2010

Constraints to participation in an outdoor orientation program

Madeleine Hoden
West Virginia University

Follow this and additional works at: <https://researchrepository.wvu.edu/etd>

Recommended Citation

Hoden, Madeleine, "Constraints to participation in an outdoor orientation program" (2010). *Graduate Theses, Dissertations, and Problem Reports*. 2963.
<https://researchrepository.wvu.edu/etd/2963>

This Thesis is protected by copyright and/or related rights. It has been brought to you by the The Research Repository @ WVU with permission from the rights-holder(s). You are free to use this Thesis in any way that is permitted by the copyright and related rights legislation that applies to your use. For other uses you must obtain permission from the rights-holder(s) directly, unless additional rights are indicated by a Creative Commons license in the record and/ or on the work itself. This Thesis has been accepted for inclusion in WVU Graduate Theses, Dissertations, and Problem Reports collection by an authorized administrator of The Research Repository @ WVU. For more information, please contact researchrepository@mail.wvu.edu.

Constraints to Participation in an Outdoor Orientation Program

Madeleine Hoden

**Thesis submitted to the
Davis College of Agriculture, Natural Resources and Design
at West Virginia University
in partial fulfillment of the requirements
for the degree of**

**Master of Science
in
Recreation, Parks and Tourism Resources**

David Smaldone, Ph.D., Chair

Robert Burns, Ph.D.

Gregory Corio, M.S.

**Department of Recreation, Parks and Tourism Resources
Morgantown, West Virginia
2010**

Keywords: Recreation Constraints, Outdoor Orientation Programs, First Year Experience

ABSTRACT

Constraints to Participation in an Outdoor Orientation Program

Madeleine Hoden

Outdoor orientation programs have shown success in helping students transition to college life. Research has shown that outcomes for students participating in a first year seminar include achieving higher grade point averages, higher persistence, measured by completion of a degree, and taking less time to complete a degree program. This study used Crawford, Godbey, and Jackson's hierarchical model of structural, interpersonal and intrapersonal constraints to leisure. An online survey was used to measure constraints to participation in Adventure WV. Students tended to perceive structural constraints as the most common constraints. Results indicated that female students tended to perceive intrapersonal constraints more so than males. Students from out of state perceived more structural constraints than students from West Virginia. The constraint items reveal significant findings for male and female students, students with different socio-demographic backgrounds, and students from different parts of the United States. Recommendations were made to Adventure West Virginia to increase participation in an outdoor orientation program.

Keywords: recreation constraints, outdoor orientation programs, first year experience

Acknowledgements

I would first like to thank Dr. Brent Bell of University of New Hampshire who supplied guidance in the beginning stages of my research, for his expertise in First Year Experience Programs and for his and Jess Ross's (of Harvard) enthusiasm for this subject area.

This research would not have been possible without the support of Greg Corio and the Mountaineer Adventure Program who have so kindly let me be a part of their "family" for the past two years. I have an immense amount of respect and gratitude toward the program and its mission. This has been an amazing Graduate Assistantship!

I would also like to thank my committee members, Greg Corio for his expertise in higher education information and First Year Experience Programs and Dr. Robert Burns for his expertise in constraints research and research in general. Their advice and guidance have significantly helped this process. I would also like to thank my classmate, Rogelio, who took the time to help me with SPSS instruction and analysis.

This thesis and my time at WVU would not have been possible without the continuing support of my family and friends. My parents, sister and nephew have offered love and laughter in times of stress – I love you Mom, Dad, Lisa and Bryce! I appreciate my Brother, Buddy's, support as well. Even from Alaska he has been admirable in his work and play. And of course a big thanks to Josh, my best friend, who has been a wealth of support these past two years.

Most importantly, I would like to thank Dr. Dave Smaldone for allowing me to sit in that green chair once a week for two years and vent, for guiding me methodically through this grueling process, for spending endless hours on revisions and for being a great friend at the same time. Through his guidance and mentoring he instilled a passion for learning and recreation. To him I owe my sincerest admiration - Thanks Dr. Dave!

LIST OF TABLES

Table

1	Cronbach's Alpha for Constraint Types	27
2	Frequency of Gender.....	28
3	Percent of Ethnicities	28
4	Frequency and Percent of Caucasian and Non-Caucasian	29
5	Intrapersonal Constraint Means	30
6	Interpersonal Constraint Means	30
7	Structural Constraint Means.....	31
8	Sub-means for Constraint Types.....	31
9	Means for Male and Female Intrapersonal Constraints	33
10	Means for Male and Female Interpersonal Constraints	34
11	Means for Male and Female Structural Constraints.....	35
12	Means of Intrapersonal Constraints by Ethnicity.....	36
13	Means of Interpersonal Constraints by Ethnicity.....	38
14	Means of Structural Constraints by Ethnicity	39
15	Percent Respondents by State	41
16	Means of WV and Surrounding States versus All Other States and Structural Constraints	42
17	Means for WV and Non-WV States and Intrapersonal Constraints.....	43
18	Means for WV and Non-WV States and Interpersonal Constraints.....	44
19	Means for WV and Non-WV States and Structural Constraints.....	46

TABLE OF CONTENTS

LIST OF TABLES	iv
ACKNOWLEDGEMENTS	iii
CHAPTER 1: INTRODUCTION	1
Adventure West Virginia	3
Statement of the Research Problem	5
Research Questions	5
CHAPTER 2: REVIEW OF LITERATURE	7
Introduction	7
Experiential Education	8
Constraints	11
Disabilities and Constraints	13
Adolescent Recreation Constraints	15
Cultural Diversity and Constraints	17
Recreation Travel and Constraints	20
CHAPTER 3: METHODOLOGY	22
Study Area	22
Data Collection	23
Instrumentation	23
Testing of the Research Questions	24
Limitations	25
CHAPTER 4: RESULTS	27
Introduction	27
Description of Student Demographics	28
Means of Constraint Items	29
Subscales of Constraints	31
Comparisons of Male and Female Constraints	32
Comparisons of Caucasian and Non-Caucasian Constraints	36
Constraint Differences by State	40
Comparing WV and Surrounding States versus All Other States	42
Comparing WV versus All Other States	43

CHAPTER 5: DISCUSSION, IMPLICATIONS AND CONCLUSIONS	48
Introduction	48
Hierarchical Model.....	48
Discussion of Research Questions	51
R1: What are the demographics of students who do not participate in Adventure WV?	51
R2: What constraints do students perceive in regards to registering and participating in Adventure WV?.....	52
R3: Within the Hierarchical Model of Constraints, which factors – Intrapersonal, Interpersonal, or Structural cause the most constraints on non-participants?	53
R4: Are there differences in the perceptions of constraints for different socio-demographic groups (gender, ethnicity, place of residence)?.....	54
Gender and Constraints.....	54
Ethnicity and Constraints.....	55
Constraint by State of Residence	57
CONCLUSION.....	59
Implications.....	60
REFERENCES	62
APPENDIX.....	68
Survey Instrument	68
Example Adventure WV Syllabus	75

CHAPTER ONE

INTRODUCTION

Outdoor orientation programs have shown success in helping students transition to college life (Cuseo, 1991; Davis, 1992; Filder, 1986; Sidle & McReynolds, 1999; Bell, 2008). Researchers (Barefoot et al., 1998; Bell, 2006) often compare outdoor orientation programs to classroom orientation courses- both are considered First Year Experience courses. Outcomes for students participating in a first year seminar include achieving higher grade point averages (Barefoot et al., 1998; Bell, 2006), higher persistence to graduate, measured by completion of a degree (Barefoot et al. 1998), and taking less time to complete a degree program.

As outdoor orientation programs become more popular, what are the constraints of the students who do not participate? Do non-participants lack the skills and resources? Is the constraint a result of the non-participants' demographics? Answers to these questions may help West Virginia University's Adventure West Virginia Program in programming and marketing for years to come.

In 1987, the three models of constraints to leisure were developed by Crawford and Godbey. The three models of constraints they discussed were structural, interpersonal and intrapersonal. In this same article, the authors argued that constraints not only affect participation and nonparticipation but also preferences. Since then, methods to integrate these models have been introduced. Crawford, Godbey, and Jackson (1991) found that structural constraints were not the most important constraint, rather interpersonal and intrapersonal constraints were likely more important influences on leisure. This hierarchical model discussed by Crawford, Godbey & Jackson (1991) detailed structural, interpersonal and intrapersonal constraints to leisure and they also addressed how people may negotiate constraints. According

to this model, constraints are encountered hierarchically, first at the intrapersonal level, next at the interpersonal, and it is only when these constraints are overcome that structural constraints are encountered. This is true unless structural constraints are strong enough to inhibit the person from recreation, then the outcome is nonparticipation.

In more recent work, Lee and Scott (2009) used the hierarchical model to look at patterns of constraints in Japanese celebrity fans, as celebrities have become an important source of leisure and recreation for individuals everywhere. The results supported the Hierarchical Model by Crawford, Godbey and Jackson (1991) and they found that perceived constraints influenced negotiation strategies and frequency of participation.

Figure 1 describes the Hierarchical Model of constraints (Crawford et al., 1991). Intrapersonal constraints are initially present when an individual is deciding their leisure preferences. Interpersonal constraints are present when the individual has established a leisure preference but is confronted with a constraint (e.g. such as lack of a partner). Additionally, structural constraints are encountered at the end when the individual has overcome intrapersonal and interpersonal constraints. This model indicates "...that eventually leisure participation depends on the successful confrontation of each constraint level in turn, whereas nonparticipation can occur because of the operation of constraints at several stages of the process" (p. 314, Crawford et al., 1991). Thus, the parts of the model are linked together and intrapersonal constraints were conceptualized as being the most powerful constraint to participation.

Figure 1. A hierarchical model of leisure constraints. Crawford, et al. (1991) *Leisure Sciences*.

The purpose of this thesis is to uncover the interpersonal, intrapersonal and structural constraints to nonparticipation in Adventure West Virginia.

Adventure West Virginia

West Virginia University's Adventure West Virginia is an alternative first-year orientation course that has made impacts on the lives of the participants (Bell, 2008). This has been measured by analyzing participant reflection papers of past Adventure WV trips, an assignment required for the course, and determining the level of student engagement and course outcomes (Bell, 2008).

There are a variety of different types of First Year Experience courses offered on campus. In addition to Adventure West Virginia, there is the general University 101. In 2002, the WVU Faculty Senate approved University 101 as a graduation requirement—all students must earn a passing grade and complete the course. Adventure WV covers the requirements of University 101, and can be taken instead of the general University 101. All incoming freshman (and transfer students with fewer than twenty-nine credit hours) must complete University 101 during

their first semester at WVU (First Year Experience Website, 2008). According to the University 101 syllabus:

“The Purpose of University 101 is to provide first-year students with an understanding of the tools for making a successful transition from high school to college; to ensure they become an active, responsible member of the community; to help them acquire basic academic survival skills; and to help them develop into self-motivated, independent learners.” (First Year Experience Website)

According to the Adventure West Virginia website, Adventure WV’s mission is:

“The Adventure WV program was developed to orient and transition new students for life at WVU. This is accomplished through the use of wilderness to create opportunities for personal developments and friendships. The program is built on quality, fun, and care for the environment.”

Although Adventure West Virginia is becoming more popular with first year students, University 101 continues to be the most common orientation course for first semester freshman. In the fall of 2008, 2,935 students were enrolled in the general University 101 course. An additional 74 were enrolled in a residence hall (Lincoln Hall) specific course covering the same material as the general University 101 course (First Year Experience Office, 2008).

The increasing popularity of Adventure WV is shown by the fact that it has grown every year since its inception in 2003. In the summer of 2008 a total of 610 students participated in one of four different types of trips offered by Adventure WV throughout the course of the summer during the months of June through mid-August. The four trips included Explore, Backpack, Habitat and Odyssey and range from five to eight days in length. Explore is an eight-day trip starting and ending on campus at the Student Recreation Center. Explore includes rock climbing at Coopers Rock State Park, and travel to Blackwater Falls, Dolly Sods, and Seneca Rocks. A three-day backpacking excursion to the top of Spruce Knob and a day of whitewater rafting on the New River finishes out the week. Backpack is a five-day backpacking trek

throughout the Dolly Sods Wilderness Area. Habitat is an eight-day service experience in Monongalia County working on a Habitat for Humanity site with an additional day of travel and canoeing on Tygart Lake. Finally, Odyssey is a seven-day experience at the WVU Challenge Course with an additional travel day to Blackwater Falls, Dolly Sods and Seneca Rocks (Adventure West Virginia Website, 2008).

Within all of the summer trips there are “classroom” discussions held around a campfire (or living room for Habitat), covering topics such as programs and resources located on WVU’s campus, fears of coming to campus, and healthy decisions students should make while they are freshman at WVU. In the fall, students meet in August and then again in November to attend lectures on campus and learn about learning styles, test-taking skills, and remind them of upcoming papers and/or projects (Adventure West Virginia Website).

Statement of the Research Problem

Although Adventure West Virginia is currently operating at capacity, it is interested in the reasons why students do not participate. Whether the reason is price, experience (or lack thereof), fear of the outdoors, etc., it would be beneficial for Mountaineer Adventure Programs and West Virginia University officials to understand why today’s students choose to not sign up. The purpose of this study is to assess the constraints on freshman regarding decisions/reasons against participation in the summer Adventure West Virginia Outdoor Orientation Program. The thesis focused on answering the following research questions:

- 1. What are the demographics of students who do not participate in Adventure West Virginia Programs?**

- 2. What constraints do students perceive in regards to registering and participating in the Adventure West Virginia Program?**
- 3. Within the Hierarchical Model of constraints, which factors-- interpersonal, intrapersonal, or structural--cause the most constraints on non-participants?**
- 4. Are there differences in the perceptions of constraints for different socio-demographic groups (gender, ethnicity, place of residence, disability)?**

CHAPTER TWO

LITERATURE REVIEW

Introduction

Systematic research on leisure constraints began in the early 1980's. Constraints can range from disabilities (Burns, 2008) to costs and lack of recreation partners (Jackson, 2005) and more. However, there is currently very limited research that addresses constraints to participation in college orientation programs, or experiential education opportunities (Harlan, 2007). Since Adventure WV is a recreational-based program, it is appropriate to use theories from recreation research to address this study's research questions. Therefore, this study chose to use the Hierarchical Model of Constraints (Crawford et al., 1991) as the theoretical foundation to study constraints to participation in Adventure WV.

The purpose of this thesis was to assess the constraints of students who did not participate in a Freshman Year Experiential Education Orientation program at WVU. Since limited research is available for constraints and outdoor orientation programs, use of past research on constraints and recreation and linking the two, recreation and outdoor orientation programs, will be critical. Adventure West Virginia ties together the outdoors and college life and it appears that students who do register for this course and participate in the trip are usually interested in the program because of its outdoor recreation emphasis. Registered students usually have either past outdoor experiences or an interest in the outdoors. In this literature review, results of research on recreation constraints and outdoor orientation program constraints will be compared and synthesized.

Experiential Education

In the fall of 2001, Fears & Denke published an article about experiential education's popularity, claiming it "is an action to provide cool experiences and information" (page 5).

Fears & Denke (2001) said that these wilderness pursuit activities depend on location availability. Urban universities are generally unable to offer experiences like these, unless there is a willingness to travel to reach wilderness (or wilderness-like) settings. These outdoor programs not only facilitate students in an environment they are not accustomed to, which allows them to grow and explore, but the programs also offer connections between students and upperclassmen, whether they are leaders or volunteers on the excursions. Most research on experiential education programs requires the program to be at least one day in length with a base camp (for example—Odyssey and Habitat) or an extended trip (Wilderness and Explore).

The qualities of effective programs were discussed in Davis-Berman & Berman (1996). Effective programs tend to: 1) deal with academic concerns, 2) deal with social integration, and 3) combine academics and social living. They reported results from fifty (out of sixty-four universities sampled), and noted that the costs of the programs ranged from \$0 to \$1050, and the philosophies of the programs were most commonly social in orientation. According to Davis-Berman & Berman (1996), the wilderness represents a foreign environment with the presumption that a change in environment (outdoors instead of a classroom) would help facilitate personal change and growth in students (Davis-Berman & Berman, 1996).

These outdoor programs can trace their roots back to 1944, when Kurt Hahn established Outward Bound, which "placed students in active and adventuresome situations" (Flavin, 1996). The assumption of these programs is that if the students learned to engage and overcome the physical challenges, they could do the same with emotional, academic and moral challenges.

After experiencing a challenge during a trip on Adventure West Virginia, students are asked to metaphorically relate that challenge to the challenges relating to adjusting to college life. For example, when backpacking Spruce Knob, students are challenged with a steep and difficult hike to reach the top. At night during a classroom discussion they will be asked questions from the instructors such as, “What challenges did you face today?” and “Do you think you will be challenged during your first year on campus?” or “Was anyone fatigued while we were climbing?” and “Do you think you will be challenged while fatigued this semester?”

Student enrollment, and then subsequent persistence until graduation is immensely important in higher education. Without degree seeking student’s enrollment and persistence, colleges and universities would not be meeting their fundamental educational goals. Evaluations of experiential education programs have found that students report a “feeling of achievement” which can result in higher GPAs and better retention rates, and enhanced personal growth (Fears & Denke, 2001). Robinson, et al. (1996) claimed that orientation programs promote confidence in the institution and in the decision of attendance. In general, freshman orientation programs are commonly offered to students to help the transition from high school to college. The importance of these programs is found when students become integrated either academically or socially. Robinson, et al. (1996) also claimed social skills were found to be a factor important for student development as well as student and career success. With the use of orientation programs, colleges and universities are increasing retention by developing supportive social environments. Braxton (2000) stated that United States colleges and universities experience an average 25% attrition rate. Jacobs and Archie (2008) determined that the sense of community felt by students influences their return. Jacobs and Archie (2008) also identified several subgroups (fraternities, sororities, and clubs, as well as residence, ethnicity and employment) that

influence overall campus community. According to Beil and Shope (1990), involvement in these subgroups has been shown to influence intent to return.

Gass (1990) investigated a model with six academic and social factors that orientation programs should focus on when assisting students with their transition. These factors were: (a) positive peer group development, (b) positive interaction with faculty members, (c) development of career and/or major study plans, (d) strong interest in academics, (e) adequate preparation for college academics, and (f) compatibility with student expectations and college offerings. Gass then examined retention for three programs, a Summer Fireside Experience Program (SFEP), a Freshman Camp (FC) and a Control Group (CG). The SFEP consisted of a five-day adventure based orientation program. The FC was a four-day session at a residential camp setting consisting of group discussions with upper classman, question-and-answer sessions and skits about college life. The CG consisted of students from the freshman class that did not participate in either the SFEP or the FC. The Fireside Experience Program, when compared to the others, resulted in the highest retention after the first year (12 months). The potential cause of the higher retention was that the adventure program was specifically designed to focus on those six academic and social goals related to student retention noted above.

In 2003, Gass, Garvey & Sugarman investigated the influence of the same Summer Fireside Experience Program seventeen years later. The same individuals used for the previous research were interviewed via telephone (this study had a response rate of forty-seven percent, sixteen of the original thirty-four participants). Results indicated that years later, individuals reported that during the experience they were challenged with assumptions of self and others, they produced peer friendships (support network), and reported that there were long-term positive effects of the orientation program during undergrad and continuing after graduation.

Gass et al. (2003) noted from the results that the timing of the experience (summer before freshman year) supported the program's intensity. For example, if the experience had been during the fall semester, the positive effects of the program may not have been reported as high.

More recently, Bell (2008) investigated whether students differ in reported levels of social support by different types of pre-orientation experiences. The following programs were studied at Harvard and Princeton (institutions with 98% graduation rates) -- wilderness programs, community service programs, preseason athletics, or no pre-orientation participation -- with a total sample size of 1,601 freshman and sophomores. A twenty-four item questionnaire, the Campus-Focused Social Provision Scale (CF-SPS), was administered as a web survey. Results indicated that participants in wilderness orientation programs reported significantly higher levels of social provisions than the other programs in all six sub-factors of social support -- attachment, social integration, competence, reliable alliance, guidance and opportunity for nurturance. The results support the idea that first year experience courses, especially outdoor orientation programs, are assisting students with their transition to college life. In this case, it was through the development of social support.

Constraints Literature

Jackson (2005), a leader in the leisure constraint research, compiled a collection of research articles, overviews, critiques, and approaches all relating to the field. Jackson (2005) provided a brief definition of constraints, history of past models and concepts, and touched on the hierarchal model by Crawford, et al. (1991) that was previously discussed.

Jackson noted that constraint research started in the late 1980's with the construct of interest referred to as "barriers to recreation participation." Since then, this field has evolved

into studying “constraints to leisure”, a more conventional term allowing researchers to leave the participants to define their own leisure and their own choices to participate.

Constraint Negotiation was a construct developed from Scott’s (1991) and Kay and Jackson’s (1991) work. Jackson (2005) also noted that, “despite experiencing constraints, people do find ways to participate in and enjoy leisure, even if such participation and enjoyment may differ from what they would have been in the absence of constraints” (p. 6), thus some people are able to negotiate past their constraint. For instance, in Kay and Jackson’s (1991) study, the primary constraints were money and time, resulting in less participation. However, rarely did they find that participation ceased because of these two constraints.

A few definitions will be provided to better explain the following constructs related to constraints. Constraints have been defined as “inanimate obstacles or conditions which can sometimes be overcome through individual effort and initiative” (Samdahl, Hutchinson, Jacobson, 1999 p. 32). Negotiation has been defined as “successful navigation of those obstacles” (p. 32) and accommodation has been defined as “when people accept or adapt to existing conditions which are not challenged or changed” (Samdahl et al. 1999, p. 33). This section will review the relevant constraint studies.

In a recent study, Cederquist, Negley, & Bell (2006) uncovered that some agencies (such as outdoor adventure service providers and outdoor education services) have constraints to participation. These constraints included lack of awareness, inadequate staff training, lack of adaptive equipment, and/or administrative inertia (Cederquist et al. 2006).

Other studies have looked at students, and found that if students are constrained primarily by intrapersonal constraints, it is much harder for them to confront and overcome these, versus interpersonal and structural constraints (Crawford et al. 1991). One example of an intrapersonal

constraint would be the item *I am afraid of the outdoors*. Intrapersonal constraints usually possess internal conflicts with personal beliefs or fears. If faced with a fear of the outdoors, one may be much less likely to participate because of the emotional discomfort participating would cause. The less amount of emotional discomfort involved, the more likely someone would be willing to participate. In addition, changes by managers or institutions may be more viable. For example, if the primary constraint is found to be a structural constraint (such as a financial issue), since that is usually the last barrier to participation, the WVU Mountaineer Adventure Program could initiate solutions such as scholarships.

Disability & Constraints

Adventure West Virginia has few students registering for their programs that are mobility challenged. However, hearing impaired, visually impaired, and students with learning disabilities would all be provided help if they desired to attend and participate on a trip.

Adventure West Virginia has the ability to accommodate almost anyone with help from WVU Office of Disability Services, WVU Institutional Advancement, WVU President's Office, and the office of WVU Institutional Analysis and Planning. Although the field of outdoor recreation has historically not been very accommodating to people with physical challenges or disabilities, with the passing of the American Disabilities Act, National and regional Parks have been changing their trail systems and public restrooms to accommodate all users

(<http://www.nps.gov/policy/DOrders/DOrder42.html>, accessed March 16, 2010).

The average annual number of West Virginia University's student population with disabilities seeking help through the Office of Disability Services is approximately 1,250 out of nearly 28,000 total students. The office has five staff overseeing about 250 students each. Of the

students seeking assistance through the West Virginia University Office of Disability Services, about 65% of students have a learning disability; the other 35% suffer from sensory disabilities. Nine percent of all WVU students are said to have a disability, but only 4.5% percent seek help through the Office of Disability Services (J. Hess, WVU Office of Disability Services, personal communication, November 21, 2008). This percentage leaves a small amount of incoming freshman that have a disability and that might be interested in Adventure West Virginia. Of those, an even smaller percentage of students may have a disability that cannot be provided for while on the trip. By providing transportation and modification of activities, Adventure WV and the University could accommodate students with any type of disability, physical or psychological, and at the very least, allow them to participate in Habitat WV or Odyssey WV. This implies that although there are few students with disabilities, they should not feel constrained to participate in Adventure WV, as the interpersonal and structural support is available to all WVU students, if they are aware of those support mechanisms.

Currently, there appears to be no research (to the author's knowledge) linking disabilities (physical and sensory) and constraints to outdoor orientation programs. However, other studies have addressed disabilities and constraints in the broader recreation field. Burns (2007) looked at National Forest visitation and perceived constraints of recreationists in relation to the presence of a person with a disability in one's household and existence of an individual with a disability. The data was collected via telephone surveys in three western states. Results reported that forty percent of households that included someone with a disability were not constrained to visit the National Forest. Research indicated these households did not have interpersonal constraints because they have support of a companion. However, structural constraints were an issue, specifically transportation to National Forests, as well as lack of time. Results also indicated that

disability, age, and other demographic factors influenced their constraints. Results also determined that the existence of a disability in an individual was a much greater constraint than presence of a person with a disability within one's household.

Adolescent Recreation Constraints

In a 1992 study of fifth through eighth graders, Hultsman found that they were constrained from participating in organized recreation activities by three factors: 1) parents denying them permission, 2) lack of skills, and 3) lack of transportation. A significant percentage of the students (80%) claimed there was at least one activity they were interested in but did not join. The results indicated that constraints were seen differently depending upon gender and grade of school. For instance, seventh graders reported more constraints because of transportation, females reported higher constraints of parents denying them permission, and males reported belonging to many other activities. When viewed in relation to previous studies, the broader implications of this study on this age group are interesting. For example, in a 1974 article, Kelly reported that half of adult's 10 most important leisure activities were begun in childhood (Kelly, 1974). Thus if children are constrained, it potentially limits their leisure activities even into adulthood. The article by Hultsman (1992) suggested marketing efforts toward the early adolescent age group, for the purpose of informing them about the benefits and satisfactions derived from leisure activities and to continue this interest as they grow up (p. 280).

Caldwell & Baldwin (2005) also discussed the concept of adolescent leisure constraints, but from a developmental systems perspective. Constrained leisure is ultimately said to direct attention to factors that may intervene and modify interest development, choice, participation and experience. The perspective taken by Caldwell & Baldwin is that constraints, and the ability to

adapt and negotiate constraints, is a reciprocal and interactive process that involves personal and environmental factors.

Raymore et al. (1994) examined the relationship of intrapersonal, interpersonal and structural leisure constraints on self-esteem, gender, and socioeconomic status. Results indicated that adolescent females with low self-esteem reported higher levels of intrapersonal and total leisure constraints. According to the authors, youth who make sure all the negotiation elements are in place – the right friends, equipment and setting – are less likely to be constrained in their leisure experience (Raymore et al. 1994).

Elkins and Beggs (2007) studied whether differences existed in the use of negotiation based on the degree of constraint perceived and the level of participation in sports activities. Results indicated that there were differences in negotiation between regular participants in campus recreational sports and those who did not participate regularly. These differences included the use of time management, physical fitness, interpersonal coordination, and financial strategies. This indicates that an individual's ability to negotiate leisure constraints plays an important role in participation in campus recreational sports. By addressing different constraints and negotiation strategies, campus recreational sports providers may be able to meet the needs of students and increase levels of participation. Ultimately, one must negotiate constraints in order to increase the likelihood of meaningful participation and have the opportunity for a leisure experience (Elkins & Beggs, 2007).

According to Jackson and Rucks (1995), research to date has supported the validity of the concept of leisure constraints negotiation. But it has not yet provided systematic or comprehensive evidence of the range of strategies that people adopt to negotiate constraints, or ways in which key components of the constraints negotiation process might be interrelated.

Jackson and Rucks (1995) sought to identify this range of strategies by surveying students in grades seven through nine about their constraints and negotiations of those constraints. The results indicated that most students' responses included constraints that had connected issues of commitment and time. The above articles contribute to a preliminary picture and understanding of the process of leisure constraints negotiation in adolescents.

Cultural Diversity & Constraints

Figure 2 shows the race and ethnicity of the 2009-2010 freshman class reported as of October 15, 2007 at West Virginia University. International students have been placed under the category Non-resident aliens.

Women (2,110)	46%
Men (2,479)	54%
American Indian/Alaskan Native (5)	.1%
International (45)	.9%
Black, Non-Hispanic (157)	3.4%
Asian (67)	1.9%
Native Hawaiian or Pacific Islander (5)	.1%
Two Or More Races (69)	.1%
Hispanic (139)	3.0%
White (4,082)	88.9%

Figure 2. Break down of Freshman race and ethnicities. WVU Institutional Statistics.
<http://www.wvu.edu/~planning/instreps.html>

According to this information, only about ten percent of this freshman class was of other race or ethnicity besides white. This is a low percentage when compared to the US population that is growing in diversity. According to Cordell, Betz & Green (2002) the American population by 2020 will increase to 325 million. The Caucasian population is expected to decrease to fifty percent from seventy-six percent in 2002. The African-American population will increase from twelve to fifteen percent, and Hispanic populations will rise from nine percent

to twenty-one percent. According to Bell and Hurd (2006); “ethnicity has a significant impact on leisure including activity choices, frequency, location, types of activities, and how an individual participates” (p. 28). It is important for leisure professionals to consider and provide diverse programs (Bell & Hurd, 2006).

In a 2001 study, Johnson, Bowker and Cordell examined twelve constraints related to health, facilities, socioeconomic standing, and how they related to participation in outdoor recreation. As part of the National Survey on Recreation and the Environment, approximately 17,000 people over sixteen years of age were surveyed via telephone interviews. Fourteen reasons for not participating in outdoor recreation were presented to the respondents. The fourteen reasons included: personal health reasons, physically-limiting disability, house-hold member with disability (personal health constraints were later combined into a single health constraint), inadequate information, inadequate facilities, poorly maintained areas, safety concerns, not enough money, not enough time, inadequate transportation, no companion, outdoor pests in activity areas, crowded activity areas, and pollution in activity areas. The list included intrapersonal, interpersonal and structural constraints. Results indicated that women were most likely to feel constrained. Of the reasons for nonparticipation, women noted they were constrained primarily by personal safety concerns, inadequate facilities and information, insufficient funds and outdoor pests. This article indicated that race did not appear to be a significant factor in determining if individuals felt constrained in the pursuit of their favorite outdoor recreation activity (Johnson, et al., 2001).

Harlan (2007) researched the barriers that keep people of racially diverse backgrounds from participating in adventure education experiences offered through college and universities. Ultimately, he found many of the common constraints such as lack of information and proximity

were present, along with “cultural variables” like discrimination, communication gaps, lack of culturally sensitive programming and social group inclusion. Results from a focus group and follow-up interviews indicated that communication gaps, community/social group inclusion and lack of culturally sensitive programming were the key constraining issues for international students at Geneva College.

Similarities in results were found by Li (2006) who studied culturally sensitive programming. Li (2006) noted that little research is being done in the area of graduate student ethnic groups and leisure activity. At Pennsylvania State University, the number of Chinese students is increasing, and unfortunately Li noted that the concern for Chinese student leisure participation is slim. Also, Chinese students were more likely to have different interests for leisure than American students (Li, 2006). The findings from Li (2006) indicated that Chinese student’s main constraints were similar to American student’s constraints, including time, money, leisure partners and leisure resources.

In these studies, constraint similarities and differences were noted that were related to cultural diversity. Johnson (2001) found that women were most likely to feel constrained by safety concerns, inadequate facilities and information, insufficient funds and outdoor pests. Similarly, Li’s (2006) findings indicated that Chinese student’s main constraints were similar to American student’s constraints including time, money, leisure partners and leisure resources. This suggests that American students, female students and Chinese students are faced with similar structural constraints. Conversely, international students at Geneva College were faced with key constraining issues such as communication gaps, community/social group inclusion and culturally sensitive programming (Harlan, 2007). This suggests that interpersonal constraints were leading causes of non-participation for international students.

This previous research examined cultural constraints to participation in recreation settings. However, we still lack clear understanding of how and to what extent students are constrained from participating in an Outdoor Orientation Program and how this may differ depending on socio-demographic factors.

Recreation Travel and Constraints

Nearly half of the WVU freshman class is from out of state. Although many are from states surrounding West Virginia, there are students enrolled from all fifty states (personal communication, WVU Visitors Resource Center Representative, April 13, 2010). Although Morgantown, WV is fairly large and growing, and is close to the majority of the US population (East Coast), it does not have a major airport, and has minimal transportation options and services. Students coming from far away distances must be motivated, prepared and plan far in advance in order to attend an Adventure WV program.

When Covelli (2006) reported on visitor constraints to visitation to National Forests in the Pacific Northwest, moderately constraining items included “*Have no way to get there*”, “*...is too far away*”, and “*There is lack of Public Transportation to ...*”. All these items are related to the issue of travel distances between home and recreation sites. Distance from recreation location and transportation to sites are commonly researched constraints (Covelli, 2006; Johnson et al. 2001; Bell & Hurd, 2006; Raymore et al. 1994; Hultsman, 1992) and results indicate that many recreation destinations are generally located in out of the way areas (Iso-Ahola, 1983).

Previous research does indicate that recreation destinations may be in rural settings or not particularly close to urban areas. Outdoor Orientation Programs may start on college campuses, most of which are not in rural “out-of-the-way” settings. In this case, WVU is located at the

corner of two connecting, and major east coast interstates, I-79 and I-68. In addition Morgantown, WV is within a day's drive of more than half of the US population. Therefore from a travel perspective, it appears WVU is conveniently situated.

Orientation Programs are vital to persistence in college students. Outdoor Orientation programs help to educate and prepare students well for their college career (Gass, 1991). Since there is no previous research on constraints to participation in an outdoor orientation program, the Hierarchical model of leisure constraint was used to provide the theoretical foundation for research for this thesis. Previous research indicates that many types of groups deal with recreation constraints, including those with disabilities, adolescents, adults, females, individuals from multicultural backgrounds, and those from seemingly far distances to recreation opportunities. This thesis seeks to address a gap in knowledge by examining constraints to college student participation in an outdoor orientation program at West Virginia University.

CHAPTER 3

METHODOLOGY

Study Area

The study site was West Virginia University, in Morgantown, WV. West Virginia University is the state's land grant institution with an over-all student enrollment of 27,115 as of Fall 2007 (Audra Wason, WVU Visitors Resource Center, personal communication, November 21, 2008). Approximately half of the 2009 incoming freshman class was from out-of-state. Online surveys were distributed to students via MIX account email addresses obtained from Student Accounts and dispersed by StudentVoice. One follow up email with the survey link was sent approximately 10 days after the initial survey email. As an incentive, participants of the survey were able to enter themselves into a drawing for a \$25 dollar gift certificate.

The online survey link was sent to 5,266 students, and a total of 471 responded. Thus the response rate was 8.9%. Although low, this number does allow for statistical tests to be performed with reasonable assumed validity. According to Salant and Dillman, (1994) for a total population with approximately 5,000 members (roughly the size of the WVU freshman class), a researcher must have a sample size of approximately 360. This number allows for a $\pm 5\%$ sampling error with a ninety-five percent confidence interval (Salant & Dillman, p.55). In regards to the low response rate, Sheehan (2001) found that since the Internet's inception in 1986, online survey responses have significantly dropped, as there is no longer any "novelty" to filling out an online survey (Sheehan, 2001). The same article examined the number of questions or length of survey and its determinant on response rate. Sheehan compared thirty-one different academic online research studies with various numbers of questions ranging from five to ninety-six, and found that response rates were all seemingly low and number of questions was

not a factor. In addition, salience in the topic and incentives did not increase response rates (Sheehan, 2001).

Data Collection

For financial, time and convenience reasons, it was decided that the least problematic form of distribution of the survey was to be digitally. It was much less expensive and time consuming than the original proposal of attending twenty-some orientation classes or training individual instructors to disperse the survey. In addition, the original proposal to attend and survey U101 classes was prohibited by the directors of University 101. However, in person surveying of U101 classes may have yielded a higher response rate.

StudentVoice is a private company hired by WVU Student Affairs to assist in research of the effectiveness of its programs. The Mountaineer Adventure Program falls under the realm of Student Affairs, so this study used StudentVoice to administer the survey. Results were compiled online by StudentVoice, put into an Excel spreadsheet, and then imported into SPSS for further analysis.

Instrumentation

The following types of demographic questions were included in the final survey: gender, place of residence and ethnicity. The remaining questions addressed reasons for not participating in Adventure WV and include the following subcategories of constraints (as identified by previous research): structural, interpersonal and intrapersonal. The following constraints for not participating were assessed:

- Intrapersonal: Fears, Preferences, Insecurities, Handicapped/Disabled, Confidence, Lack of Skills

- Interpersonal: Dislike the Outdoors, Family and Friends impacts, Cultural reasons, Prejudice
- Structural: Summer Job, Summer Vacation, Too Expensive, Didn't know about the program, Distance from home, Recreation opportunities, Program was full, Credits, Other obligations

The above questions were scaled on a Likert Scale (from 1-5). The number one category represented "I strongly disagree with this statement", and the number five category represented a category of "strongly agree." By using the previously established hierarchical model, the various constraint levels of the students were determined. Descriptive statistics including means, medians, standard deviations, and frequency distributions were reported for all relevant data. Different groups were compared using the appropriate statistical tests. When determining significant differences, the p-value was significant at $p < 0.05$.

More specifically, the research questions were analyzed in the following way:

1. What are the demographics of students who do not participate in Adventure West Virginia Programs?

A number of socio-demographic variables were analyzed, including age, gender, ethnicity, and place of residence. In order to provide a sample profile of the non-participants, frequencies, valid percents, means, and medians were calculated as appropriate.

2. What constraints do students perceive in regards to registering and participating in the Adventure West Virginia Program?

The constraint items were analyzed and examined by overall mean score for each item. Along with the mean score, valid percents were reported.

3. Within the Hierarchical Model of constraints, which factors-- interpersonal, intrapersonal, or structural-- cause the most constraints on non-participants?

The constraint items were analyzed and examined by overall mean score for each item. Each factor was summed, and a mean score calculated to determine the factor causing the greatest constraint. Along with the mean score, valid percents were reported.

4. Are there differences in the perceptions of constraints for different socio-demographic groups (gender, ethnicity, place of residence, disability)?

The socio-demographic groups were measured by comparing mean scores. Gender was tested using an independent samples t-test. The remaining two categories (ethnicity, place of residence) will be tested using sample t-tests as well.

Limitations

The survey was sent to 5,266 freshman students in their first semester (Fall 2009) of college and 471 responded, a response rate of 8.9%. Given that the response rate was generally low, caution is advised when interpreting the data and generalizing results. Results do not necessarily apply to other freshman (past, future) at WVU, or at other universities.

Limitations were also present during the data collection stage. One limitation was that the survey was an email survey that was sent to students MIX accounts. This may have impacted the response rate of students who choose not to use or check their MIX account. The length may have also been a limitation as it was only available for eleven days in November 2009.

The incentive of being entered into a drawing for numerous twenty-five dollar gift cards could have been a limitation, as some students may have completed the survey just to receive the incentive, or some may have preferred a clearer description and guarantee of incentive. Internet users and college students alike are frequently over-surveyed (Porter, et al., 2004).

When students finished the survey, if they wanted to be entered into the incentive drawing, they were able to enter their email into a blank at the end. StudentVoice collected those email addresses in a excel spreadsheet, separate of their survey answers. Of those that completed the survey and entered their email into the survey, five were randomly chosen as winners. Four winners redeemed their twenty-five dollar gift card and one did not. To remain anonymous an email was sent to the winners, in which their email addresses were blind-copied, alerting them of their winnings. Another email was sent later as a follow up to remind winners.

Finally, the sample only consisted of freshmen non-participants of Adventure WV, not all freshmen. This study did not include questions related to negotiation strategies. One of the hopes of this thesis was to report on disabilities, but the survey instrument did not include a question in the demographics section referring to presence of a disability. The survey did ask students if they were constrained by disability, however presence of a disability and constraint because of a disability are two separate things.

CHAPTER 4

RESULTS

The results of the data analysis are discussed in the following chapter. A Cronbach's coefficient alpha test was first run to determine the reliability of the constraint scale and subscales. Results are reported first for the demographics of the participants of the study. A frequency of all the means of all constraints follows. Sub-means for each constraint subscale are reported as well for all items (Interpersonal, Intrapersonal and Structural). An independent sample t-test was then used to determine statistical significance and means when comparing constraints by gender, state/region, or ethnicity.

The reliability of the three constraint constructs was found to be satisfactory when assessed using Cronbach's alpha. This means that all three subscales (Interpersonal, Intrapersonal and Structural constraints) are internally consistent. The Cronbach's coefficient alpha for each subscale surpassed the cut-off point (.70) recommended by Nunnally (1978) and Bagozzi (1980). The Cronbach's alpha values for constraint subscales were .9304 (for intrapersonal), .8833 (for interpersonal) and .7293 (for structural). These results suggest that the proposed measurement model is suitable for further analysis. See Table 1.

Table 1
Cronbach's Alpha for Constraint Types

Constraint Type	Cronbach's alpha (α)*
Intrapersonal	.9304
Interpersonal	.8833
Structural	.7293

*cut-off = .70

Description of Student Demographics

Of the 471 respondents, 298 (63.3%) were female, the remaining 173 (36.7%) were male. See Table 2. A small amount of those surveyed (10; 2.1%) responded that they were not US citizens. A total of 438 individuals (93%) labeled themselves as Caucasian and 31 (6.6%) labeled themselves as either American Indian or Alaska native, Asian, Black or African American, Native or Pacific Islander, Hispanic/Latino, other or a collection of different ethnicities. All these ethnicities were later grouped as “Non-Caucasian.” An even smaller amount of those surveyed (10; 2.1%) responded that they were not US citizens (See Table 3 and Table 4).

Table 2
Frequency of Gender

		Frequency	Percent
Valid	Male	173	36.7
	Female	298	63.3
	Total	471	100.0

Table 3
Percent of Ethnicities

	<i>N</i>	<i>Percent</i>
Indian	1	.2
Asian	4	.9
Black	7	1.5
Hawaiian	1	.2
Hispanic	3	.6
White	438	93.4
Multi-Ethic background	14	3.0
Jewish	1	.2
Total	469	100.0

Table 4
Frequency and Percent of Caucasian and Non-Caucasian

	<i>N</i>	<i>Percent</i>
Caucasian	438	93.0
Non-Caucasian	31	6.6
Total	469	99.6
Total	471	100.0

Means for Constraint Items

Approximately 316 students completed the remaining survey after responding “no” to the question, “Did you participate in the Adventure WV freshman orientation program.” The remaining 155 either did not complete the survey or responded yes to “Did you participate in the Adventure WV freshman orientation program.” Further analysis included only the 316 students noted above who responded that they did not participate in Adventure WV. Respondents were asked about their perceived constraints they experienced related to participating in Adventure WV. From a list of 38 constraint items, respondents were asked their level of agreement related to whether each item was a constraint to their participation. Each of the constraints items fell under the umbrella of one of three broad subscales, intrapersonal, interpersonal, and structural constraints. Mean scores of each item were tabulated to determine which items were most and least constraining. The results showed that the two items that were rated as most constraining were both structural constraints, *I had a summer job* (m=3.93, on a five point scale) and *I did not have enough time this summer* (m=3.79). See Tables 5-7 below.

Table 5
Intrapersonal Constraint Means

	<i>N</i>	<i>Mean</i>
I prefer other forms of recreation.	316	2.77
I am afraid of heights, and would not like the challenge course.	316	2.34
I am afraid of being embarrassed.	316	2.28
I am not confident with my body image.	316	2.20
I am afraid of rock climbing.	316	2.18
I am afraid of whitewater rafting.	316	2.16
I am insecure about my outdoor recreation abilities.	316	2.13
Adventure WV is too physically challenging.	316	1.99
I am afraid of getting hurt.	316	1.90
I feel that I am physically not in shape to participate in an Outdoor Orientation Program.	316	1.89
I lack the skills required to participate in an Outdoor Orientation Program.	316	1.89
I am afraid of backpacking.	316	1.77
I have poor health.	316	1.69
I am afraid of the outdoors.	316	1.66
I feel that I am unable to participate because I am handicapped or disabled.	316	1.41

Scale was 1 = “strongly disagree” to 5=”strongly agree”

Table 6
Interpersonal Constraint Means

	<i>N</i>	<i>Mean</i>
I did not sign up because I don't have time outside of friends and family.	313	2.34
I am not interested in an outdoor orientation program.	313	2.32
My friends did not sign up for 'Adventure WV,' so I decided to not sign up.	313	2.25
I dislike the outdoors.	313	1.84
I did not sign up because I don't enjoy recreating with other people.	313	1.64
I am afraid of prejudice from other recreationists based on my racial/ethnic identity.	313	1.35
I did not sign up because of cultural reasons.	313	1.35
My friends would disapprove of me if I spent a week in the outdoors.	313	1.31
I did not sign up because I thought other students of my same race would not sign up.	313	1.29
My family would disapprove of me if I spent a week in the outdoors.	313	1.28
I did not sign up because people in my own cultural group don't accept my outdoor recreation activities.	313	1.27

Scale was 1 = “strongly disagree” to 5=”strongly agree”

Table 7
Structural Constraint Means

	<i>N</i>	<i>Mean</i>
I had a summer job.	309	3.93
I did not have enough time this summer.	309	3.79
I had other obligations that restrained me from participating.	309	3.40
It was summer vacation and I did not want to think about school.	309	3.27
The cost of the trip was too expensive.	309	3.03
The start of the Adventure WV program (on campus) was too far of a distance from my hometown.	309	2.42
I did not need the credits.	309	2.29
I did not like the recreation opportunities offered during the programs.	309	2.14
I am afraid of encounters with undesirable or dangerous animals and insects.	309	2.14
I did not even know about the program until I arrived on campus.	309	2.10
I didn't sign up because my major requires a different U101 course.	309	2.10
I did try to sign up but the program was full.	309	1.75
Scale was 1 = "strongly disagree" to 5="strongly agree"		

Subscales of Constraints

The Structural (m=2.70) constraint subscale was the most constraining subscale when compared with intrapersonal (2.02) and interpersonal (1.66) constraints. See Table 8.

Table 8
Sub-means for Constraint Type

	<i>Intrapersonal</i>	<i>Interpersonal</i>	<i>Structural</i>
N	316	313	309
Mean	2.0167	1.6581	2.6966
Median	1.8667	1.5455	2.7500

Comparison of Male and Female Constraints

A series of independent sample t-tests were conducted to determine if there were significant differences in the mean scores for the 38 constraints items between male and female students. The results showed eighteen significant mean score differences; twelve in the intrapersonal domain, two in the interpersonal domain, and 4 in the structural domain.

Twelve statistically significant relationships were noted in the intrapersonal constraints domain, with seven of these pertaining to fears of the outdoors, injury, types of recreation and embarrassment. Female respondents reported being more constrained than males in each of these cases. Female means were generally higher than male scores for all intrapersonal constraints. In addition, on the following intrapersonal constraints items, female respondents reported statistically significant higher scores than males on the following items, *I am afraid of the outdoors, I am insecure about my outdoor recreation abilities, I feel that I am physically not in shape to participate in an outdoor orientation program, I lack the skills required to participate in an outdoor orientation program I am afraid of getting hurt, I am afraid of rock climbing, I am afraid of backpacking, I am afraid of whitewater rafting, I am afraid of heights and would not like the challenge course, Adventure WV is too physically challenging, I am not confident with my body image, and I am afraid of being embarrassed.* See Table 9.

Table 9
Means for Male and Female Intrapersonal Constraints

	<i>Male</i> (<i>n</i> =105)		<i>Female</i> (<i>n</i> =211)		<i>t</i>	<i>p</i>
	<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>		
I am afraid of the outdoors.	1.40	.754	1.79	1.017	-3.81	.000
I have poor health.	1.57	.918	1.75	.974	-1.595	.112
I prefer other forms of recreation.	2.70	1.287	2.81	1.135	-.812	.417
I am insecure about my outdoor recreation abilities.	1.68	.935	2.35	1.223	-5.43	.000
I feel that I am unable to participate because I am handicapped or disabled.	1.29	.756	1.46	.977	-1.790	.075
I feel that I am physically not in shape to participate in an Outdoor Orientation Program.	1.52	.942	2.08	1.213	-4.45	.000
I lack the skills required to participate in an Outdoor Orientation Program.	1.58	.959	2.05	1.154	-3.573	.000
I am afraid of getting hurt.	1.54	.910	2.08	1.173	-4.44	.000
I am afraid of rock climbing.	1.85	1.175	2.34	1.305	-3.272	.001
I am afraid of backpacking.	1.39	.753	1.96	1.092	-5.39	.000
I am afraid of whitewater rafting.	1.74	1.083	2.36	1.398	-4.32	.000
I am afraid of heights, and would not like the challenge course.	1.94	1.216	2.55	1.455	-3.88	.000
Adventure WV is too physically challenging.	1.60	.947	2.18	1.161	-4.75	.000
I am not confident with my body image.	1.79	1.124	2.41	1.255	-4.42	.000
I am afraid of being embarrassed.	1.82	1.133	2.50	1.336	-4.75	.000

Scale was 1 = "strongly disagree" to 5 = "strongly agree"

For interpersonal constraint items, statistically significance differences were noted for two of the eleven items: *I am not interested in an outdoor orientation program* ($t=-2.32$, $p=.021$)

and *I dislike the outdoors* ($t=-2.168$, $p=.031$). Females reported higher means for both items ($m=2.44$; 1.94 respectively) than their male counterparts ($m=2.09$; 1.64 respectively). See Table 10.

Table 10
Means for Male and Female Interpersonal Constraints

	<i>Male</i> ($n=104$)		<i>Female</i> ($n=209$)		<i>t</i>	<i>p</i>
	<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>		
My friends did not sign up for 'Adventure WV,' so I decided to not sign up.	2.35	1.298	2.21	1.209	.944	.346
My friends would disapprove of me if I spent a week in the outdoors.	1.35	.773	1.29	.609	.677	.499
My family would disapprove of me if I spent a week in the outdoors.	1.22	.482	1.32	.711	-1.39	.166
I did not sign up because I don't have time outside of friends and family.	2.35	1.229	2.34	1.211	.044	.965
I did not sign up because I don't enjoy recreating with other people.	1.63	.956	1.64	.961	-.057	.955
I am not interested in an outdoor orientation program.	2.09	1.175	2.44	1.289	-2.322	.021
I dislike the outdoors.	1.64	1.042	1.94	1.196	-2.168	.031
I am afraid of prejudice from other recreationists based on my racial/ethnic identity.	1.25	.650	1.40	.700	-1.838	.067
I did not sign up because of cultural reasons.	1.33	.703	1.35	.733	-.313	.755
I did not sign up because I thought other students of my same race would not sign up.	1.28	.717	1.29	.677	-.157	.875
I did not sign up because people in my own cultural group don't accept my outdoor recreation activities.	1.24	.566	1.28	.659	-.555	.580

Scale was 1 = “strongly disagree” to 5= “strongly agree”

Four structural constraint items were found to have statistically significant differences when comparing females to males: *The cost of the trip was too expensive* (female $m=3.23$, male $m=2.64$), *I did not like the recreation opportunities offered during the programs* (female $m=2.25$, male $m=1.90$), *I am afraid of dangerous encounters with undesirable animals and insects* (female $m=2.31$, male $m=1.77$) and *I did not sign up because my major requires a different U101 course* (female $m=1.93$, male $m=2.45$). Females reported higher constraints for the first three items listed than their male counterparts. Males reported a higher constraint mean on the item *I did not sign up because my major requires a different U101 course* than their female counterparts. See Table 11.

Table 11
Means for Male and Female Structural Constraints

	<i>Male</i> (<i>n</i> =102)		<i>Female</i> (<i>n</i> =207)		<i>t</i>	<i>p</i>
	<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>		
I had a summer job.	4.05	1.438	3.86	1.495	1.03	.303
It was summer vacation and I did not want to think about school.	3.14	1.542	3.33	1.410	-1.05	.293
The cost of the trip was too expensive.	2.64	1.184	3.23	1.326	-3.81	.000
I did not even know about the program until I arrived on campus.	2.23	1.495	2.04	1.240	1.06	.289
The start of the Adventure WV program (on campus) was too far of a distance from my hometown.	2.48	1.340	2.40	1.288	.534	.594
I did not like the recreation opportunities offered during the programs.	1.90	.949	2.25	1.099	-2.88	.004
I did not need the credits.	2.41	1.172	2.23	1.134	1.297	.196
I did not have enough time this summer.	3.72	1.315	3.83	1.217	-.762	.447
I am afraid of encounters with undesirable or dangerous animals and insects.	1.77	.974	2.31	1.278	-4.11	.000

I did try to sign up but the program was full.	1.69	1.062	1.78	1.014	-.734	.463
I didn't sign up because my major requires a different U101 course.	2.45	1.453	1.93	1.185	3.13	.002
I had other obligations that restrained me from participating.	3.20	1.414	3.50	1.314	-1.879	.061

Scale was 1 = “strongly disagree” to 5=”strongly agree”

Comparison of Caucasian/Non-Caucasian Constraints

A series of independent sample t-tests were conducted to determine if there were significant differences in the mean scores for the 38 constraints items between Caucasian and Non-Caucasian students. The results showed four significant mean score differences: one in the intrapersonal domain, one in the interpersonal domain, and two in the structural domain.

A statistically significant difference was found between Caucasian and non-Caucasian respondents for only one intrapersonal constraint item, *insecurity of recreation ability* ($t=2.93$, $p=.006$). Caucasians ($m=2.17$) reported higher means than their counterpart Non-Caucasians ($m=1.65$). Refer to Table 12.

Table 12
Means of Intrapersonal Constraints by Ethnicity

	<i>Caucasian</i> ($n=292$)		<i>Non-Caucasian</i> ($n=23$)		<i>t</i>	<i>p</i>
	<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>		
I am afraid of the outdoors.	1.66	0.958	1.61	0.941	0.27	0.788
I have poor health.	1.69	0.946	1.78	1.126	-0.45	0.651
I prefer other forms of recreation.	2.76	1.186	3	1.168	-0.93	0.351
I am insecure about my outdoor recreation abilities.	2.17	1.197	1.65	0.775	2.93	0.006

I feel that I am unable to participate because I am handicapped or disabled.	1.41	0.925	1.3	0.765	0.556	0.579
I feel that I am physically not in shape to participate in an Outdoor Orientation Program.	1.92	1.161	1.61	1.118	1.233	0.219
I lack the skills required to participate in an Outdoor Orientation Program.	1.92	1.123	1.57	0.945	1.479	0.14
I am afraid of getting hurt.	1.9	1.123	1.96	1.107	-0.244	0.807
I am afraid of rock climbing.	2.18	1.277	2.22	1.38	-0.141	0.888
I am afraid of backpacking.	1.78	1.035	1.65	0.935	0.577	0.564
I am afraid of whitewater rafting.	2.15	1.32	2.3	1.521	-0.543	0.587
I am afraid of heights, and would not like the challenge course.	2.37	1.409	2.13	1.392	0.774	0.44
Adventure WV is too physically challenging.	2	1.129	1.91	1.125	0.342	0.733
I am not confident with my body image.	2.22	1.244	2	1.279	0.824	0.41
I am afraid of being embarrassed.	2.29	1.322	2.09	1.164	0.731	0.466

Scale was 1 = “strongly disagree” to 5=”strongly agree”

Using an independent sample t-test, a statistically significant difference was found between Caucasian (m=1.89) and non-Caucasian (m=1.32) respondents for the interpersonal constraint item *I dislike the outdoors* (t=4.07, p=.000). See Table 13.

Table 13
Means of Interpersonal Constraints by Ethnicity

	<i>Caucasian</i> (<i>n</i> =290)		<i>Non-Caucasian</i> (<i>n</i> =22)		<i>t</i>	<i>p</i>
	<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>		
My friends did not sign up for 'Adventure WV,' so I decided to not sign up.	2.28	1.246	1.95	1.133	1.186	0.237
My friends would disapprove of me if I spent a week in the outdoors.	1.31	0.667	1.27	0.703	0.278	0.782
My family would disapprove of me if I spent a week in the outdoors.	1.27	0.615	1.45	0.963	-0.87	0.391
I did not sign up because I don't have time outside of friends and family.	2.35	1.22	2.27	1.162	0.294	0.769
I did not sign up because I don't enjoy recreating with other people.	1.62	0.956	1.86	0.99	-1.13	0.259
I am not interested in an outdoor orientation program.	2.36	1.268	1.86	1.082	2.04	0.052
I dislike the outdoors.	1.89	1.178	1.32	0.568	4.073	0
I am afraid of prejudice from other recreationists based on my racial/ethnic identity.	1.33	0.629	1.59	1.221	-0.988	0.334
I did not sign up because of cultural reasons.	1.32	0.673	1.73	1.162	-1.63	0.116
I did not sign up because I thought other students of my same race would not sign up.	1.28	0.666	1.41	0.959	-0.85	0.396
I did not sign up because people in my own cultural group don't accept my outdoor recreation activities.	1.26	0.599	1.41	0.959	-0.73	0.476

Scale was 1 = “strongly disagree” to 5=”strongly agree”

Using an independent sample t-test, statistically significant differences were found between Caucasian and non-Caucasian respondents for the following structural constraint items, *It was summer and I did not want to think about school* ($t=2.46$, $p=.015$), and *I did not even know*

about the program until I arrived on campus ($t=-2.90$, $p=.008$). Caucasians ($m=3.99$) reported higher means than their counterpart Non-Caucasians ($m=3.27$) for *did not want to think about school*. However, Non-Caucasians ($m=3.14$) reported higher means for *knowledge of trip before arrival on campus* than Caucasians ($m=2.01$). Refer to Table 14.

Table 14
Means of Structural Constraints by Ethnicity

	<i>Caucasian</i> ($n=286$)		<i>Non-Caucasian</i> ($n=22$)		<i>t</i>	<i>p</i>
	<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>		
I had a summer job.	3.99	1.431	3.27	1.804	1.81	0.083
It was summer vacation and I did not want to think about school.	3.33	1.447	2.55	1.335	2.458	0.015
The cost of the trip was too expensive.	3.03	1.312	3.14	1.246	-0.363	0.717
I did not even know about the program until I arrived on campus.	2.01	1.248	3.14	1.781	-2.9	0.008
The start of the Adventure WV program (on campus) was too far of a distance from my hometown.	2.39	1.284	2.91	1.477	-1.801	0.073
I did not like the recreation opportunities offered during the programs.	2.14	1.056	2.18	1.181	-0.193	0.847
I did not need the credits.	2.31	1.166	2.05	0.844	1.4	0.173
I did not have enough time this summer.	3.83	1.213	3.5	1.566	0.95	0.351
I am afraid of encounters with undesirable or dangerous animals and insects.	2.17	1.218	1.73	1.077	1.661	0.098
I did try to sign up but the program was full.	1.77	1.035	1.55	0.963	0.966	0.335
I didn't sign up because my major requires a different U101 course.	2.09	1.301	2.27	1.316	-0.619	0.536
I had other obligations that restrained me from participating.	3.41	1.329	3.41	1.623	0	1

Scale was 1 = "strongly disagree" to 5="strongly agree"

Constraint Differences by State

Finally, a series of independent sample t-tests were conducted to determine if there were significant differences in the mean scores for the thirty-eight constraint items between students from WV and surrounding states versus students from all other states. The results showed one significant mean score difference (structural) when WV and surrounding states were compared to all other states. However, when comparing WV only to all other states, results showed three significant mean score differences: none in the intrapersonal domain, one in the interpersonal domain, and two in the structural domain.

These comparisons were made between students from West Virginia and surrounding states vs. all other states to determine if constraints were influenced by proximity to WVU. These surrounding states included Pennsylvania, Maryland, Virginia, Kentucky and Ohio. There were 257 (86.53%) individuals from WV and surrounding states and there were 40 (13.46%) from all other states, which included New York (2.8%), New Jersey (3%), Georgia, Florida, Colorado, California, Connecticut, Vermont, Rhode Island, Texas, Wisconsin, Illinois, Delaware, New Hampshire, Tennessee, Massachusetts, and North Carolina.

In addition, comparisons were made between students from West Virginia and all students from out of state. Of the respondents, 164 (54.3%) were from West Virginia, while 138 (45.69%) were from outside of West Virginia. See Table 15.

Table 15
Percent Respondents by State

	<i>N</i>	<i>Percent</i>
No Answer	17	3.6
WV	214	45.4
VA	28	5.9
NY	13	2.8
MD	44	9.3
PA	85	18.0
NJ	14	3.0
OH	22	4.7
GA	1	.2
FL	6	1.3
CO	3	.6
CA	2	.4
CT	6	1.3
VT	1	.2
RI	1	.2
TX	2	.4
WI	1	.2
IL	3	.6
DE	2	.4
NH	2	.4
TN	1	.2
MA	2	.4
NC	1	.2
Total	471	100.0

Comparing WV and Surrounding States versus All Other States

Testing using independent sample t-tests, there were no statistically significant results found when comparing intrapersonal constraint means between students from WV plus students from surrounding states of WV, versus students from all other states. Nor was there any statistical significance found on a T-test for student interpersonal constraints by state. However,

one statistically significant difference was found for the following structural constraint item when comparing students from WV and surrounding states ($m=2.19$) and all other states ($m=3.85$), *The start of the Adventure WV program (on campus) was too far of a distance from my hometown.* See Table 16.

Table 16
Means of WV plus Surrounding States and All Other States and Structural Constraints

	<i>WV and Surrounding States</i> ($n=257$)		<i>All Other States</i> ($n=40$)		<i>t</i>	<i>p</i>
	<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>		
I had a summer job.	3.99	1.448	3.92	1.457	0.257	0.797
It was summer vacation and I did not want to think about school.	3.27	1.456	3.45	1.449	-0.718	0.473
The cost of the trip was too expensive.	3	1.336	3.25	1.171	-1.101	0.272
I did not even know about the program until I arrived on campus.	2.02	1.269	2.4	1.446	-1.59	0.119
The start of the Adventure WV program (on campus) was too far of a distance from my hometown.	2.19	1.163	3.85	1.167	-8.371	0
I did not like the recreation opportunities offered during the programs.	2.15	1.033	2.05	1.197	0.51	0.613
I did not need the credits.	2.32	1.17	2	0.961	1.92	0.06
I did not have enough time this summer.	3.76	1.254	4	1.177	-1.123	0.263
I am afraid of encounters with undesirable or dangerous animals and insects.	2.11	1.186	2.28	1.339	-0.828	0.408
I did try to sign up but the program was full.	1.74	1.011	1.75	1.08	-0.062	0.951
I didn't sign up because my major requires a different U101 course.	2.12	1.303	1.98	1.25	0.643	0.52

I had other obligations that restrained me from participating.	3.38	1.356	3.45	1.358	-0.298	0.766
--	------	-------	------	-------	--------	-------

Scale was 1 = “strongly disagree” to 5=”strongly agree”

Comparing West Virginia and All Other States

Using an independent sample t-test comparing West Virginia (m=2.32) and Non WV states (m=2.04), results found a statistically significant difference for the Intrapersonal constraint item, *I am not confident with my body image* (t=2.02, p=.044). Refer to Table 17.

Table 17
Means for WV versus Non-WV States and Intrapersonal Constraints

	WV (n=164)		Non WV States (n=138)		<i>t</i>	<i>p</i>
	<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>		
I am afraid of the outdoors.	1.63	0.893	1.7	1.044	-0.552	0.581
I have poor health.	1.63	0.873	1.78	1.06	-1.3	0.194
I prefer other forms of recreation.	2.75	1.137	2.79	1.247	-0.29	0.772
I am insecure about my outdoor recreation abilities.	2.21	1.19	2.04	1.171	1.201	0.231
I feel that I am unable to participate because I am handicapped or disabled.	1.37	0.852	1.43	0.981	-0.596	0.552
I feel that I am physically not in shape to participate in an Outdoor Orientation Program.	1.96	1.187	1.8	1.133	1.184	0.237
I lack the skills required to participate in an Outdoor Orientation Program.	1.96	1.132	1.8	1.093	1.189	0.236
I am afraid of getting hurt.	1.8	1.09	1.93	1.118	-0.963	0.337
I am afraid of rock climbing.	2.21	1.308	2.12	1.258	0.566	0.571
I am afraid of backpacking.	1.77	0.982	1.74	1.083	0.245	0.806

I am afraid of whitewater rafting.	2.21	1.347	2.04	1.306	1.108	0.269
I am afraid of heights, and would not like the challenge course.	2.35	1.408	2.34	1.427	0.043	0.966
Adventure WV is too physically challenging.	2.04	1.137	1.88	1.095	1.228	0.22
I am not confident with my body image.	2.32	1.291	2.04	1.174	2.02	0.044
I am afraid of being embarrassed.	2.37	1.307	2.17	1.321	1.353	0.177

Scale = 1 = “strongly disagree” to 5=”strongly agree”

When comparing WV and all other states, there was no statistical significance noted for any of the questions regarding interpersonal constraints. See Table 18.

Table 18
Interpersonal Constraints within students from WV and all other states

	<i>WV and Surrounding States (n=260)</i>		<i>All Others (n=40)</i>		<i>t</i>	<i>p</i>
	<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>		
My friends did not sign up for 'Adventure WV,' so I decided to not sign up.	2.27	1.238	2.25	1.296	-0.484	0.629
My friends would disapprove of me if I spent a week in the outdoors.	1.29	0.663	1.35	0.58	-1.51	0.132
My family would disapprove of me if I spent a week in the outdoors.	1.27	0.655	1.3	0.516	-0.051	0.96
I did not sign up because I don't have time outside of friends and family.	2.35	1.213	2.32	1.289	-1.824	0.069
I did not sign up because I don't enjoy recreating with other people.	1.64	0.959	1.45	0.783	-0.414	0.679
I am not interested in an outdoor orientation program.	2.34	1.277	2.18	1.238	-0.209	0.834
I dislike the outdoors.	1.85	1.154	1.78	1.25	-0.504	0.615

I am afraid of prejudice from other recreationists based on my racial/ethnic identity.	1.35	0.666	1.3	0.648	0.335	0.738
I did not sign up because of cultural reasons.	1.35	0.748	1.3	0.564	-0.651	0.516
I did not sign up because I thought other students of my same race would not sign up.	1.3	0.732	1.18	0.385	-1.3	0.196
I did not sign up because people in my own cultural group don't accept my outdoor recreation activities.	1.27	0.654	1.22	0.423	-0.575	0.565

Scale was 1 = “strongly disagree” to 5=”strongly agree”

Independent t-tests were also used to test for differences on the structural constraints between in-state West Virginia students and all out-of-state students, or students from all other states. Statistically significant differences were found for the following structural constraint items when comparing WV student responses to non-WV student responses, *It was summer vacation and I did not want to think about school* ($t=-1.98$, $p=.049$) and *The start of the Adventure WV program (on campus) was too far a distance from my hometown* ($t=.8.10$, $p=.000$). West Virginia students responded with a lower mean for both items ($m=3.14$; 1.90 , respectively) compared to non-WV students ($m=3.47$; 3.02 respectively). Although no statistically significant differences were found for *I had a summer job*, means on this item for both WV (3.84) and all other states (4.14) were much higher than all other questions. See Table 19.

Table 19

Structural Constraint means for WV and all Non WV states

	WV (n=160)		Non WV States (n=137)		<i>t</i>	<i>p</i>
	<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>		
I had a summer job.	3.84	1.544	4.14	1.313	-1.78	0.076
It was summer vacation and I did not want to think about school.	3.14	1.517	3.47	1.362	-1.98	0.049
The cost of the trip was too expensive.	2.97	1.421	3.12	1.182	-0.98	0.328
I did not even know about the program until I arrived on campus.	2.06	1.347	2.08	1.243	-0.159	0.874
The start of the Adventure WV program (on campus) was too far of a distance from my hometown.	1.9	1.011	3.02	1.325	-8.1	0
I did not like the recreation opportunities offered during the programs.	2.11	1.052	2.17	1.061	-0.45	0.653
I did not need the credits.	2.33	1.247	2.22	1.02	0.85	0.394
I did not have enough time this summer.	3.71	1.31	3.89	1.161	-1.24	0.215
I am afraid of encounters with undesirable or dangerous animals and insects.	2.03	1.146	2.24	1.269	-1.48	0.139
I did try to sign up but the program was full.	1.67	0.969	1.82	1.07	-1.318	0.188
I didn't sign up because my major requires a different U101 course.	2.01	1.31	2.2	1.273	-1.316	0.189
I had other obligations that restrained me from participating.	3.36	1.402	3.43	1.299	-0.471	0.638

Scale was 1 = “strongly disagree” to 5=”strongly agree”

Results of the previous analyses indicate that overall, there were very few major constraints on students and that structural constraint were the most common. When comparing different demographic groups, females were more constrained than males by intrapersonal factors, all sub-groups were rarely constrained by interpersonal factors, and structural constraints had the most differences when comparing West Virginia students to non-West Virginia students.

The majority of significant differences found when comparing females and males were the intrapersonal constraint factors—a total of twelve factors had statistically significant differences. Females reported higher means on all these items that were different. While higher means were reported for non-Caucasians for interpersonal items relating to cultural constraints, they were not found to be statistically significant differences. Finally, although some of the most constraining factors were structural items, when comparing different groups, very few structural constraints were found to have differences. Instead, intrapersonal constraints had the most differences between demographic groups.

CHAPTER 5

DISCUSSION AND CONCLUSIONS

Introduction

The purpose of this study was to assess the constraints on freshman regarding decisions/reasons against participation in the summer Adventure West Virginia Outdoor Orientation Program. Previous recreation constraint research focused on underserved populations particularly women, persons with disabilities and others. This study contributed to the literature by looking at constraints of co-ed students of different ethnic and cultural backgrounds attending a state flagship university to participation in an outdoor orientation program.

The following chapter includes a discussion about the findings of this study, the implications to the field of Outdoor Orientation Programs/First Year Experience Programs, recreation research, as well as overall conclusions.

Hierarchical Model

This study helped expand the applicability of leisure constraint theory. To the best of the author's knowledge, this model has not been tested in Higher Education Outdoor Orientation Program settings. It can then be argued that the findings from this study helped confirm the cross-discipline validity of the leisure constraints theory.

Constraint items used for this thesis included intrapersonal, interpersonal and structural constraints. Intrapersonal are constraints one is faced with such as a fear or false perception. An

example of an intrapersonal constraint item could be, *I am afraid of the outdoors*. Interpersonal constraints are constraints in which people perceive being constrained because of social or cultural perceptions, lack of interest or fear of what friends may think. An example from this thesis of an interpersonal constraint was, *My friends did not sign up for 'Adventure WV,' so I decided not to sign up*. Lastly, structural constraints have to do with physical constraints, such as the item *I had a summer job*.

Earlier, the Hierarchical model (Crawford et al., 1991) was introduced explaining how most people deal with the three types of constraints: Intrapersonal first, Interpersonal second, and lastly Structural constraints. Generally, it is only once the first two barriers (intrapersonal and interpersonal) have been overcome that structural constraints become relevant. If students are constrained primarily by intrapersonal constraints, it will be much harder for them to confront and overcome these because of the personal conflict with themselves, versus interpersonal and structural constraints (Crawford et al. 1991). However, if the primary constraint was seen to be structural, since that is usually the last reason for non-participation, the WVU Mountaineer Adventure Program could initiate solutions.

This results from this study found that Structural Constraints were the most constraining of the three main types. However, no constraint was found to reach a 4 on the 5 point scale, although one came close—*I had a summer job* ($m=3.93$), which was the most constraining item. These findings suggest that students are generally not constrained to participate in Adventure WV, and that the Mountaineer Adventure Program may already be successful at recruiting, educating and marketing to incoming students. In addition, it seems as though intrapersonal constraints were potentially still present for females, while interpersonal constraints were not a

factor for any subgroup. Raymore et al. (1994) and Johnson (2001) found similar results that females with low report higher levels of intrapersonal and total leisure constraints.

Since so few interpersonal items were found to have statistically significant differences when comparing males to females, Caucasians to non-Caucasians and in comparing in-state students to out-of-state students, the findings from this thesis may suggest that WVU students have supportive interpersonal relationships. In all cases of the research interpersonal constraint items were the least constraining factors (they had the lowest means). Thus it appears that WVU students are not experiencing constraints related to friends, family, or cultural groups. In addition, there were very few differences found between demographic groups on interpersonal constraint items—only two of ten were different between males and females; two of ten were also different between non-Caucasian and Caucasian; and none were different between states. This is on contrast to Harlan (2007), who found that interpersonal constraints (such as communication gaps, community/social group inclusion and culturally sensitive programming) were leading causes of non-participation for international students.

Students reported that a few structural constraints were the largest barriers they faced when deciding to participate in an Outdoor Orientation Program, as these constraints generated the highest means for all groupings. This suggests that students were constrained mostly by having summer jobs, lack of time, money and location from start of program. Similar findings were reported in previous research (Burns, 2007; Kay and Jackson, 1991; Hultsman, 1992).

The study did not consider negotiation strategies. It is recommended that future studies include questions related to incorporating negotiation strategies. Although all freshmen, including those who did participate in Adventure WV in the summer of 2009, were able to complete the demographic information section, Adventure WV students were not asked further

questions after that point. Therefore, it is not known what constraints faced students who are already participating in Adventure WV, or how they successfully negotiated through those constraints. The following section discusses each research question in more detail.

Discussion of Research Questions

R1. What are the demographics of students who do not participate in Adventure West Virginia Programs?

Although very few students completing the survey were non-Caucasian, the sample was reflective of the total WVU freshman population. Refer to Table D1. Since the numbers of non-Caucasian respondents was small, this study grouped all ethnicities besides Caucasian into one group for further analysis.

In addition, students from far away regions in the U.S. may be under-represented by WVU recruiting. WVU hires 11 recruiters for the entire United States. The regions they cover are: North Central West Virginia, Southwestern and Southern West Virginia, eastern panhandle counties in West Virginia and three additional counties in Maryland, the rest of Maryland and Delaware, New Jersey and Eastern Pennsylvania/Philadelphia, New York and New England states, Ohio, Central and Western Pennsylvania, and other states. There is also a recruiter for Veteran, Transfer and Non-Traditional students. In reviewing the recruiter's regions, it appears that high school students in the northeastern region of the United States potentially have the access and ability to learn more about the University, especially those in larger cities. This may be why there is a higher percentage of students attending WVU from these states as opposed to Midwestern and Western states. It is also important to note that the only representative recruiting for "other states" is the Program Coordinator for Student Services and is the director of the WVU Student Communication Center (call center).

R2. What constraints do students perceive in regards to registering and participating in the Adventure West Virginia Program?

Of the thirty-eight intrapersonal, interpersonal and structural constraint items, the top five constraints were found to be structural and were: *I had a summer job* (m=3.93), *I did not have enough time this summer* (m=3.79), *I had other obligations that restrained me from participating* (m=3.4), *It was summer vacation and I did not want to think about school* (m=3.27), and *The cost of the trip was too expensive* (m=3.03). However, the constraint *The cost of the trip was too expensive* had a mean that was also close to the midpoint (3.03) on the 1-5 Likert scale, thus, it should not be considered a true constraint, rather a high mean in comparison to other constraints. These items are related to time and money, common constraints found in other recreation research (Johnson et al., 2001; Kay and Jackson, 1991; Li, 2006). For example, in Kay and Jackson's (1991) study, the primary constraints were money and time, resulting in less participation. However, in their study, rarely did they find that participation ceased because of these two constraints.

The two constraint items (of the total thirty-eight) that students found least constraining were both interpersonal, *I did not sign up because people in my own cultural group don't accept my outdoor recreation activities* (m=1.27), and *My family would disapprove of me if I spent a week in the outdoors* (m=1.28). The third least constraining item was an intrapersonal constraint, *I feel that I am unable to participate because I am handicapped or disabled* (m=1.41). WVU has only a small population of students seeking help through Disability Services (4.5%). In 1996, roughly six percent of college students enrolled in an undergraduate institution were disabled,

most suffering from learning disabilities (Women, Minorities and Persons with Disabilities in Science and Engineering: 2002, 2003).

It could be hypothesized that this finding (not being constrained due to a disability) is due to students not knowing about the assistance offered, or they do not need the assistance.

Although one of the hopes of this thesis was to report on disabilities, the survey instrument failed to administer a question in the demographics section referring to presence of a disability. The survey did ask students if they were constrained by disability, however presence of a disability and constraint because of a disability are two different things.

R3. Within the Hierarchical Model of constraints, which factors-- intrapersonal, interpersonal, or structural--cause the most constraints on non-participants?

Structural constraints were the constraints that students were most likely to rank high as constraints. The total mean for structural constraints was 2.7. Intrapersonal and interpersonal constraint items were found to be not as constraining. The mean for the intrapersonal constraints was 2.0 and the mean for the interpersonal constraints was 1.7. This means that students reported they were most constrained by structural items, less constrained by intrapersonal factors and even less constrained by interpersonal factors.

As discussed earlier, it appears that incoming WVU freshman were most constrained by a summer job, lack of time, and other obligations. Similarly, Jackson and Rucks (1995) surveyed students in grades seven through nine about their constraints. Their results also indicated that most students' responses included constraints that had connected issues of commitment and time.

R4. Are there differences in the perceptions of constraints for different socio-demographic groups (gender, ethnicity, place of residence)?

Gender and Constraints

Females were significantly more constrained than males on the majority of intrapersonal constraint items than males. Similar results were found by Raymore et al. (1994) when they examined the relationship of intrapersonal, interpersonal and structural leisure constraints on self-esteem, gender, and socioeconomic status. Results indicated that adolescent females with low self-esteem reported higher levels of intrapersonal and total leisure constraints. This suggests that female freshman entering WVU are more inhibited to participate by intrapersonal constraints, such as having low self-esteem or confidence.

Structural constraint items were also found to have statistically significant differences between males and females. Females reported higher means on the following items, *The cost of the trip was too expensive*, *I did not like the recreation opportunities offered during the programs*, and *I am afraid of dangerous encounters with undesirable animals and insects*. This suggests that females were more constrained than males from signing up because of reasons relating to cost, type of activity, and undesirable conditions.

University 101 is a required course for all incoming freshman and transfer students with fewer than twenty-nine credits. Motivations for attending the Adventure WV program may have been driven by the ability to obtain these credits, and not for recreation purposes. Required U101 courses may have also been deterrence for students, as approximately nine majors (Forestry, Honors, Business, Journalism, Engineering, Agriculture Resources, Education, Natural Resources Management, and Animal and Veterinary Science) and several other WVU

departments and assistance programs require or offer an approved substitute course. This was addressed by the item, *I did not sign up because my major required a different U101 course* (m=2.10) and was found to be more of a constraint for males (m=2.45), than females (m=1.93) but was still not an important constraint, as the means are below mid-point. It is important to note that many of the majors mentioned above, with the exception of Journalism, Education, and Honors are predominately populated by males (Joe Seaman, College of Business and Economics, personal communication, April 26, 2010; Robin Hensel, College of Engineering and Mineral Resources, personal communication, April 27, 2010; Rita Dudley, Davis College of Agriculture, Natural Resources and Design, personal communication, April 27, 2010). Information regarding male and female percentages in the School of Journalism and the College of Human Resources and Education were unavailable.

When recruiting females to participate in an outdoor orientation program, it may be important to consider the many intrapersonal constraints that females must negotiate. Creation of an all-female Adventure WV program may be empowering and may reduce the intrapersonal constraints for female students.

There are common structural components such as cost, disliking the activities offered and undesirable conditions that females also feel they must negotiate (Johnson, et al. 2001). The results of this study are similar to results of an earlier study that indicated that women were most likely to feel constrained to participating in their favorite outdoor recreation activities by safety concerns, inadequate facilities and information, insufficient funds and outdoor pests (Johnson, et al. 2001).

Ethnicity and Constraints

According to Bell and Hurd (2006); “ethnicity has a significant impact on leisure including activity choices, frequency, location, types of activities, and how an individual participates” (p. 28). It is important for leisure professionals to consider and provide diverse programs (Bell & Hurd, 2006). However, Covelli (2006) found few non-Caucasian respondents to feel constrained by intrapersonal constraint items with most respondents agreeing to the item – *Like to do other things for recreation*. Similarly, Non-Caucasian (m=1.65) students at WVU were less likely to be constrained by certain intrapersonal items, in particular, *I am insecure about my outdoor recreation abilities* than were Caucasian (m=2.17) individuals.

Structural constraints were highly constraining to both Caucasian and non-Caucasian respondents. In addition, statistically significant differences were also found between Caucasian (m=1.89) and non-Caucasian (m=1.32) respondents for the interpersonal constraint item *I dislike the outdoors*. In addition, while statistically significant, most interpersonal constraint means relating to cultural constraints including, *I am afraid of prejudice from other recreationists based on my race/ethnic identity*, *I did not sign up because of cultural reasons*, and *I did not sign up because I thought other students of my same race would not sign up* were reported as more constraining for Non-Caucasian respondents than Caucasian respondents. While these items were not constraining for either group (i.e., they had low means), these findings mirror broader studies dealing with ethnicity and recreation participation that have shown that non-Caucasians are less likely to be interested in outdoor recreation than Caucasians (Kaplan & Talbot, 1988; Washburne & Wall, 1980; Zube & Pitt, 1981).

Statistically significant differences were also found between Caucasian and non-Caucasian respondents for the following structural constraint items, *It was summer and I did not want to think about school*, and *I did not even know about the program until I arrived on*

campus. Caucasians reported a higher mean ($m=3.33$) to the structural constraint item, *It was summer and I did not want to think about school* than their counterpart non-Caucasians reported ($m=2.55$). However, non-Caucasians reported a higher mean ($m=3.14$) for the structural constraint item, *I did not know about the program until I arrived on campus* than their counterpart Caucasian respondents ($m=2.01$). One suggestion may be that marketing for the Adventure WV programs needs to involve emphasizing excitement and adventure related to school and learning in order to not appear “too academic”, and marketing strategies or programs that more specifically target different cultural or ethnic students and their families.

Although Caucasians in this study were less interested in an outdoor orientation program, the majority of summer participants on Adventure programs are Caucasian. Interpersonal cultural constraints were slightly more constraining to Non-Caucasians when deciding to participate in an outdoor orientation program. For example, although not found to have a statistically significant difference, means for the item *I did not sign up because of cultural reasons* were higher in non-Caucasian respondents than Caucasian respondents. Thus, Adventure WV might want to consider offering more culturally accepted orientation programs for Non-Caucasian incoming freshman. This finding could be explored in further research as well.

Constraint by State of Residence

The majority of respondents were from West Virginia (45.4%), Pennsylvania (18.0%), Maryland, (9.3%) and Virginia (5.9%). The remaining 21.4% of students were from the other states surrounding West Virginia, including New York, New Jersey and other parts of the northeastern United States. There were no statistically significant differences found when

comparing intrapersonal constraints between students from WV plus students from surrounding states of WV, versus students from all other states. Nor were there any statistically significant differences found between interpersonal constraints when comparing WV plus students from surrounding states, versus students from all other states.

However, a statistically significant difference was found for the following structural constraint item, *The start of the Adventure WV program (on campus) was too far of a distance from my hometown*, when comparing students from WV and surrounding states and all other states. Students from WV and surrounding states reported a lower mean ($m=2.19$) than students from all other states ($m=3.85$). Geographically, it makes sense that this structural item was found to be a constraint—some students must travel farther distances to reach WVU. By adding directions, maps, explanations of the ease of travel to and from Morgantown, WV (location of start of trip), lodging information, etc. to the Adventure WV website and brochure, students from “all other states” may be less inhibited to participate in the orientation program.

Statistical significant differences were also found for the following structural constraint items when comparing WV student responses to non-WV student responses, *It was summer vacation and I did not want to think about school* and *The start of the Adventure WV program (on campus) was too far a distance from my hometown*. West Virginia students responded with a lower mean for both items compared to non-WV students. This suggests that WV students were less likely to be constrained because of summer time activities, jobs, etc. than non-WV students and that distance from home was more of a constraint for out of state students.

The highest overall mean was reported for out-of-state students ($m=4.14$) for *I had a summer job* compared to WV students (3.84). Interestingly, the difference on the item *The cost*

of the trip was too expensive was not found to be statistically significant. These two findings may suggest that WVU students are not constrained by the cost of the trip, but rather they are working and would lose pay from their jobs if they were to go on a week-long trip. It could be hypothesized that more students from out of state had higher tuition to pay, and were thus constrained to participate in Adventure WV because they were working at a job to help pay for college.

CONCLUSION

Outdoor orientation programs have shown success in helping students transition to college life (Bell, 2008; Cuseo, 1991; Davis, 1992; Filder, 1986; Sidle & McReynolds, 1999). Researchers often compare outdoor orientation programs to classroom orientation courses—both are considered First Year Experience courses (Barefoot et al., 1998; Bell, 2006). Research has shown that outcomes for students participating in a first year seminar include achieving higher grade point averages (Barefoot et al., 1998; Bell, 2006), higher persistence, measured by completion of a degree (Barefoot et al. 1998), and taking less time to complete a degree program.

In 1991 Crawford, Godbey, and Jackson revised their constraint models to integrate structural, interpersonal and intrapersonal constraints to leisure into a hierarchical model and also discussed how people may negotiate constraints. According to this model, constraints are encountered in a particular order, first at the intrapersonal level, next at the interpersonal, and it is only when these constraints are overcome that structural constraints are experienced. The purpose of this thesis was to uncover the interpersonal, intrapersonal and structural constraints to nonparticipation in Adventure West Virginia.

The study intended to answer the following questions;

1. What are the demographics of students who do participate in, and who do not participate in Adventure West Virginia Programs?
2. What constraints do students perceive in regards to registering and participating in the Adventure West Virginia Program?
3. Within the Hierarchical Model of constraints, which factors-- interpersonal, intrapersonal, or structural--cause the most constraints on non-participants?
4. Are there differences in the perceptions of constraints for different socio-demographic groups (gender, ethnicity, place of residence)?

An online survey was developed and used to collect data regarding student constraints related to participation in the freshmen outdoor orientation program. The most common constraint items were, *I had a summer job* and *I did not have enough time this summer*. Results indicated that female students tend to perceive intrapersonal constraints more so than males. In addition, non-Caucasian students perceived more interpersonal constraints than Caucasian students. And finally students from out of state perceived more structural constraints than students from West Virginia. The findings of this study offer insights into the sample of WVU freshman who did not participate in Adventure WV.

Implications for Future Research

In future research on constraints to participation in an outdoor orientation program, it is suggested that negotiation of constraints be incorporated. This thesis was unable to provide additional insight into negotiating constraints for Adventure WV 2009 participants.

Although results did not indicate statistically significant differences for intrapersonal constraints between males and females, it was interesting to note that females reported higher means for every intrapersonal item. Females were also more likely to respond that money was a

constraint. A suggestion may be to run a female only trip, that way females would be separated from males and may not be constrained to participate because of their insecurity of their ability, confidence in body image and fear of being embarrassed. In addition, offering female specific scholarships, if appropriate, could help address the cost difference.

Although means for interpersonal constraints when comparing non-Caucasian and Caucasian respondents were at the mid-point or lower on the scale, large gaps existed between the two. Caucasians *did not know about the program before coming to campus* and *did not want to think about school during the summer*. This may suggest that marketing to Caucasians should increase, and include an emphasis on adventure and social setting, rather than the academic requirements related to the program. Interpersonal cultural constraints were more constraining to Non-Caucasians when deciding to participate in an outdoor orientation program. Thus, Adventure WV might want to consider offering more culturally accepted orientation programs for Non-Caucasian incoming freshman.

Time was ultimately the most constraining factor, and then money. One suggestion for future marketing in reference to time is to remind students that U101 is required, and how students may save time in the fall if they participate in Adventure WV in the summer. It may also be suitable to apply scholarships in a value of more than just trip cost, and include equipment cost as well. Similarly, a small subsidization to participate may be useful in order for students not to be constrained by having a job, especially for out of state students. Students from out of state may also benefit from marketing strategies in general and those that target ease of travel to Morgantown and low cost of transportation and lodging.

REFERENCES

- Adventure West Virginia Website. (2008). Retrieved November 21, 2008.
<http://firstyear.experience.wvu.edu/>
- Bagozzi, R. P. (1980). *Casual models in marketing*. New York: John Wiley.
- Barefoot, B.O., Warnock C., Dickinson, M. Richardson, S. & Roberts M. (1998). *Exploring the evidence: Reporting outcomes of first-year seminars*. (Monograph). Columbia, SC: University of South Carolina, National Resource Center for the First-Year Experience and Students in Transition.
- Beil, C., & Shope, J. (1990, May 1). No exit: Predicting student persistence. AIR 1990 Annual Forum Paper. (ERIC Document Reproduction Service No. ED321669) Retrieved March 26, 2009, from ERIC database.
- Bell, B. (2006). Wilderness orientation: Exploring the relationship between college preorientation programs and social support. *Journal of Experiential Education*, 29, 145-167
- Bell, B. (2008). *Adventure pedagogy: Increasing student engagement in a first year experience class*. Unpublished Article, University of New Hampshire.
- Bell, C., & Hurd, A. (2006, October). Research update: Recreation across ethnicity. *Parks & Recreation*, 41(10), 28-34. Retrieved March 26, 2009, from SPORTDiscus with Full Text database.
- Braxton, J.M. (2000). *Reworking the departure puzzle*. Vanderbilt University Press, Nashville, 11.
- Burns, R. C. & Graefe, A.R. (2008). Constraints to outdoor recreation: Exploring the effects of disabilities on perception and participation. *Submitted for publication consideration to Journal of Leisure Research*.
- Caldwell, L. L., & Baldwin, C. K. (2005). A developmental approach to understanding constraints to adolescent leisure. *Constraints to Leisure*, 75-88
- Cederquist, J., Negley, S., & Bell, S. (2006, January). Gender, ability, and ethnicity: Promoting inclusiveness in outdoor recreation programming. *Association of Outdoor Recreation & Education Conference Proceedings*, Retrieved March 12, 2009, from SPORTDiscus with Full Text database.
- Coco-Ripp, J. (2005, February). Including people who are deaf in recreation. *Parks & Recreation*, 40(2), 26-33. Retrieved March 26, 2009, from SPORTDiscus with Full Text database.

- Cordell, H.K., Betz, C.J., & Green, G.T. (2002). Recreation and the environment as cultural dimensions in contemporary American society. *Leisure Sciences*, 24, 13-41.
- Covelli, E. L., Burns, R. C., & Graefe, A. R. (2006). Using the paradigm of constraints to understand non-traditional forest recreation use: Racial and ethnic minorities' participation rates. Unpublished Masters Thesis, West Virginia University.
- Crawford, D. W., & Godbey, G. C. (1987). Reconceptualizing barriers to family leisure. *Leisure Sciences*, 9, 119-127.
- Crawford, D., Jackson, E., & Godbey, G. (1991). A hierarchical model of leisure constraints. *Leisure Sciences*, 13, 309-320.
- Cuseo, J. (1991). The freshman orientation seminar: A research –based rationale for its value, delivery, and content. (Monograph No. 4). Columbia, SC: National Resource Center for The Freshman Year Experience, University of South Carolina.
- Enrollment by Racial/Ethnic Category. West Virginia University Institutional Statistics. Retrieved March 20, 2009. <http://www.wvu.edu/~planning/instreps.html>
- Davis, B.O., Jr. (1992) Freshman Seminar: A broad spectrum of effectiveness. *Journal of the Freshman Year Experience*, 4(1), 79-94.
- Davis-Berman, J., & Berman, D. (1996, May/June). Using the wilderness to facilitate adjustment to college: An updated description of wilderness orientation programs. *The Journal of Experiential Education*, 19, 22-28.
- Elkins, D. J., & Beggs, B. A. (2007). Comparative analyses of constraint negotiation strategies in campus recreational sports. *The Cyber Journal of Applied Leisure and Recreation Research*. <http://larnet.org/2007-03.html>.
- Ernst, J., & Monroe, M. (2004, November). The effects of environment-based education on students' critical thinking skills and disposition toward critical thinking. *Environmental Education Research*, 10(4), 507-522. Retrieved March 12, 2009, doi:10.1080/1350462042000291038
- Fears, G., & Denke, M.S. (2001, Fall). Wilderness pursuit programs: An orientation paradigm. *The Journal of College Orientation and Transition*, 9, 5-12.
- Fidler, P P. (1986). Research Summary-University 101. Columbia, SC: University Career Center, University of South Carolina.
- First Year Experience Website. (2008). Retrieved November 11, 2008. <http://firstyear.experience.wvu.edu/>

Flavin, M. (1996). Kurt Hahn's school's & legacy: To discover you can be more and do more than you believed. The Middle Atlantic Press, Wilmington, Delaware.

Gass, M. A. (1990). The longitudinal effects of an adventure orientation program. *Journal of Experiential Education*, 10(2), 30-33.

Gass, Michael A., Garvey, Daniel E., & Sugerman, Deborah. E. (2003). The long-term effects of a first-year student wilderness orientation program. *Journal of Experiential Education*, 26(1), 34-40.

Hawkins, B.A., & Freeman, P. (1993). *Factor analysis of leisure constraints for aging adults with mental retardation*. Paper presented at the NRPA Symposium on Leisure Research, San Jose, CA.

Harlan, N. (2007). *Barriers to participation in adventure education for students from diverse backgrounds*. Unpublished Masters Thesis, Geneva College.

Hultsman, W.Z. (1992, August). Constraints to activity participation in early adolescence. *Journal of Early Adolescence*, 12, 280-299.

Iso-Ahola, S.S. (1983). Towards a social psychology of recreational travel. *Leisure Studies*, 2(1), 45-56. Retrieved from SPORTSDiscus with Full Text database.

Hung, Kam. (2006). Exploration of the aging phenomenon in Hong Kong from a leisure perspective. *Proceedings of the 2006 Northeastern Recreation Research Symposium*. 451-458. Pennsylvania.

Jackson, E. L. (1993). Recognizing patterns of leisure constraints: results from alternative analyses. *Journal of Leisure Research*, 25, 129-149.

Jackson, E. L. (2005). Leisure constraints research: overview of a developing theme in leisure studies. *Constraints to Leisure*, 3-19.

Jackson, E., & Henderson, K. A. (1995). Gender-based analysis of leisure constraints. *Leisure Sciences*, 17, 31-51.

Jackson, E. L., & Rucks, V. C. (1995). Negotiation of leisure constraints by junior-high and high-school students: An exploratory study. *Journal of Leisure Research*, 27, 85-94.

Jacobs, J., & Archie, T. (2008). Investigating Sense of Community in First-Year College Students. *Journal of experiential Education*. 30(2), 282-285.

Johnson, C., Bowker, J., Bergstrom, J., & Cordell, H. (2004, August). Wilderness values in America: Does immigrant status or ethnicity matter?. *Society & Natural Resources*, 17(7), 611-628. Retrieved March 12, 2009, from Academic Search Complete database.

Johnson, C., Bowker, J., & Cordell, H. (2001). Outdoor recreation constraints: an examination of race, gender, and rural dwelling. *Southern rural sociology : SRS*, Retrieved March 12, 2009, from Agricola database.

Kaplan R., & Talbot J.F. (1988). Ethnicity and preference for natural settings: A review and recent findings. *Landscape and Urban Planning*, 15 (1-2), 107-117.

Kay, T., & Jackson, G. (1991). Leisure despite constraint: The impact of leisure constraints on leisure participation. *The Journal of Leisure Research*, 23, 301-313.

Kelly, J.R. (1974). Socialization toward leisure: A developmental approach. *Journal of Leisure Research*, 6, 181-193.

Lee, S., & Scott, D. (2009). The process of celebrity fan's constraint negotiation. *Journal of Leisure Research*, 41 (2), 137-156.

Li, Huan. (2006). A comparison of the leisure lifestyles of Chinese and American graduate students at the Pennsylvania State University. *Proceedings of the 2006 Northeastern Recreation Research Symposium*. 442-446. Pennsylvania.

Little, D. (2002). Women and adventure recreation: Reconstructing leisure constraints and adventure experiences to negotiate continuing participation. *Journal of Leisure Research*, 34(2), 157. Retrieved from Academic Search Complete database.

McGrath, J. (1970). *Social and psychological factors in stress*. New York: Holt, Rinehart and Winston.

Moen, P.; Dempster-McClain, D; & Williams Jr., R.M. (1989). Social integration and longevity: An event history analysis of women's roles and resilience. *American Sociological Review*. 54, 635-647.

Morgan, K., & Bath, P.A. (1998). Customary physical activity and psychological wellbeing: A longitudinal study. *Age and Aging*, 27(Suppl. 3), 35-40.

Women, Minorities and Persons with Disabilities in Science and Engineering: 2002. (2003, September). (D. o. National Science Foundation, Producer) Retrieved March 16, 2010, from Chapter 2: Undergraduate Enrollment - Enrollment Rates:
<http://www.nsf.gov/statistics/nsf03312/c2/c2s1.htm#c2s113>

Nunnally, J.C. (1978). *Psychometric theory* (2nd ed.). New York: McGraw-Hill.

Oguma, Y., Sesso, H.D., Paffenbarger, R.S., & Lee, L.M. (2001). Physical activity and all cause mortality in women: A review of the evidence. *British Journal of Sports Medicine*, 36, 162-172.

Patterson, L., & Chang, M. L. (1999). Participation in physical activity by older Australians: A review of the social psychological benefits and constraints. *Australian Journal on Ageing*, 18, 179-185.

Porter, S.R., Whitcomb, M.E., & Wietzer, W.H. (2004). Multiple surveys of students and survey fatigue. *New Directions for Institutional Research*, 121, 63-73.

Raymore, L. A., Godbey, G. C., & Crawford, D. W. (1994). Self esteem, gender, and socioeconomic status: Their relation to perceptions of constraint on leisure among adolescents. *Journal of Leisure Research*, 26, 99-118.

Robinson, Debra A. G., Burns, Carl F., Gaw, & Kevin F. (1996). Orientation Programs: A foundation for student learning and success. *New Directions for Student Services*, 75, 55-68.

Rook, L.S. (1990). Social relationships as a source of companionship: Implications for older adults' psychological well-being. In: B.R. Sarason; L.G. Sarason; G.R. Peirce, eds. *Social support: An interactional view* (p.219-250). New York.

Samdahl, D. M., Hutchinson, S. L., & Jacobson, S. (1999). Navigating constraints? A critical commentary on negotiation in leisure studies. Paper presented at the 9th Canadian Congress on Leisure Research, Acadia University, Wolfville, Nova Scotia.

Salant, P., & Dillman, D.A. (1994). *How to Conduct Your Own Survey*. New York, NY: John Wiley & Sons, Inc.

Scott, D. (1991). The problematic nature of participation in contract bridge: A qualitative study of group related constraints. *Leisure Sciences*, 13, 321-336.

Sheehan, K. (2001). Email survey response rates: A review. *Journal of Computer Mediated Communication*. <http://jcmc.indiana.edu/vol6/issue2/sheehan.html>, accessed April 10, 2010.

Sidle, M. W., & McReynolds, J. (1999) The freshman year experience: Student retention and student success. *NASPA Journal*, 36(4), 288-300.

Son, J.S., Kerstetter, D.L., & Mowen, A.J. (2008). Do age and gender matter in the constraint negotiation of physically active leisure? *Journal of Leisure Research*, 40, 267-290.

Stanton, R. (2000, November 3). Retrieved March 16, 2010, from Director's Order #42: Accessibility for Visitors with Disabilities in National Park Service Programs and Services: <http://www.nps.gov/policy/DOrders/DOrder42.html>

Steinberg, L. (1996). *Adolescence* (4th ed.). New York, NY: McGraw-Hill.

Teague, M.L., & MacNeil, R.D. (1992). *Aging and leisure: Vitality in later life* (2nd ed.). Dubuque, IA: Wm. C. Brown Communication, Inc.

Washburn R., & Wall, P. (1980). Black-white ethnic differences in outdoor recreation. *USDA Forest Service Research Paper*.

Zube, E.H., & Pitt D.G. (1981). Cross-cultural perceptions of scenic and heritage landscapes. *Landscape Plann.*, 8(1), pp. 69-87.

APPENDIX

Davis College of Agriculture, Forestry and Consumer Sciences

Dear Participant,

This letter is a request for you to take part in a research project to learn your opinions related to participation in Adventure WV. This project is being conducted by Maddy Hoden, a graduate student in the Recreation, Parks & Tourism Resources Program at WVU with supervision of Dr. Dave Smaldone, for a Master's Degree in Research. Your participation in this project is greatly appreciated and will take approximately 10 minutes to fill out the attached questionnaire. If you complete the survey, you can also choose to enter a random drawing for a \$25 gift certificate to a local store.

Your involvement in this project will be kept as confidential as legally possible. All data will be reported in the aggregate. You must be 18 years of age or older to participate. Your participation is completely voluntary. You may skip any question that you do not wish to answer and you may discontinue at any time. Your class standing will not be affected if you decide either not to participate or to withdraw. West Virginia University's Institutional Review Board acknowledgement of this project is on file.

I hope that you will participate in this research project. Thank you very much for your time. Should you have any questions about this letter or the research project, please feel free to contact Dr. Smaldone at 304-293-7404 by e-mail at david.smaldone@mail.wvu.edu.

Thank you for your time and help with this project.

Sincerely,

Maddy Hoden

Dr. Dave Smaldone

First, we would like to learn more about you the student!

Q 1. Were you aware of the Adventure West Virginia freshman orientation program prior to arriving at WVU to start school?

☐ Yes

☐ No

Q2. Are you: *(please check one)*

☐ Male

☐ Female

Q3. Where is your permanent residence? *(please write in your answers on the lines)*

If you are a U.S. citizen:

City: _____

State: _____ Zip code: _____

If you are a non-U.S. citizen, please write in your country:

Q4. Would you consider your permanent residence, or the address listed above, to be: *(check one)*

☐ Urban

☐ Suburban

☐ Rural

Q5. What is your age? _____

Q6. What year are you in school?

- ☐ Freshman
- ☐ Sophomore
- ☐ Junior
- ☐ Senior

Q7. Please select *one or more* of the following categories to best describe your race. *(please check one or more)*

- ☐ American Indian or Alaska native
- ☐ Asian
- ☐ Black or African American
- ☐ Native Hawaiian or Pacific Islander
- ☐ Hispanic/Latino
- ☐ White
- ☐ Other: _____

Q8. Did you participate in the Adventure West Virginia freshman orientation program?

- ☐ **Yes → You are finished—thanks for your help!**
- ☐ **No → Please move to Question #9**

Q9. What was the most important reason you did not participate in the Adventure WV freshman program? *(please write in your answer below)*

Now, we would like to hear more about your beliefs related to University 101 equivalent course, Adventure West Virginia. Adventure WV is an outdoor orientation course for first-year students at WVU. and can be taken in place of University 101.

Q10. Listed below are some personal reasons why you may not participate in Adventure WV. Please indicate your level of agreement with the each of the statements below by circling the appropriate response in each column.

	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree
a. I am afraid of the outdoors.	SD	D	N	A	SA
b. I have poor health.	SD	D	N	A	SA
c. I prefer other forms of recreation.	SD	D	N	A	SA
d. I am insecure about my outdoor recreation abilities.	SD	D	N	A	SA
e. I feel that I am unable to participate because I am handicapped or disabled.	SD	D	N	A	SA
f. I feel that I am physically not in shape to participate in an Outdoor Orientation Program.	SD	D	N	A	SA
g. I lack the skills required to participate in an Outdoor Orientation Program.	SD	D	N	A	SA
h. I am afraid of getting hurt.	SD	D	N	A	SA
i. I am afraid of rock climbing.	SD	D	N	A	SA
j. I am afraid of backpacking.	SD	D	N	A	SA
k. I am afraid of whitewater rafting.	SD	D	N	A	SA
l. I am afraid of heights, and would not like the challenge course.	SD	D	N	A	SA

m. Adventure WV is too physically challenging.	SD	D	N	A	SA
n. I am not confident with my body image.	SD	D	N	A	SA
o. I am afraid of being embarrassed.	SD	D	N	A	SA

Q11. Listed below are some reasons why you may not participate in Adventure WV related to social groups. *Please indicate your level of agreement with the each of the statements below by circling the appropriate response in each column.*

	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree
a. My friends did not sign up for 'Adventure WV,' so I decided to not sign up.	SD	D	N	A	SA
b. My friends would disapprove of me if I spent a week in the outdoors.	SD	D	N	A	SA
c. My family would disapprove of me if I spent a week in the outdoors.	SD	D	N	A	SA
d. I did not sign up because I don't have time outside of friends and family.	SD	D	N	A	SA
e. I did not sign up because I don't enjoy recreating with other people.	SD	D	N	A	SA
f. I am not interested in an outdoor orientation program.	SD	D	N	A	SA
g. I dislike the outdoors.	SD	D	N	A	SA
h. I am afraid of prejudice from other recreationists based on my racial/ethnic identity.	SD	D	N	A	SA
i. I did not sign up because of cultural reasons.	SD	D	N	A	SA
j. I did not sign up because I thought other	SD	D	N	A	SA

students of my same race would NOT sign up.					
k. I did not sign up because people in my own cultural group don't accept my outdoor recreation activities.	SD	D	N	A	SA

Q12. Listed below are some other external or intervening reasons why you may not participate in Adventure WV. Please indicate your level of agreement with each of the statements below by circling the appropriate response in each column.

	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree
a. I had a summer job.	SD	D	N	A	SA
b. It was summer vacation and I did not want to think about school.	SD	D	N	A	SA
c. The cost of the trip was too expensive.	SD	D	N	A	SA
d. The cost of the supplies needed for the trip were too expensive.					
d. I did not even know about the program until I arrived on campus.	SD	D	N	A	SA
e. The start of the Adventure WV program (on campus) was too far of a distance from my hometown.	SD	D	N	A	SA
f. I did not like the recreation opportunities offered during the programs.	SD	D	N	A	SA
g. I did not need the credits.	SD	D	N	A	SA
h. I did not have enough time this summer.	SD	D	N	A	SA
i. I am afraid of encounters with undesirable or dangerous animals and insects.	SD	D	N	A	SA

j. I did try to sign up but the program was full.	SD	D	N	A	SA
k. I didn't sign up because my major requires a different U101 course.	SD	D	N	A	SA
l. I had other obligations that restrained me from participating.	SD	D	N	A	SA

Thank you for your help!

Please enter your email below if you would like to be entered into the random drawing for a \$25 gift certificate to a local store.

email: _____

**West Virginia University
2009 Adventure WV**

Offered by:

The WVU Mountaineer Adventure Program

&

**The Davis College of Agriculture, Forestry and Consumer Sciences
Recreation, Parks and Tourism Resources Program**

**RPTR 140 – 3-credit- Adventure WV – Explore ##
CRN # 86028, Section 001**

Instructors: Greg Corio and Forrest Schwartz

Office: 104M Student Rec Center

Phone: 304-293-5221

Email: adventurewv@mail.wvu.edu

Office Hours: Please email to set up appointment.

Course Description

The purpose of Adventure WV is to provide you, the first year student, with information and tools for making a successful transition from high school to college; to ensure that you become an active, responsible member of the WVU community; to help you acquire basic academic survival skills; and to help you develop into a self-motivated, independent learner.

This course will introduce you to the state's natural resources, culture, and history, as well as WVU's academic policies, procedures, services and traditions. Success in this course depends largely on your participation. Successful completion of course assignments will determine your final grade. Adventure WV is an alternative to the WVU U101 requirement.

Mission

The Adventure WV program was developed to orient and transition new students for life at WVU. This is accomplished through development of new and lasting friendships, along with personal development. The program is built on safety, quality, fun, and care of the environment.

Required Materials and Tools

1. Daily Planner
2. WVU eCampus
 - a. Many of the assignments such as the on-line quizzes and activities will require access to WVU eCampus. To access eCampus go to <https://ecampus.wvu.edu>. Log in using your MIX username and password. Click on the link for your Adventure WV course (RPTR).

Goals & Objectives

Create a fun and exciting environment that fosters new friendships as well as individual growth.

By the experiential design of the program

Leaders that are trained in group dynamics, effective communication and conflict resolution skills.

Develop a positive connection with WVU students, faculty, staff, and the university community.

By developing a common thread through shared experiences

Through the use of the “Leave-a-Trace” program

By fostering traditions

Ease the transition to college life.

By addressing issues that face college students.

By instilling a sense of accomplishment by setting people up for success and positive experiences that will aid them through college.

Offer opportunities for leadership, teamwork, and community service with other incoming freshmen.

Teambuilding initiatives and group challenges.

By creating community service projects.

Enhance interpersonal skills such as trust, communication, acceptance, and social interaction.

Through leadership building, group initiatives, and debriefings.

Encourage improvement of participant self-awareness, decision making skills, initiative and self-confidence.

By positive encouragement and commitment.

Compassionate and insightful leaders.

Develop wilderness skills and awareness of outdoor recreational opportunities at WVU.

By visiting and discussing recreational areas in WV.

By teaching skills throughout the program.

By making students aware of the Outdoor Recreation Center.

Combat substance abuse and homesickness

Through discussions and debriefings

Through teaming up with WVU Student Health Services and the Carruth Center.

Support Student Retention.

Course Assignments

*****FOR ALL CLASS PAPERS, PLEASE USE 12 POINT TIMES NEW ROMAN FONT AND 1.5 LINE SPACING*****

Participation and Attendance: (200 pts, 20%)

Class attendance and active participation are the easiest things students can do to facilitate learning and complete their classes successfully. Therefore your attendance and *active* participation are required on the summer expedition, at the University Welcome, two fall semester classroom meetings, and CCE project. Participation will be evaluated by your instructors during the expedition, while attendance will be taken at each class session and other required events.

Journal: (100pts, 10%)

You will need to bring a journal on the summer expedition. Time will be allotted each day for you to reflect and write about the day's events and the evening discussions. Journal entries should be a reflection of the days events – not a description of what was done, but a discussion of your thoughts and feelings experienced during the days' activities. Journals will be collected and graded the last day of the expedition.

Goal Letter and Reflection: (100pts, 10%)

The goal letter will be written during the summer expedition. This assignment requires you to write a letter to yourself outlining your first semester goals at WVU. These goals could address academics, personal development, social skills, and anything else that you want to accomplish. This letter should also address the steps you will take to ensure you achieve these goals. The goal letter will be returned to you at the second class session in November. Your final assignment for the class will be to review the goals you had set

during the summer expedition and write a paper that discusses how far you have come in accomplishing your first semester goals. Specific requirements for this final paper will be handed out during your class in November as well.

Post Trip Reflection Paper: (100pts, 10%)

Upon completion of the summer expedition, you are required to write a four to seven page paper on the experience. **Be sure to list which program you participated in and the dates of the program.**

- The paper should be a reflection upon your Adventure West Virginia experiences with an analysis of how/if at all the Adventure West Virginia program was effective in helping you adjust to WVU and college life.
- It is important to be specific in describing aspects of the program most important to you, as well as aspects of the experience that did not help or may have hindered your adjustment.
- Describe your experience in a manner that helps the reader understand your emotions; fears, joys, challenges, thrills, and annoyances. This paper will be used to help determine how to adjust future Adventure West Virginia experiences.
- Describe how the program has impacted your view of West Virginia (not at all for some, maybe a great deal for others).
 - Did the program challenge some of your assumptions? Reinforce ideas you already had? What were the most important aspects of the program in effecting your views of West Virginia?

Some questions to ask yourself when writing this paper include:

- How was I challenged?
- How did I overcome challenges?
- How, if at all, did the week help with starting college?
- What way (if at all) did the program change your perceptions about WVU and/or West Virginia?
- What are my overall thoughts of the program?
- This paper is due at the Reunion Picnic on Sunday August 26th at the ball room in the Mountain Lair from 7-9pm. Make sure your name, program # is on your paper and you put it with other papers from your program.

Paper Due Date: August 30th, 2009 at Adventure WV Reunion (we recommend doing it before the start of school—because there is a lot going on the first week of school)

Instructions for turning in your Reflection Paper:

Two parts of the paper are due on Aug. 30th at the Reunion.

1. Bring a hard copy of your paper to the reunion. Make sure your name and program number are on the paper and that it is placed in the correct program pile.
2. E-mail a digital copy of your paper to: adventurewv@mail.wvu.edu . When you send your electronic copy of your paper it is preferred that you send the paper as a word document, or in rich text format.
 - a.) If you have Microsoft Word as your word processor, simply attach the document and send it along.
 - b.) If you do not have Microsoft Word, then save your document in Rich Text Format.
 - c.) The filename of the document should include your last name and program number. *For example: smith_program15.doc*

University Welcome (New Student Convocation) and First Floor Meeting: *(Required or one letter grade reduction)*

The University Welcome serves as West Virginia University's official introduction to welcome new students. WVU challenges new students to succeed through academics, civic responsibility, service to others, leadership training, and lifetime learning. For on-campus freshman, the first floor meeting is a time for residence hall students to meet other residents on their floor, learn residence hall policies, and begin to build a relationship with their floor mates, RA, and other residence hall staff. To receive credit for attending the events you must save the "attendance tickets" that are passed out and attach them to your Reflection Paper.

Note: Commuting students will only receive one ticket when they attend the University Welcome – commuters will not attend a residence hall floor meeting.

Information Security Awareness: *(50pts, 5%)*

Students will complete a 20 question pre-assessment and six modules (Introduction to Information Security, Email Security, Copyright Infringement, Password Security, Virus Protection, Identity Theft) of five questions each. Additional modules (Instant Messaging, Social Engineering, Web Browser) may be available for extra credit. In order to complete this activity, login to the eCampus website. Information from these modules

will be discussed in class. **All modules, quizzes and the Pre Assessment must be completed and submitted by September 4th, 2009.**

Classroom Meetings: (100pts, 10%)

We will meet twice during the semester (please see last page of syllabus for times and location of your class.) Attendance is required. If you have a conflicting class you must contact us **at least one week in advance** and provide a copy of your course schedule showing the conflict and we can reschedule you for another class. There will be no make up classes for students who do not show up.

Center for Civic Engagement Assignment: (200pts, 20%)

You will be required to complete one three to five-hour long service learning project. All projects must be scheduled and approved through the Center for Civic Engagement (293-8761x3384). You will need to sign up for a project at the CCE by Oct 1. The project must be completed by November 6th. In addition, students will be required to write a 3 page paper on various aspects of the project. We will go over this process during the 1st class session.

Online Quizzes: (150pts, 15%)

Each quiz is worth 50 points. All quizzes are posted on eCampus and **must be completed by the due date**. Please refer to the course schedule for due dates.

Other Activities:

Adventure WV Reunion: **Sunday August 30, 2007** 7pm—9pm in the Mountainlair Ballroom (top floor). ***Wear your Adventure WV shirt!*** Make sure you bring your reflection paper and email us a digital copy to: adventurewv@mail.wvu.edu . **The papers are DUE at the reunion!** This is a chance to meet up with your whole Adventure group. We will be showing a slideshow from your trip along with other Adventure WV trips, followed by a raffle to win rafting trips, outdoor gear, and cool WVU prizes. Raffle will be at the end of the slideshow and you must be present to win.

Evaluation

Assignment	Pts	%
Participation and Attendance	200	20%
Journal	100	10%

Goal Letter and Reflection	100	10%
Post Trip Reflection Paper	100	10%
University Welcome and first Floor Meeting	(required or grade letter reduction)	
Classroom Meetings (2 meetings)	100	10%
Information Security Awareness pre-Assessment	20	2%
Information Security Awareness Modules (6 modules)	30	3%
Center for Civic Engagement Project	200	20%
Quizzes		
Quiz 1 (Due 9/25)	50	5%
Quiz 2 (Due 10/16)	50	5%
Quiz 3 (Due 11/20)	50	5%
Course work Total	1000	100%

Grade Scale:

A 93-100	A- 90-92.99
B+ 87-89.99	B 83-86.99
B- 80-82.99	C+ 77-79.99
C 70-76.99	D 60-69.99
F 59 and below	

LATE POLICY

Important:

- Hand in all assignments to the Adventure WV office, not the Outdoor Rec Center.
- Do not leave them under our doors or in our mailbox as they may not collect the assignment for several days and you will be penalized for additional lateness. There is also a risk it could get lost!
- Always keep a personal copy of your assignment.
- Do not expect your instructor to open a file sent by email or a disk copy of your work, unless arranged beforehand. **All assignments must be handed in as hard paper copies and typed.**

Period of Lateness	Deduction
Up to 24 hours after the due time	10% of the value of the assignment
From 24 hours to 48 hours after the due time	20% of the value of the assignment
From 48 hours to 72 hours after the due time	30% of the values of the assignment
From 72 hours + after the due time	100% of the value of the assignment

Extensions will only be granted in justified cases. **NOTE:** This **does not** include workload, sporting events, field trips etc. Documentation for justified cases will be expected (i.e., medical certificate, death notice etc.). Late assignment work will not be accepted or graded if it is handed in more than 72 hours after the due time. However, to receive a final grade for a course you may have to have completed all assignments.

Academic Honesty and Integrity

In this course and all courses at WVU, we expect and value academic honesty and integrity. We expect that our students will subscribe to the following: “Students should act to prevent opportunities for academic dishonesty to occur and in such a manner to discourage any type of academic dishonesty.... Academic dishonesty includes plagiarism; cheating and dishonest practices in connection with examinations, papers, and projects; and forgery, misrepresentation, and fraud.” (WVU Undergraduate Catalog)

WVU’s Social Justice/Disability Statement

West Virginia University is committed to social justice. Our University does not discriminate on the basis of race, sex, age, disability, veteran status, religion, sexual orientation, color or national origin. The instructor of this course concurs with that commitment and expects to maintain a positive learning environment based upon open communication, mutual respect, and non-discrimination. Any suggestions as to how to further such a positive and open environment in this class will be appreciated and given serious consideration. If you are a person with a disability and anticipate needing any type of accommodation in order to participate in this class, please advise the instructor and make appropriate arrangements with Disability Services (293-6700).

Adventure WV Fall '09 Course Schedule

Explore WV Program 1: June 16-23, 2009

- **August 23, 2009 Sunday:** University Welcome and 1st Floor Meeting
- **August 30, 2009 Sunday:** 7pm—9pm in the Mountainlair Ballroom (top floor). ***Wear your Adventure WV shirt!*** Make sure you bring your reflection paper and email us a digital copy to: adventurewv@mail.wvu.edu. **The papers are DUE at the reunion!** This is a chance to meet up with your whole Adventure group. We will be showing a slideshow from your trip along with other Adventure WV trips, followed by a raffle to win rafting trips, outdoor gear, and cool WVU prizes. Raffle will be at the end of the slideshow and you must be present to win.
- **September 4, 2009:** Information Security Awareness modules and pre-assessment assignment due.
- **September __, 2009:** 1st Class Meeting 5-7pm @ _____ Building. Bring your daily planner and syllabi for all of your classes.
- **September 25, 2009:** Quiz 1 due

- **September and October:** You should be working on your CCE Project!
- **October 16, 2009:** Quiz 2 due
- **November 6, 2009:** CCE Project and due. All hours must be complete and paper turned in to the Center for Civic Engagement.
- **November __, 2009:** 2nd Class Meeting 5-7pm @ _____ Building.
- **November 20, 2009:** Quiz 3 due
- **December 4, 2009:** Goal Letter Reflection Assignment Due. This is your final assignment for this course. A description of the assignment will be handed out during your 2nd class meeting. Paper is due at the Adventure WV office by 4:30pm.