionable value.

**Others.** There were seven other programme components associated with participant responses that will not be discussed in detail here but may come up in the discussion of other headings. These include group survival (4%), food (2.7%), snow caves (1.3%), the sauna (1.4%), and the life game (.25%). The rest of participant responses, approximately 36%, could not be associated with any specific programme component.

**General programme.** The fact that so many responses were not associated with any specific programme component may be significant. Of the 36% of responses not associated with any specific programme component, approximately 27% referred to the programme as a whole. Participants seemed to see the programme in its entirety as significant as opposed to singling out specific components. For example:

Participant 1.1: I learnt how to work in a group ..., like better, because, this does teach you a lot because you take like say ten eleven, twelve people or five or six whatever, you put them all together, like you kinda have to learn to work with each other, it gives you more respect for yourself more respect for others, others views and opinions cuz out here you can’t really ..., like it is on the streets...fight or else you come back or you get a breach right... you can... so you have to learn to work with each other and cooperate, so gives you... umm makes you know... teaches you how to deal with things.

In spite of the large number of responses associated to the programme as a whole, it would not appear to be an indication that participants were unable to define the
component in the programme which brought about their learning. This information was readily forthcoming as has been demonstrated above. It is more an indication that the programme as a whole was focused in it's goals and therefore was clearly the sum of its parts from the perspective of the participants.

The association of programme components with participant responses was a relatively simple process with high level of reliability. The association of participant responses with the critical factor heading was a much less straightforward process and therefore it may be argued that this category is less reliable. In spite of this problem, the critical factor heading offers a very interesting perspective on what makes the wilderness adventure programme effective.

![Figure 1: Programme Components](image)
**Heading (b) Critical factors**

This heading was important for the fact that it is not enough to say that a hike or a solo was the key to learning. The question must be asked, what was it about the hike or the solo that made it a key to learning. It is this aspect of the response that is captured in the critical factor heading.

A critical factor could be associated with 57.2% of responses leaving 42.8% of responses designated as non-specific in the critical factor heading. A non-specific designation was assigned to responses which did not define a connection beyond that of the programme component. Of the 57.2%, 19.3% were associated with working in groups, 13.9% with difficulty, 7% with the environment, 4.5% with strictness and time to think, 2.9% with analogy, 2.1% with fear, 1.3% with pressure, 1% with choice and 0.5% with counseling (See Figure 2).

**Group Work.** Having to work in groups was the factor most often associated with responses by the participants. This factor was also associated with participant responses more often than any programme component or theme. This is not surprising since requiring the group to work together is an important strategy in the design of this programme. It's power comes in part from the fact that it is a difficult thing for these adolescents to do. Consider the following quotations:

Participant 2.3: I don't know, like not the hike itself was what like I didn't feel any the hike was a big deal but like it was hard because I kept getting pissed off and frustrated because on the one hand I'd have to wait for people and on the other hand like I wanted to get there.

Participant 2.2: we didn't think of it as group survival eh.... it was like, everybody out in the woods we had to stay in a certain area, like we
never sat down once and said as a group, ok, what are we going to
do, we need to work at it, you know, we need to build a shelter, we
need to do this, everyone just did whatever the hell they wanted to, it
was horrible.

The beauty of wilderness adventure programming is the immediacy of the feedback
demonstrated in the participant responses above. It indicated to participants not
only when they were failing at working together but also when they were having
success:

Participant 3.1: I think when we got out breakfast it was the most like a
team effort (yeah) cuz we had to split up some people had to go that
way ....well whatever how many people were in a group to get that
part. If they didn't do it then we didn't get that part of our breakfast,
so everybody had to work together to get their own part.

Participant 3.3: I learnt that it's better to do things with somebody else
because I almost fell off the rocks and if (name omitted) wasn't there I
would have kept on falling.

Participant 3.4: or like when (name omitted) came sliding into me sideways
and I was holding on to that tree.. it's like I look up and (name
omitted)'s coming right into me... like it's just, grab him and hold him.

From observation of the groups as well as quotations such as the ones above, it is
clear that the programme helps participants to see the value in working together.

Lastly, the related aspect of individual responsibility in working in a group is
also evident in the responses in this heading.
Participant 3.2: if everybody tries their hardest it'll show, like you can tell when everyone is trying their hardest and it's a lot easier.

Participant 3.3: I also learned you have to be responsible for your own actions, you can't just blame things on other people like if you did something you should like fess up to it instead of letting someone else get in s--t for it. (yeah)

These participants have seen the benefits of being a contributing group member. A young male participant expresses the same concept in reference to the ropes course and the responsibility of spotting for other group members:

Participant 2.2: Like I didn't feel like spotting for (name omitted) that much because he dog f---ed it while I was up there, he'd be screwing around and doing s--t.

This piece of feedback erupted into a series of exchanges between group members ending with the conclusion that the group had learned something about being able to depend on others and being dependable. The realities of group membership are clearly a critical factor in this wilderness adventure programme.

Programme Difficulty. The second most often associated critical factor at 13.9% is the difficulty of the programme. Just as requiring participants to work in groups is integral to the design of the programme, difficulty is equally so a goal. Responses from the participants indicate that the programme reaches its goal in this respect as well.

Participant 1.2: I think everyone had a hard time though, it's not easy hiking four, five, six, seven miles a day.
Participant 1.3: you learn to push yourself to your limits you get to see how far you can go (yeah that's for sure).

The general poor physical condition of programme participants ensured that the programme would be physically challenging for them. However, just because the participants found it difficult did not mean that they all thought the programme should be made easier.

Facilitator: Should it have been easier?

Participant 2.4: should it?... yeah it should have

Participant 2.2: I don't think so, no

Participant 2.3: If it would be a weekend thing it should be... but not for what we did.

Facilitator: What's good about it being hard?

Participant 2.5: I think the being hard is the... when you're hiking teaches you to work as a group, because like if you just say, you know, if you just like say I'm not pulling the toboggan.

The feeling that the difficulty of the programme brought about learning was a common one among participants.

Facilitator: What... did it being hard teach you anything specifically?

Participant 1.1: I think it teaches more about how to work in a group too, but more about yourself because it kind of um you look at it like what they do in Maple Ridge, they try to snap you by working you so hard and
all that and then here it's not as harsh, it's a lot better here but kind of pushes you so that you mentally snap in a way.... I think it snaps you, I think it's like a breaking point.

Facilitator: Is that similar for all of you? Can you relate to that?

Participant 1.3: yeah.

Participant 1.5: uh huh, yeah.

Participant 1.2: you learn to depend on yourself...

Participant 1.6: you learn responsibility.

The participants seem to view the difficulty of the programme as a necessary lever to break them of old behavior patterns. There is a clear relationship between the difficulty of a programme component and the value which the participants place on it. It is something that is clearly tied to the participants sense of accomplishment and therefore self concept as well.

Participant 3.4: Yeah that's what I thought, I thought I'd never make it up that mountain and I looked and I thought there's no way I'd make it up and I did it! I'm surprised.

Participant 3.3: you get like self, high respect and stuff, like, I don't know, it's weird.

Content analysis backed by such quotations would seem to indicate that difficulty is clearly another vital factor in the effectiveness of this programme. The related critical factor of strictness shall be considered next.
**Strict Behavioral Expectations.** Strict behavioral expectations are another fundamental aspect of this wilderness adventure programme. While it was tempting to collapse this factor in with that of difficulty, it was thought that it would be able to stand on its own with 4.5% of responses being associated with it. It is an important aspect of the programme that participants learn the concept of choice and consequences. Statements such as the following indicate that this concept is not lost on the participants:

Participant 3.3: I learned there's a consequence for every mistake that you make (yeah totally)

Participant 3.2: I was um if you think before you do something then you don't have to end up with s--t like carrying the lady and stuff like that, or think before you speak

Facilitator: What did you learn after losing your sleeping bag?

Participant 3.2: I regretted it but now that I think about it it kinda helped me because it just kinda made me realize that I screwed up and actually got the punishment for it cuz you get, where I live now you get... like you do something they don't really do s--t about it.

The consequences that participants experience during the programme (and actually having to attend the programme at all) is clearly sending the desired message to participants. It is an aspect of the programme which some participants readily accept and others must learn to accept. The following quotation already quoted above comes from a 17 year old that had to be confronted on the second day of the programme and threatened with breach if his behavior did not change. His behavior did change as did his attitude:
Participant 1.2: when I first came here I really hated it... didn't really like you guys but after about a little bit, after half I started to like it and I started to think that you guys are pretty nice guys, you're just doing your job.

Strict behavioral expectations combined with an emphasis on the participant, facilitator relationship leads to a clear understanding of roles for the adolescents in the programme. It also teaches the reciprocal nature of relationships a principle captured succinctly in the words of one of the participants and affirmed by another; "if you want respect you got to show it." ("yeah").

**The Environment.** The thing which most obviously sets wilderness adventure programmes apart from other programmes is the fact that these programmes take place in a wilderness environment. The fact that all aspects of the programme take place in this environment could give rise to the conclusion that all responses are in some way coloured by this fact. While this may be an implicit reality, the concern here is more with the explicit aspect of direct response associations with the critical factor of the wilderness environment. Content analysis revealed that the wilderness environment as a critical factor was associated with 7.0% of participant responses.

Participant response to the environment was of course varied. For many it was a kind of unnerving experience, for others it just added to the adventure.

Participant 3.3: I felt unsafe here... insecure... it's just all those bears and like when we were going across a real steep side like I kept on falling carrying the pack, I don't know if I was going to keep rolling...

Participant 3.4: I learned that the wilderness is scary
Participant 3.5: I learned that it's challenging and fun

Participant 3.3: it's like a box of chocolates, you never know what you're going to get (laughter).

Participant 3.4: well when you're out there you don't know if a bear is going to come get you or ..I don't know.

Participant 3.5: I want to come back to this place and camp with beers.

Participant 3.3: there's lots of bugs and the water is freezing cold

This exchange demonstrates the way the environment effects each of the participants differently. For some it is a threat, for others a challenge and for still others a playground. A least one participant viewed the environment as a place to clear his head:

Participant: 1.1: It sort of clears your head out here...

Of course the environment is an integral component to the hike and to solo and as stated above, virtually the whole programme. On the group survival it helped to teach the lesson in team-work when the cold weather revealed insufficiencies in effort and cooperation:

Participant 2.2: that group survival was without a doubt the worst f---- 16 hours of my life.... and I'm never sleeping next to your armpits again (laughter)

Facilitator: Anything you can learn form that situation?

Participant 2.6: don't let (name omitted) near the wood.
Participant 2.1: more firewood, get more firewood

Participant 2.2: we just needed to work more... we didn't think of it as group survival eh.... it was like, everybody out in the woods we had to stay in a certain area, like we never sat down once and said as a group, ok, what are we going to do, we need to work at it, you know, we need to build a shelter, we need to do this, everyone just did whatever the hell they wanted to, it was horrible.

The experience of a cold night made it perfectly clear that cooperation and effort or more to the point, a lack of these, can cause a great deal of discomfort. The environment is therefore a good teacher and clearly responsible for a significant portion of the learning expressed by programme participants.

**Time to think.** Time for participants to think about their behavior is a logical component of any programme designed to bring about real change. In one sense the entire programme is designed to give participants the opportunity to reflect on their lives and their behavior with the mirror of the programme activities. Time to think was associated with 4.5% of participant responses. Of course the solo is the programme component which actually presents a block of time for participants to do little else than think. Just over 75% of participant responses associated with time to think were also associated with the solo with the remaining 25% being associated with a long walk one participant took while trying to leave the programme.

Participant responses suggest that the programme, through the solo, provides the necessary time to think:
Participant 1.3: then you get your solo all by yourself and this, I don't know, it forces you into thinking about your life because there is nothing else to do.

Participant 1.6: Gives you a chance to think about your life, where you're going, what you're doing.

The opportunity to sit and think is not lost on the programme participants and is clearly an important critical factor.

**Metaphor.** Metaphor as a critical factor is a reference to participant responses that use analogy. Metaphor is another aspect of wilderness adventure programming that practitioners use to help participants generalize insights beyond the bounds of the programme. At 2.9%, the number of participant responses associated with the concept of metaphor was relatively low, however a couple of statements give a clear indication that at least a few participants made the metaphoric connection between the programme and the larger picture:

Participant 1.1: this trip's like a mini life...... it teaches you things, to keep up, to do everything yourself, initiative to do things.

Participant 2.2: if you don't carry your weight in society, then other people have to carry your burden and that pisses them off. I don't know, like I got pissed off when people didn't carry their log, the lady... you can't make it packin lady by yourself like you can't and if it was a metaphor for society I guess you can't make it on your own, you need other people to do s--t for you like... yeah.
These participants clearly were able to use the concept of metaphor in order to apply their experiences to their lives outside of the programme. The limited number of responses that could be associated with this critical factor will be further discussed in the next chapter.

**Other.** There are four remaining critical factors that will not be explored in this section but may come up in the discussion of other headings. These include fear (2.1%), pressure (1.3%), choice (1%), and counseling (0.5%). The third and final heading to be examined in detail is that of themes.

![Figure 2](Critical Factors.png)

**Heading (c) Themes**

Participant responses were narrowed down into 20 distinct themes; 13 of these shall be examined in detail here (See figure 3). Within many of the themes, there is a further breakdown based on whether a learning outcome is being expressed or whether simply a comment is being made that is associated with that
particular theme. This information will be presented as it relates to the theme being discussed in this section.

**Evaluation.** Responses that evaluate the programme in some way accounted for 12.8% of what participants had to say. Of the 12.8%, 71% of responses were positive in their evaluation and 29% were negative in their evaluation. The question of the validity of such evaluative statements in the presence of the programme facilitators is covered under the larger argument for the validity of the study itself. It may be noted, however, that the participants were not at all unwilling to make negative comments in regard to the programme. This fact is in itself an argument for validity.

Most of the evaluative comments refer to specific programme components such as the food or to specific activities. For instance several participants were less than satisfied with what and how much they received to eat:

Participant 1.7: I'd say the food quantities. (food, yeah)

Participant 1.2: not just the food quantities, just different kind... better food.

Participant 1.3: different food...

The challenge of feeding adolescents in the wilderness is not an easy one. Other comments were simply made in reference to the aspect of the programme which participants liked best. Some of these were unequivocal:

Participant 2.2: the sauna rocked ass... it was the best part

Facilitator: what about the hike to the one peak?
Participant 3.1: that was rad!

Participant 3.5: that was excellent!

As much as the programme pushed participants out of their comfort zone and made them at times very uncomfortable, the overall feeling from all groups expressed both verbally and nonverbally, is that they valued the programme:

Participant 2.2: all I have to say is it does more good than it does harm, this programme I liked it actually, it pissed me off when I was freezing my ass off on the survival and when I had to pack the lady (laughter) but all in all it was good I liked it.

As the above quotation demonstrates, the participants were able to separate out their evaluation of the programme from their evaluation of some of the unpleasant aspects which they had to endure. The overwhelming perception of facilitators was that the participants had found the experience to be a valuable one.

**Banter.** This theme was created to account for the responses that were unrelated to the purposes of the focus group. This would include joking and tangents that the group would undertake before being brought back to task. It was thought that this information was important in that it provided insight into the tone or mood of the group. It is also an important aspect of the argument for the validity of the information generated because it is an indication of how relaxed and comfortable the participants were with the exercise. Banter accounts for 12.8% of the participant responses.
One participant wished to rub in the fact that his solo site was much more comfortable than some of the others. This leads to one of the tangents referred to above:

Participant 2.3: yeah I had a big dry hill and I laid out my outer, took off my shirt and laid down there for a couple of hours, got a kick ass tan.

Participant 2.1: I Got no sun.

Participant 2.2: I got just little slivers of sun.

Participant 2.1: I didn't, like I had only one little area that the sun would come in.

Participant 2.2: I only had little slivers about this thick all over.

Participant 2.3: we had a kick ass place eh? Mine was a big open space, running water, trees...

Facilitator: We only do that for the people we like (laughter)

Participant 2.1: What, you don't like me? (laughter) I had no water for two days, I tried making water and all this s--t got in there and I (laughter) said f--- this (laughter).

The ability to laugh and joke among the group and the facilitators is surely an indication that a level of trust had been reached in the group. There was a healthy level of both levity and seriousness during the focus group sessions.

**Team work.** It is important here to define the difference between the theme of team-work and the critical factor of group work. The theme refers to the what the
response is referring to in terms of outcome or a concept being discussed. The critical factor of group work refers to the factor in the programme which brings about the outcome or gives impetus for the comment to be made. For example, the fact that the participants were required to do work in a group leads to the outcome of improved ability to work in teams. The critical factor is the group work and the theme is team-work.

The theme of team-work accounts for 11.8% of participant responses. Of this figure, 67.5% of responses refer to team-work as a learning outcome and 32.5% are comments referring to team-work as a concept. Team-work as a learning outcome was expressed in connection with most of the programme components:

Participant 3.3: I learned that you have to work as a team on that ropes course cuz it's kind of hard to accomplish things if you don't make a plan with your other team members and try and do it by yourself.

Participant 2.1: it also helps for like, kinda to work as a team cuz like if somebody's struggling and they want to give up you give them lots of support.

Participant 2.5: encourage them.

Participant 2.1: yeah you can help them up the hill so you learn to work as a team too.

Participant 1.2: just like the game of life, you got to work in a group if you want it to work.
Team-work is a theme that clearly permeates the impression left by the programme on participants.

**Responsibility.** The next theme according to percentage of participant responses is responsibility. The participants expressed responsibility as a learning outcome of the programme in just under 50% of the responses in this theme. In some cases the participants made it easy for analysis and stated plainly that one of the things the programme teaches is responsibility:

Participant 1.4: You learn responsibility.

Participant 3.3: I also learned you have to be responsible for your own actions, you can't just blame things on other people like if you did something you should like fess up to it instead of letting someone else get in s--t for it.

In other cases the theme is simply implicit in what the participant is saying:

Participant 1.4: Well I just thought it was really important to get it done otherwise we were going to be sleeping in the cold

Participant 2.2: If you don't carry your weight in society, then other people have to carry your burden and that pisses them off. I don't know, like I got pissed off when people didn't carry their log, the lady.

The participants clearly learned something about being responsible through participation in the programme.

**Consequences.** Content analysis revealed an equal number of responses in the consequences and deterrent categories. Each of these accounted for 8% of
responses and of this number, 80% were references to learning outcomes. Participants were able to experience directly the consequences of their own and other’s behavior. It seems to have left an impression:

Participant 3.1: cuz if one person gives up their end of the weight then somebody else gets stuck with the rest of their weight so...

Participant 3.3: and then it's a real bitch. (yeah).

Participant 3.4: I was, um, if you think before you do something then you don't have to end up with s--t like carrying the lady and stuff like that.

Participant 3.3: I learned there's a consequence for every mistake that you make.

Participant 3.4: yeah totally.

The above responses indicate that the concept of choices, decisions and consequences is effectively communicated to programme participants.

**Deterrent.** One of the primary goals for the Attorney General's office is deterrence. As has already been mentioned, deterrence as theme accounted for 8% of responses. Half of these referred to deterrence as an outcome of the programme or programme component. Responses in this theme indicate that the programme has influenced the participant not to re-offend. There is an interesting ambivalence expressed in that on the one hand participants feel the programme was valuable, yet on the other hand it was a difficult experience that they do not wish to have to repeat.

Participant 1.2: Makes you not want to be on probation again
Participant 1.3: Makes you not want to do anything bad again

Participant 1.2: after a while you get to sort of like the programme but you still don't want to come back

Some participants are full of assurances that they will never be in trouble again while others offer a more tempered opinion:

Participant 2.6: Oh yeah, that's what I was going to say, I don't think that it would stop me like stop me from doing crimes like if I was going to do s--t I'm like oh I have to go to the Edge, I don't want to do that again. I probably wouldn't think about that as much but somewhere in the back of my head it would run through my thought processes.

Whether the programme actually works as a deterrence factor or not is a topic for future research. What is important to this discussion is that participants in general seem to view the programme as providing a certain degree of deterrence.

**Self Knowledge.** Wilderness adventure programmes have been compared to a mirror that participants are able to look into and see themselves. The resulting self knowledge enables them to then make decisions about possible change. Participant responses were judged to be referring to self knowledge for 6.4% of the total responses. Of this number, 67% referred to self knowledge as an outcome.

One of the participants seemed surprised by a turn in his thoughts for the worse:

Participant 2.4: after the first day instead of thinking about up-building things I started thinking about destructive things like if I chucked a rock hard enough at a squirrel would I kill it? (laughter)
Another participant, while discussing the programme, suggests that it is helpful in gaining insight about oneself:

Participant 2.1: The programme teaches more about how to work in a group too, but more about yourself.

Other participants suggest that they have discovered ability to go beyond what they thought were physical limits while others suggest that the programme has helped them to see just how lazy they are:

Participant 2.3: we are all habitual dog f---- like we just we don't do anything, we don't work, I don't go to school, I don't work all I do is just smoke pot and drink beer all day and party, like it's totally non, non, constructive.

This same participant later suggests that he has decided to go out and get a job and get his own place. His look in the mirror was clearly enlightening.

**Challenge.** The wilderness adventure programme is designed to challenge the participants. It is therefore somewhat surprising that the theme of challenge should account for only 6.1% of responses. All of these responses were comments made with regard to the challenging nature of the programme. For instance, the ropes course:

Participant 2.3: well for some people it was challenging, like for (name omitted) and (name omitted).

Participant 2.4: It helped (name omitted) to overcome his fear of heights.
Participant 2.3: but like the hike, the hike was challenging

Participant 2.4: I thought it was challenging

The wilderness environment:

Participant 3.5: I learned that it's challenging and fun.

The relatively low number of responses in this heading is balanced by the higher number in the critical factor heading of programme difficulty. Challenge as well as difficulty are concepts which are definite keys to the programme.

Reflection. As team-work work relates to group work, so also is there a close relationship between the theme of reflection and the critical factor of time to think. Reflection responses are also very close to self knowledge in content yet still distinct. Reflection accounts for 5.9% of responses which are all in the form of comments as opposed to learning outcomes.

The comments that were made suggest that participants took the time to reflect on their lives:

Participant 3.2: it was just a good time to sit around and focus on our s--t, that's what my probation officer said... it would be a good time to focus and it was true because you don't have any distractions it helps you to focus.

Participant 1.6: Gives you a chance to think about your life, where you're going, what you're doing.

Participant 2.2: I think after that (group survival) we started to think more like about like we're up here for a purpose.
The participants responses indicate that the programme provided the time and impetus to reflect on their lives. It appeared to be a helpful process for many of them.

**Self esteem.** Self Esteem is one of the most heralded outcomes of wilderness adventure programmes. In this study, self-esteem accounted for almost 5% of participant responses. In each of the responses the theme was presented as an outcome of the programme. The participants expressed the increase in self esteem in different ways:

Participant 3.7: you get like self, high respect and stuff, like, I don't know, it's weird

Participant 3.2: You kinda have a feeling of pride (yeah)

Participant 3.3: uh hmm pride feeling

Participant 2.2: like it gave you confidence in yourself

The impression of facilitators was that virtually all of the participants were proud of the fact that they had completed the programme in spite of the relatively few responses in this theme heading.

**Security.** The theme of security was tied exclusively to the critical factor of environment. Just under 3% of responses belong to this theme and most are comments that arose from the third group in regard to having to be outside all the time:

Participant 3.1: I mean it's just those simple little things that you miss

Participant 3.3: The security of a roof over your head
Participant 3.7: Uh huh. yes.

Participant 3.3: and the walls surrounding you,

Participant 3.5: and your own bed

Participant 3.7: doors that lock.... the toilet paper

Participant 3.2: it kinda makes you realize how good you got it.

The environment was a constant challenge to the participants comfort and security.

**Determination.** Determination as a theme accounts for only 2.7% of responses. Most of these are references to the importance of having determination as the following example indicates:

Participant 1.4: on the ropes course too it's like... if you give up on life you're not going to make it and if you have determination your life will be OK.

The nature of the programme is such that determination is a required element from participants. When the groups were asked if the programme taught them to have determination they responded unanimously in the affirmative.

**Dependence.** The last theme to be presented in detail is that of dependence. The theme of dependence accounted for just over 1.5% of responses and these were clustered primarily around discussion of the ropes course:

Participant 2.1: and if you fall there is going to be people there to catch you so...

Participant 2.2: that's what it was, the spotting.
Participant 2.1: you're dependant on them.

Participant 2.4: and when it gets hard there is people there to catch you.

**Remaining Themes.** The remaining themes were more seldom occurrences which resisted being combined into other themes. For example there were several references made by participants which expressed a desire to quit smoking or to finish school. Four of the participants expressed the intent to look for work when they returned from the programme. Combined, the remaining themes accounted for just over 8% of responses.

**Heading (d) consensus**

The final heading to be presented is that of consensus. This heading follows the suggestion of Byers and Wilcox (1991). They suggest that the use of Lederman's technique of classifying information according to whether the responses represented consensus, an idiosyncratic response, or disagreement is helpful in establishing the weight given to different responses.

It was the sense of facilitators that the vast majority of responses represented at least a certain degree of consensus. Although dissenting opinions were few in number, they did demonstrate that participants were not hesitant to disagree with comments they did not agree with. Many of the responses were sentences composed of the input of several group members as they tripped over each other expressing the same idea:

Participant 1.2: society requires that the whole society works at it to because when one person or two don't carry their burden, more people have to carry other peoples burden...
Participant 1.4: less people have to carry more burden...

Participant 1.2: like I was thanking about that on my solo...

Participant 1.6: you really get pissed off

Participant 1.3: yeah...

Each group was very involved in the process of generating responses and even the participants who actually said very little that could be recorded, were very involved non-verbally. The 45% of responses which qualified as consensus based on transcripts does not capture the true nature of the responses that were generated. Taking all factors into consideration, consensus was much stronger than this figure indicates.
Chapter 5

Interpretation of results

The biggest challenge in any study such as this is to extract meaning from the data in order to find answers to the questions being asked. The raw data has been organized in the previous chapter but the task of interpretation continues. The following pages are devoted to a discussion of the two primary questions of this study in light of the results presented in the previous chapter. These questions are: What changes for the participants because of Wilderness Adventure programmes, and what is it within a given programme which is responsible for this change?

Content Analysis

The analysis of the data revealed that the participants were not just referring to programme components as they discussed the programme. There were factors embedded in the components which were as important if not more important than the components themselves. It was this perception which spawned the critical factor category. The result was a kind of three level breakdown of the programme. The first level considers the programme as an organic whole. The second level divides the programme into its different component parts, and the third level examines the critical factors within these components.

Another important discovery during content analysis was that participant responses did not lend themselves to the simple outcome classification. Some statements simply represented comments about the programme while others actually referred to an outcome. The result was the creation of two headings instead of just the one for outcomes. The heading of theme was created to capture
the topic of what was being expressed by the participant and the heading class was used to classify whether the statement represented a comment about the programme or an outcome of the programme.

One caveat which must be stated from the beginning is that one needs to guard oneself from the assumption that frequency is equal to importance (Krueger 1994). Although frequency is an important tool in establishing the importance of a concept, it must be acknowledged that it is not the only criteria. One must also consider such factors as context, and intensity in addition to the non verbal aspect such as tone and inflection. While these elements will all be taken into consideration, frequency will be used as the starting point for discussion.

**The programme as a whole.** The analysis of the data indicates that almost 36% of the responses referred to the programme as whole, without any specific reference to a particular component of the Programme. One interpretation might be that participants were not probed in enough detail in order to achieve better definition of what they were referring to specifically in the programme. Another interpretation might be that the whole programme some how stood out as greater in the participants minds than any particular programme component. Since information on programme details is not lacking, the second interpretation is appropriate.

The question which must follow from this line of reasoning is whether the programme as a whole may be viewed simply as the sum of it's parts or whether it actually becomes a greater entity with an identity that reaches beyond the simple sum. This is an interesting question for future research and discussion since it has yet to be broached in any of the literature. From this study it would appear that in spite of repeated references to "the programme" that the participants make very
little distinction between the programme as a whole and individual programme components. It would also appear that when participants speak of the effects of the programme that they are referring simply to the sum of it's parts. Perhaps the obvious fact that the sum is greater than any single part is what has generated the higher percentage of responses which refer to the programme as a whole.

Regardless which it is, it is important that future research clearly define the programme being evaluated. If the programme is nothing less than the sum of it's parts, then the parts must be defined. Wilderness adventure programmes can no longer be spoken of as ethereal entities whose only defining characteristic is that they occur outside. The contents of the black box are important. On the other hand, even if such programmes do take on an Identity of their own beyond the simple sum of the components, the components are still important factors in the understanding of the larger entity. Future research needs to more completely define the components of the programmes being investigated.

**The programme components**

Content analysis produced 15 distinct programme components within the larger programme. The six primary components will be discussed separately in some detail in this section. The remaining components will be discussed together at the end of this section.

**Hiking.** Hiking clearly made an impression on participants. Both the number and content of responses suggest that this activity is an integral aspect of the programmes. The power of the hikes is that everyone has to participate. No one will be carried and therefore each participant must contribute the necessary effort. In addition, groups are required to remain together at all times so slower group members are pressured to go faster, and faster members end up with the
responsibility of holding the group together. The intensity this creates when combined with difficult terrain, heavy back packs, and long days creates the energy for lasting learning.

When one looks deeper, the top two critical factors associated with hiking were difficulty (32%) and group work (17%). Almost 30% of responses could not be narrowed beyond the general category of hiking. The message from participants appears to be that a difficult hike in the context of a group is a significant aspect of the wilderness adventure programme.

The next question to be answered is in regard to the effects of such a hike. The majority of responses in regard to the hike were in the form of comments and did not express any specific learning outcome. Participants found hiking to be a challenging activity that was viewed as a positive experience. The outcomes that were expressed had to do with learning team-work and improved self esteem. It is reasonable to conclude that the hiking aspect of these programmes was significant in it's importance, especially in the development of team-work and self esteem.

**Lady.** The amount of time spent working with lady when compared to hiking or the solo seems almost inconsequential. In spite of this, the lady activity accounts for the second highest association rate after hiking. When one adds to this the fact that only two groups had opportunity to work with this activity, the figure of 9.9% becomes quite noteworthy. Lady is another activity like hiking that requires participation from each group member. Those group members which do not contribute are generally given immediate and intense feedback from those members who are. Once again the activity is demanding in both a physical as well as a cooperative sense.
The critical factors most often associated with the lady activity were group work (46%) and analogy (25%). In spite of the fact that the lady activity is very demanding physically, only 8% of responses were associated with the critical factor of difficulty. The participants seemed to see this activity not just as something that was hard, but rather as something that was able to teach them something.

Another very significant finding with respect to this activity is that over 80% of responses in the critical factor category of analogy were generated by the lady activity. The metaphor of society was given to participants as they took part in the activity and it clearly took hold. Responses indicate a very clear connection was made between carrying one's weight in society and carrying the log (lady) with the other participants. The connection to the larger societal context was clearly achieved with this activity.

A further note must be made in regard to the presentation of the analogy of "lady as a picture of society". The responses of the participants indicate that this picture made an endurable impression. This may support what Gass (1991) has suggested in regard to the presentation of a metaphor before and during an activity. He suggests that this practice can have a significant effect on the power of the activity. There is no doubt that the analogy made a strong connection with participants.

With regard to the effects of the lady activity it is significant that almost 80% of the responses associated with it expressed learning outcomes and over half of these expressed the concept of consequences. This can be easily explained since the lady activity was a consequence for not meeting a behavioral expectation. However, it clear from the participant responses that the activity was viewed as much more than just a consequence, in fact there was some consensus for the
assertion that the lady activity had taught one of the groups more than any other programme component.

Solo. The participants spend the largest single block of time on the solo activity. If one wanted to do an efficiency analysis based on time and generation of responses this activity would not fair that well. Still, with almost 10% of responses associated with solo, it can be considered a significant programme component. It should also be noted that solo was considered to be the most important component by at least three of the participants. One even went so far to suggest that the whole experience would be a waste without the solo at the end to process what had occurred in the programme.

The critical factor of time to think is of course the primary one associated with the solo with approximately 35% responses. Twenty-five percent of responses did not suggest a critical factor beyond the solo component. The primary goal of the solo is that participants take time to think and reflect on their lives and behavior in light of what they have experienced in the programme. Participant responses indicate that this is what most of the participants do.

Following from the critical factor of time to think, the theme most often associated with solo was reflection (30%). Just under a quarter of responses were evaluative in nature and of these only two responses were negative. The fact that these two themes dominated this category is the reason that just under 40% of responses in this category expressed an outcome. The outcomes that were expressed were on the themes of self esteem and self knowledge.

The importance of solo should not be underestimated. It was clearly a very valuable experience for many of the participants and is strongly associated with two very important programme outcomes.
**Ropes Course.** The ropes course is an activity that is on the other end of the time spectrum from the solo. While many consider a ropes course to be an individual activity, the element of team spotting transforms it very much into a group activity. With 8.3% of responses being associated with this component, the few hours which are spent on it would seem to have made a significant impact on participants. The activity is designed to be difficult and to test the patience and perseverance of the participants as they support each other through the different elements of the course.

The critical factor of group work accounted for 55% of participant responses in the ropes course category. This is a reflection of the strength of the dynamic introduced by team spotting. Each participant had an opportunity to experience the ability of the group to care for their needs. Responses indicated that they were not always impressed with the performance of their peers, however, the intrinsic lesson of the exercise seems to have gotten through. Participants learn the importance of both being dependable and being able to be depended on.

The critical factor of difficulty accounts for another 20% of participant responses in the ropes course category. The course is designed to require several attempts before success can be achieved. Most of the participants in these groups did not manage to complete the course yet chose not to focus on this aspect in their responses. The aspect of spotting seems to have made a bigger impression than the difficulty of the course.

There is a pleasing symmetry to the two themes which account for the majority of outcome responses in the ropes course category. The complementary themes of responsibility (30%) and dependence (23%) represent two of the goals of this activity perfectly. Participants also expressed the themes of challenge and
determination in association with the critical factor of difficulty. The ropes course would appear to be a difficult programme component that challenges participants ability to trust and be trustworthy.

Facilitators. Interpretation of this component is more difficult because of the duel nature of the facilitators as programme as well as focus group facilitators. Responses in this category were not elicited through direct questioning regarding the role of the facilitators rather, it was simply volunteered by the participants. Based on the established relationship of the facilitators with the groups, there should be no hesitation to take this information as trustworthy in the sense that it is offered as such by the participants. It would be naive, however, to assume that this same relationship does not colour comments in this category in a favourable way.

The assumption being made is that the participants are able to view the programme as distinct enough from the facilitators for them to give honest feedback in their statements about the programme. That the level of rapport established with the programme participants was excellent is clear from the transcripts of the focus groups. However, to take the next step and request direct feedback for facilitators was thought to be pushing the limits of the participants ability to be completely candid.

The critical factors of counselling and behavioral expectations (strictness) account for 75% of responses associated with the facilitator component. Interactions during the programmes often involve confrontation as participants attempt to escape the intensity of the programme. Facilitators are pro-active and firm in their interactions with individuals who are not necessarily used to following instructions of others. It would appear that this reality is being reflected in the critical factor category.
No one theme was associated with the facilitator component substantially more than another. The most interesting comments, however, were associated with the themes of personal growth and consequences. Participant responses in these themes demonstrated an appreciation of the firmness of the interactions with facilitators. It is an important aspect of the programme that a firm line be drawn by the facilitators in regard to participant behavior. Within the boundaries there is a great deal of room for relationship building and friendship. Outside of the bounds of acceptable behaviors, the relationship is highly confrontative and consequential. This is the guiding principle of the relationship between facilitator and participant.

**Other programme components.** There were six other programme components which came out of the content analysis process. These include group survival (4%), food (2.7%), a breakfast run (1.8%), snow caves (1.3%), the sauna (1.4%), and the life game (.25%). It is not necessary to make the assumption that these are unimportant aspects of the programme simply because they were not frequently mentioned. For instance, one group which was required to do the group survival activity appears to have learned a great deal about consequences from the experience. Over 10% of the responses they generated were associated with this activity. Another group which was the only group to do the breakfast run activity found it to be a great teacher and confidence builder in the area of team-work.

The low numbers for these components are indicative of how each group and each experience changes from programme to programme. Variables such as the weather, time spent on an activity, the group mood during the activity; all these factor into the mix of importance and effectiveness. For example, the life activity is usually a powerful analogy for participants to use to examine their own lives. Weather prevented two of the groups from being exposed to the activity and
seriously affected the circumstances of the group that did get to attempt it. In spite of this, one of the participants who was able to experience the activity saw it as a useful picture for his own life.

Regardless of the activity, there are elements outside of the control of the facilitator that will affect outcomes. Some of these factors are physical such as the weather or other environmental variables, others are intrinsic to the make up of different groups. The next programme participants could find any one of these programme components to be the most powerful or the most uninteresting.

**Implications for future programmes: theory and practice.**

It is reasonable to conclude that hiking, the lady activity, the solo, and the ropes course were important factors for the participant who took part in the programmes. However, the thing that is more important to note is that there are several critical factors within these components that seem to be the keys to effectiveness according to these participants.

The critical factor of requiring the participants to work in a group was clearly a very important aspect of the programme. The difficulties which this aspect of the programme produced suggests the skills required to function successfully in a group were less than polished for these participants. It is noteworthy, however, that in spite of the difficulty experienced in dealing with this factor, they viewed it as a valuable aspect of the programme. They seemed to see the value in having an opportunity to practice and learn the skills of a successful group member. Group theory may have much to offer towards understanding the power and effectiveness of such wilderness programmes.
Wichmann (1991) lists the peer group as one of the seven common components of wilderness adventure programmes. He also mentions stress and challenge in the same list. Participant responses indicated that difficulty was also a very critical factor in their eyes. It follows then, for example, that it was not just the hike that was important but that it was a very difficult hike. It was also not just a ropes course, but a difficult ropes course. The challenge aspect of the programme seems to add the intensity that promotes the learning process.

Challenge or difficulty as a critical factor is of course tied to the need for a positive, post experience evaluation of the difficulties that were faced. To limit this evaluation to an ultimate "success" outcome is, I believe, to limit the value of the challenge. Making a valiant attempt on a difficult ropes course but still failing to complete is more valuable than success on a less challenging course if the experience is processed appropriately. It is in the meeting of the challenge or the difficulty that the participant is motivated to see themselves as active agents in their own lives.

A theoretical perspective that may be helpful in understanding the importance of this challenge aspect of the programme is Bandura's self efficacy theory as proposed by Sachs and Miller (1992). The work by these authors may offer a good starting point for future researchers looking at the aspect of challenge in the wilderness setting. The positive evaluation of these difficult situations can also work toward meeting the esteem needs as postulated by Maslow (1970) and others. Maslow's hierarchy of needs is another theoretical framework which may be a useful tool in the design of future programme research.

The critical factor of the wilderness environment is also on Wichmann's (1991) list of common programme elements. The wilderness seems to add to the
challenge of the programme. Participants found it made life more difficult and increased their level of stress and in some cases fear. It was the underlying factor in virtually all of the other programme components. Whether it was the cold or the difficulty of the terrain, or the animals in the woods, the environment was one more thing adding intensity to the programme. In this regard, Becker and Fuerstein's (1991) "powerful environment", would be a possible help to future researchers. Another possibility aid to understanding the many faceted aspect of the environment might be Kurt Lewin's (1951) field theory; particularly his concept of mapping the life space of individuals as well as the concept of equilibrium within an individuals life space.

The isolating nature of the wilderness environment also often confronts clients with the consequences of their behaviour and thus encourages them to make necessary changes (Kimball, 1980; Durkin 1988). In the wilderness environment there is no place to run away to and no place to hide. Participants that try, do not try for long. For one participant, a failed attempt to leave the programme in order to escape consequences for his behavior was the turning point in his attitude and behavior.

If difficulty were to be represented by a fire, then the behavioral expectations (helped by the environment) placed on participants would be the ring of rocks to keep participants in it. For most of the participants, the natural response to difficulty was to try and escape it. The structure of the programme is designed to have them work through the problems and difficulties with the help of peers and the facilitators. As coercive as this might sound, the participants expressed an awareness that it was a necessary aspect of the programme for them. Of course the skill required by facilitators is to know when to take the pressure off in order that the participants can process what is occurring. This aspect of the programme
actually fits well with Maslow's (1970) description of an individual's need for security. The rules and expectations of the programme provide for a need for structure and order in the participants' lives and they clearly respond positively to it.

Cognitive processing is encouraged by the last critical factor to be considered in detail here; time to think. Participants expressed that having the opportunity to think about their lives was a valuable factor in the programme. Participants suggested that the solo not only gave them time to think but for several participants, forced them to think. Being forced to think is an interesting concept however the key for this discussion is that the participants found time to think helpful. The usefulness of this time for participants suggests that cognitive theory also has a potential role in helping to provide the theoretical base for wilderness programmes.

One final issue with regard to practice in wilderness programmes which should be mentioned here is that of effect maintenance. It is important that the effects of this and other programmes be maintained over time and there are many factors which influence the degree to which these changes will be maintained. One of the biggest barriers to maintaining the change that has occurred is the environment to which most of the participants must return. Often the changes that have occurred for participants receive little or no support from families or peers. Schools and communities also tend to overlook the progress participants have made and continue to view the participant as though he or she has undergone no change at all. In this context, it is very difficult to maintain any changes without the implementation of some kind of support system for the changes that have taken place.
The logical next step for these programmes would be to provide follow-up support for graduates of the programme. Currently, follow-up is limited to a standard schedule of appointments with probation officers. While the role of the probation officer is an important one, the level of support necessary to maintain change can not possibly be achieved in this relationship. An adequate support structure would need to consider both family and school issues in addition to the development of a supportive relationship through a child care worker or counselor. A wilderness therapeutic component of the support structure could also be developed in order to help refresh and strengthen changes that have been made. The experience of this author suggests that multiple visits to the programme are indeed an effective means of strengthening and maintaining change. In short, it should not be forgotten that in order for participants to completely change behaviors and attitudes that may have developed over years, it will take more than a few days or even a few months. These programmes are, however, a very good start.

Summary

Activities are the building blocks which are combined to create wilderness adventure programmes. As important as these activities are, the critical factors are what is really behind the effectiveness of the programme. Participant responses suggest that being required to work with peers on difficult tasks in a demanding environment combined with firm behavioral expectations and adequate time to reflect is what makes these programmes effective.

With respect to building the theoretical groundwork necessary to improve programme effectiveness, the possible sources are many and diverse. They range from Lewin's field theory to Maslow's hierarchy to cognitive behavioralism. A logical
next step may be for researchers to look at a grounded theory approach (Glaser & Straus, 1967) in order to address this problem. Lastly, the issue of maintaining the change brought about by the programme is one that needs to be addressed by the provision of supports for participants both through and beyond the scope of the programme.

**Implications for research**

It has already been stated that research in the field of wilderness adventure programmes needs to take a step back and give consideration to defining the theory which can support the practices already in place. Qualitative research such as this study is the first step in beginning to define what actually is happening in the black box of these programmes. The results of this study suggest three implications for future research.

The first and most important implication is that future research must define the programme under investigation in detail. Most of the research that has been published in the past has provided almost nothing in the way of a programme description. This study has demonstrated that even a list of programme components may be inadequate without more information with regard to critical factors in the activities.

If theory is to advance, research must have the ability to be compared on the basis of the design of the programmes. Just because one programme uses the same activities as another programme does not necessarily mean that the programmes are essentially the same. There is much more to a programme than simply the activities which compose it. In addition to providing a list of the programme activities, a useful programme description will provide enough detail for researchers to duplicate important critical factors for the purposes of replication.
The second implication of this study for future research is a plea for the development of a sound theoretical foundation. At present, the design of most wilderness adventure programmes is the result of an informal consensus that relies on the experience of practitioners and the Outward Bound model established in 1941 by Kurt Hahn. Some of these programmes are effective and helpful, others are nothing less than dangerous. Without movement in the area of theory development, these programmes are doomed to be subject to the whim of every practitioner with a new idea.

Lastly, this study underlines the value of a qualitative approach to research in this field. Up to this point, quantitative research that focuses on outcomes has taken up most of the energy directed at research in this field. Good qualitative research is almost non-existent. This is in spite of the fact that these programmes lend themselves so well to qualitative approaches. The focus group approach used in this study could not be more perfectly suited to wilderness adventure programmes that follow a debriefing procedure. Seeing that one of the major tasks in this field is theory development, the time is right for qualitative research to be used in this effort.

**Implications for Counselling**

Wilderness adventure programmes are being used with great success for therapeutic purposes with adolescent populations. Practitioners are pleased with outcome effects such as increased self esteem and learned social skills. One problem is that the lack of a sound theoretical base generally in this field, carries over to the use of these programmes as therapeutic interventions. The theoretical foundation to support these programmes as therapeutic interventions must be developed.
The theoretical base aside, the outcomes observed in this and other studies are the kinds of effects that parents and counsellors are seeking to bring about in many "problem adolescents". This study supports the use of wilderness adventure programmes for adolescents who need to learn how to function appropriately within their peer group while increasing self esteem and self knowledge. Programme effects, however, will be dependent on the distinct nature of the specific programme.

Counsellors who might consider this type of programme for their clients should obtain a thorough programme description as well as the results of any research that might have been done on the programme. A well run wilderness adventure programme may be an excellent adjunct to the therapeutic process. A poorly run programme or one that is too demanding for clients could also do much harm.

For the counselor that is able to facilitate the experience him or herself and then continue on with the client(s), the strength of the relationship that can be formed is quite remarkable. Adolescents who might be quite hesitant to discuss personal problems with an adult in a stuffy office may find the same adult quite approachable on a mountain path or in a canoe. The wilderness environment seems to speed the relaxing of the defenses that many adolescents hold firmly in the presence of counsellors. These programmes clearly have great potential for counsellors working with societies troubled youth.

Conclusion

This study has given three groups of adolescents the opportunity to respond to the wilderness adventure programme that they have experienced.
The results of this focus group inquiry have shed some light on two important questions in regard to these programmes. What has changed for the participants because of the Wilderness Adventure programme, and what is it within the programme which is responsible for this change? The results of this study suggest that there are factors that are equally if not more important than the activities which compose the programme. Research must focus on these factors as well as the more basic programme components. Finally, this study has also lent some support to the claims that these programmes increase self esteem and reduce recidivism in delinquent adolescents. It also suggests that there are many more therapeutic benefits for practitioners who are able to develop and use these programmes wisely.
References


Appendix A

Programme Description

Pre trip considerations

One afternoon planning meeting is required to establish equipment requirements, behavioral expectations, establish informed consent and to respond to any questions participants may have.

Program Components

The nature of Outdoor Adventure Interventions is that there are a multitude of active elements which combine to become the experience. They may be viewed as belonging to two separate categories. The first category is the environment which includes such things as weather, location, sleeping and eating arrangements, and to a certain extent, the peer group. The second category encompasses the tasks given to the participants to be accomplished within the given environment. These include the mundane tasks of camp establishment and maintenance (setting up tents, gathering wood, lighting camp fires), personal maintenance (personal hygiene, personal warmth and dryness) and group maintenance (preparation of food, clean-up, group needs).

In addition to the mundane tasks of living in an outdoor environment, the participants were provided with the following tasks:

Group Hike. Each programme began with a strenuous hike on the first evening into the first camp. Participants were required to carry all personal gear as well as group supplies such as food, cooking gear and shelter in their backpacks. For the six day experiences, the following two days were spent backpacking. For the 14 day experience, the participants spent the next five days backpacking. The length of the hiking days varied from 5 to 8 hours per day with one 12 hour day on the 14 day trip. The terrain was extremely varied on each of the trips however each trip dealt with particularly difficult as well as easy terrain.
All three programmes also experienced poor weather conditions for at least a portion of their hikes.

**Low ropes course.** This involves a series of strength and balance elements created by tying large gage ropes between trees at a height ranging from .2m to 2.00m above the ground. The elements are progressive in their difficulty but the overall course is designed for participant success. This is an individual task in that each participant must negotiate the course without any direct physical assistance from the group. It is also a group task, however in that the group is responsible for the safety of the individual participant while they are up on the ropes. This requires constant vigilance and attention to what is occurring for each of the participants by all of the participants. The group is also then, right on the spot to offer encouragement having had group success defined as having the whole group complete the course. Optimally, each participant should have to attempt the course several times before they are successful; one session allows each participant two attempts at the course. It is best if the group is required to return on several occasions before group success is achieved. Each session is debriefed extensively with focus on the dynamics displayed by the group within the session.

**The Game of Life.** This activity is carried out in a forested area approximately 6m wide and 20m long. Within the area boundaries the trees are marked according to which ones are in and out of bounds. There are also numerous objects within the area which are provided to aid or distract in the goal of task completion. The participants are given several pieces of rope, one plank, one pole and a bucket as further aids or distractions. The participants are then informed that their task is to travel from one end of the area to the other without them or their equipment touching the ground on penalty of having to start over. At the discretion of the facilitator, participants may become blinded (blindfolded) or
dumb (silenced) in order to add challenge to the group. A time limit is given for completion however failure only means another try later on. Once again, each session is debriefed.

**Group Survival.** This group task involves the systematic assignment of value points to items important to survival as well as items that would be considered more as luxuries. The group is informed that they will be spending one night away from the established camp - ideally isolated on a small island. They are given a list of possible items that may be brought along with the corresponding value assignments and told they may take 500 points worth of supplies. The list is such that only the bare essentials for survival of the group may be purchased with the provided points. The selection of any luxury item such as cigarettes or sweets or music (all very costly) will degrade the comfort of the group. The group will be required to stay on the island from before dusk until some time after dawn the next day. Skills such as shelter building and fire building will have been covered before this event. In addition, information on safety and survival will have been supplied to the group. The group will be observed. Debrief will follow.

**The lady activity.** Lady is a reference to a log which is equal in length to the number of participants times the length of log that one of them can easily carry. The group is required to complete a variety of activities with the log without allowing it to touch the ground unless permission is given by facilitators. These activities include curls, bringing the log over ones head, passing lady back and forth between two sub-groups, walking with lady, running with lady, carrying a group member with lady and many other permutations limited only by imagination. The exercise is designed to be physically demanding and to stretch the participants physically and mentally. The crowning event in working with lady is to
have her standing on one end with a participant sat on top. Sessions with lady range from 15 to 30 minutes.

**The breakfast run.** This activity requires participants to search for and retrieve tokens hidden in a one kilometre radius. Clues are provided and a time limit is enforced. To be successful the group must split up and each subgroup must run to find "their" token. The tokens are then used to purchase the elements of a cooked breakfast. The exercise lasts approximately 0.5 hours

**Solo.** Participants were given essential survival gear and required to spend from noon until two hours after dawn of the second day in an isolated spot with no communication with other participants and limited communication with facilitators (safety checks only).
Appendix B

Programme One Specifics

The programme was 14 days and 14 nights in duration.

The first evening and the next 6 days were spent backpacking through mixed terrain. Poor snow and weather conditions added to the difficulty of the hiking.

A base camp was established on day 7. Sleeping bags and clothes were dried.

Days 8 and 9 involved a long and difficult hike to a mountain peak, just below which the group dug snow caves to spend the night.

Days 10 and 11 were spent on structured activities including the life game and the ropes course.

Day 12 morning was used to prepare the group for solo. The group was put out on solo from the afternoon of day 12 until the morning of day 14.

Day 14 departure

Programme Two Specifics

The programme was 6 days and 6 nights in duration.

The first evening involved a short backpack into camp one.

Days 1 and 2 required participants to hike up to a mountain peak with full packs. The group did not hike well together and spent the night on group survival. The group returned to camp one on day 2 and spent balance of day working with lady.

Day 3 was spent on the ropes course and other activities.

Day 4 morning was used for solo preparation and participants were put out on solo from the afternoon of day 4 until the morning of day 6.

Day 6 departure


**Programme Three Specifics**

The programme was 6 days and 6 nights in duration

The first evening involved a short backpack into camp one

Days 1 and 2 required participants to hike up to a mountain peak with full packs.

Day 3 the group returned to camp one in the morning and spent the afternoon on the ropes course and other structured activities. The night was spent on group survival.

Day 4 morning was used for solo preparation and participants were put out on solo from the afternoon of day 4 until the morning of day 6.

Day 6 departure
Appendix C

Participant consent form

Research Title: Focus group investigation of an Outdoor Adventure Intervention.

Researcher: Wes Bartel  tel. # (604) 762-8669.

Research Supervisor: Dr. Marvin Westwood  Associate Professor, Department of counselling psychology, University of British Columbia.  tel. # (604) 822-6457.

This project represents the masters thesis requirement of the Master of Arts degree in the department of counselling psychology at the University of British Columbia.

The purpose of this project is to examine an Outdoor Adventure intervention, in this case the Edge Wilderness Experience, from the perspective of the participants. Research information will be gathered in two ways. First, there will be written notes of observations kept by the leaders. Secondly, the group will be interviewed together at the end of the experience. This group interview will be tape recorded and the recording will be transcribed. All identifying information will be changed to ensure confidentiality of participants. The tape and the transcription will be destroyed within 5 years.

This project will require no additional time commitment on the part of the participants beyond that mandated by the court.

If there are any questions regarding this project they can be answered by the researcher.

The participant has the right to refuse participation in this research at any time without effecting participation in the Edge Wilderness Experience.

By signing this form in the space provided below, the participant is consenting to participate in this research project. The signature also signifies that the participant has received a copy of this consent form.

I ____________________ consent to participation in this research project.

Date ________________
Parent / guardian consent form

Research Title: Focus group investigation of an Outdoor Adventure Intervention.

Researcher: Wes Bartel  tel. # (604) 762-8669.

Research Supervisor: Dr. Marvin Westwood Associate Professor, Department of counselling psychology, University of British Columbia.  tel. # (604) 822-6457.

This project represents the masters thesis requirement of the Master of Arts degree in the department of counselling psychology at the University of British Columbia.

The purpose of this project is to examine an Outdoor Adventure intervention, in this case the Edge Wilderness Experience, from the perspective of the participants. Research information will be gathered in two ways. First, there will be written notes of observations kept by the leaders. Secondly, the group will be interviewed together at the end of the experience. This group interview will be tape recorded and the recording will be transcribed. All identifying information will be changed to ensure confidentiality of participants. The tape and the transcription will be destroyed within 5 years.

This project will require no additional time commitment on the part of the participants beyond that mandated by the court.

If there are any questions regarding this project they can be answered by the researcher.

The participant has the right to refuse participation in this research at any time without effecting participation in the Edge Wilderness Experience.

By signing this form in the space provided below, the parent / guardian is consenting to participate in this research project. The signature also signifies that the parent / guardian has received a copy of this consent form.

I ___________________ consent to ___________________'s participation in
parent / guardian                  participant's name
this research project.

Date _________________
Agency consent

Research Title: Focus group investigation of an Outdoor Adventure Intervention.

Researcher: Wes Bartel  tel. # (604) 762-8669.

Research Supervisor: Dr. Marvin Westwood  Associate Professor, Department of counselling psychology, University of British Columbia.  tel. # (604) 822-6457.

This project represents the masters thesis requirement of the Master of Arts degree in the department of counselling psychology at the University of British Columbia.

The purpose of this project is to examine an Outdoor Adventure intervention, in this case the Edge Wilderness Experience, from the perspective of the participants. Research information will be gathered in two ways. First, there will be written notes of observations kept by the leaders. Secondly, the group will be interviewed together at the end of the experience. This group interview will be tape recorded and the recording will be transcribed. All identifying information will be changed to ensure confidentiality of participants. The tape and the transcription will be destroyed within 5 years.

This project will require no additional time commitment on the part of the participants beyond that mandated by the court.

If there are any questions regarding this project they can be answered by the researcher.

The agency has the right to refuse participation in this research at any time without effecting participation in the Edge Wilderness Experience.

The Ministry of Attorney general's department: corrections branch consents to participation in this research project. The signature of the Local Director also signifies that the agency has received a copy of this consent form.

Directors Signature

Date