

THE EFFECTS OF WILDERNESS-BASED PROGRAMMING
AND FACILITATED REFLECTION ON SOCIAL
SELF-EFFICACY AMONG COLLEGE
STUDENTS IN FRESHMAN
ORIENTATION
PROGRAMS

by

Thomas Joseph Zimmer

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THE UNIVERSITY OF UTAH GRADUATE SCHOOL

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Thomas Joseph Zimmer

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<u>5-16-07</u>	 Chair: Jim
	
	


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Chair: Supervisory Committee

Approved for the Major Department


Dan Dustin
Chair/Dean

Approved for the Graduate Council


David S. Chapman
Dean of The Graduate School

ABSTRACT

This study examined the effectiveness of four college orientation programs on social self-efficacy beliefs among 158 college students. It was hypothesized that an outdoor orientation would increase social self-efficacy more than an on-campus orientation, and that an orientation with facilitated reflection would increase social self-efficacy more than a traditional orientation. Students chose between an on-campus and a wilderness-based orientation. Then, the students were randomly selected into a control or treatment group within both the on-campus and wilderness orientations. Outdoor orientations involved multiple days of a specific adventure activity (i.e., rock climbing, rafting, kayaking, mountaineering) located away from the college campus. These wilderness settings provide an environment that pushes students into social interactions, which can positively increase social self-efficacy. On the other hand, on-campus orientations involved speeches, skits, group initiatives, academic advising, and other activities located on the college campus. The treatment for both wilderness based and on-campus orientations consisted of the same daily activities as the control group; however, at the end of the second day the treatment groups participated in facilitated reflective provided by the orientation staff. This allowed students to learn from each other and see other student's perspectives, which can increase social self-efficacy. Students in all four orientations increased their social self-efficacy scores; however,

significant differences between orientations types were not found. Although the two hypotheses were not supported, both on-campus and wilderness orientations were found to increase social self-efficacy.

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CHAPTER 1

INTRODUCTION

Social self-efficacy among new college students is an important social concern (Smith & Betz, 2000). Self-Efficacy is domain specific and it involves “the beliefs in one’s capabilities to organize and execute the courses of action required to produce given attainments” (Bandura, 1997, p. 3). College social self-efficacy concerns beliefs about one’s capabilities to form and maintain relationships in a college or university setting (Bandura, Barbaranelli & Capara, & Pastorelli, 1996). The stressful transition into college life can separate many freshmen students from strong emotional relationships including, family, friends, schoolteachers, counselors, mentors and others (Rotenburg & Morrison, 1993). Having high social self-efficacy can increase one’s confidence to enter into social situations, which can foster social relationships. This can increase a student’s social support, which is an important attribute for college students (Smith & Betz, 2000). Studies have found relationships between low college social self-efficacy and loneliness (Blai, 1989; Medora & Woodward, 1986), and depression (Hermann & Betz, 2004). On the other hand, a high college social self-efficacy can reduce stressors leading to depression (Matsushima & Shiomi, 2003), while increasing academic success (Ferrari & Parker, 1992), life satisfaction (Gabrielle, 2002) and college retention (Astin, 1997).

Many college students dropout of college because of their undesirable social life (Tinto, 1987); however, it is important for many students to continue their education and graduate in order to acquire jobs that are more desirable and higher paying. College students with high social self-efficacy can develop a helpful social network and experience a more successful college career.

Outdoor education provides a rich medium to lay groundwork for social self-efficacy development necessary for college life. Self-Efficacy Theory by Albert Bandura (1997) posits multiple ways to increase self-efficacy. Enactive mastery experiences are the most influential ways to increase self-efficacy because they directly show individuals if they are accomplishing a task or not (Bandura, Jeffery & Gajdos, 1975; McAuley, 1985). A second way to foster self-efficacious beliefs is through vicarious experiences, or modeling (Bandura, 1997; McAuley, 1985; Schunk, Hanson & Cox, 1987). Outdoor education provides optimal opportunities for both mastery experiences and vicarious experiences of social engagement to take place (Hastie, 1995; Walsh & Golins, 1975). These activities force people to rely on each other, work on communication, teamwork, and other attributes that foster social interaction. Successful accomplishments in these activities can lead an individual to transfer success toward future, more difficult tasks in daily life (Bandura, 1997; Paxton, 1999). Much evidence exists to support the positive effects of outdoor education on self-efficacy (Kelly, Coursey, Selby, 1997; Paxton, 1999; Propst & Koesler, 1998).

Facilitated reflection through Experiential Education (EE) can also positively affect self-efficacy beliefs (Kelly et al., 1997; Paxton, 1999). Experiential Education fosters learning by involving students in a reflective process that is external to the

individual (AEE, 1994; Luckner & Nadler, 1997). Kolb's (1984) Experiential Learning Process encourages the use of Experiential Education. His cycle requires individuals to process their experiences through reflection in order to learn. This process enables the learner to be actively engaged in posing questions, experimenting, investigating, being curious, being creative, solving problems and constructing meanings (Luckner & Nadler, 1997). Facilitated reflection is one popular way to provide this internal reflection where students have ownership of their learning experiences. This involves group discussions where students look back on their experiences in order to learn from the new events in their lives. Experiential Education has been widely used in conjunction with outdoor education (Ewert & Hollenhorst, 1988; Luckner & Nadler, 1997) and supports the increase and transferability of self-efficacy (Paxton, 1999; Propst & Koesler, 1998).

Self-Efficacy Theory by Albert Bandura (1997), outdoor education, and facilitated reflection have all been shown to increase social self-efficacy; however, little is known about their potential in improving a college orientation program. Mastery experiences can generalize to similar situations (Bandura, 1997); however, college orientation experiences may not appear comparable, and not generalize to other social situations in college life. In addition, students who voluntarily sign up for orientation programs may already have a high social self-efficacy, resulting in modest gains. The social self-efficacy developed through high school and previous years may influence a student's college social self-efficacy, and may prevent any change during a short program. Outdoor education, and facilitated reflection, alone may not provide enough influence toward the positive growth of social self-efficacy. Therefore, the purpose of this study is to examine the effect of a 2-day college orientation program on college

social self-efficacy among freshman college students. It is hypothesized that outdoor orientations will increase social self-efficacy more than on-campus orientations; and that college orientations involving facilitated reflection will increase social self-efficacy more than orientations without this reflection.

CHAPTER 2

REVIEW OF LITERATURE

Population/ Problem

Typically, the first year of college, directly following high school, can be surrounded by change and development causing it to be a difficult transition in life (Rotenberg & Morrison, 1993). As teens go through this phase of life they experience new social and academic situations leading to considerable amounts of loneliness and stress (Blai, 1989; Rotenberg & Morrison, 1993). After finishing high school, most adolescents will eventually begin a new life away from the comforts and security of their childhood home and enter the workforce or move onto higher education. This can result in anxiety (Kashdon & Roberts, 2004), depression (Esra, Aydogan & Yildiz., 2005; Hermann & Betz 2004), and irresponsibility (Dryfoos, 1997). These years are a vital period of time when teenagers experience external and internal pressures to be successful and achieve accomplishments in the future. Many students leave their hometown's and enter new environments where old relationships (parents, friends, peers and others) are not readily available to offer comfort and support. However, improving these students' social confidence can increase their willingness to enter into social interactions that can lead to new friendships (Bandura, 1997). Adolescents who enter into strong and

supportive relationships during this new phase of life can exhibit lower levels of loneliness (Leung, 2001), anxiety (Kashdon & Roberts, 2004), stress (Bandura, 1997), and depression (Esra et al., 2005; Hermann & Betz, 2004).

The transition into college life holds many social changes. The new atmosphere is often geographically distant from home, involves a new residence with unknown roommates and hall mates, new financial demands, the loss of an established social network, the need to establish a new social supportive group, and many other factors. One of the determining factors for students to continue their college education and graduate is their social interaction (Tinto, 1987). A social community offers a stronger connection to the college atmosphere (Fan & Mak, 1998). A strong social community includes group gatherings, friendship development, roommate cohesion, and interaction between students and their instructors/ professors. The more a student is involved with a social aspect at their college, the more likely he or she will stay in school (Astin, 1997; Tinto, 1987).

Social support and interaction plays a strong role in college retention (Astin, 1997; Tinto, 1987). Staying in school is an important concern for success and better career paths now that degrees are becoming more of a prerequisite for employment (Hsiao, 1992). Many students leave their college or university due to poor social life (Astin, 1997, Tinto, 1987), economic restraints (Farmer, 1985), academic reasons (Gabrielle, 2002), adverse interaction with faculty (Tinto, 1989) and others. The 1995 national average for students who graduate in 4 years was only 38% (Money, 1997). Students who are surrounded by supportive peers not only feel like their college is a supportive institution, but that their friends give them a reason for staying (Tinto, 1987).

Many students do not return to an institution because of the lack of a social atmosphere external to the classroom (Terenzini, 1996). To tackle these dropout rates, programs have been developed to increase retention. Freshman and new student orientations have been an effective way to maintain students (Derby & Smith, 2004). These orientations help dissolve the anxiety and confusion many new students experience. Institutions also try to improve student and faculty interaction. It is important that the faculty encourages and engages in student involvement in order to increase retention (Evangelou, 1990). Orientation programs can continue to improve a high school student's conversion to college social life.

Students, without the direct influence of parental social networks and their influence in social situations, enter an atmosphere where they must personally engage into social environments. Without the confidence to engage in social situations, (among roommates, hall mates, classmates, clubs, college activities, and interaction with faculty and staff) many students find the college environment to be difficult and stressful (Astin, 1997; Terenzini, 1996; Tinto, 1987, 89). Students who are confident in interacting with these social groups are more likely to succeed as a college student academically (Stanton-Salazar & Spina 2005; Wilcox, Winn & Gauld, 2005), socially (Astin, 1997; Tinto, 1987), in career development (Smith, 1984), personal health (Von Ah, Ebert, Ngamvitroj, Park & Kang, 2004), and have an increase in college satisfaction (Dewitz, 2002).

Ultimately, students who have confidence in their ability to interact socially will be more likely to actively participate in social situations, which lead to development of social relationships. One way to operationalize social confidence is through self-efficacy (Bandura, 1997). Using mastery experiences, modeling, and reflection techniques in a

program should reduce the amount of anxiety and stress a college freshman experiences in social situations leading to more socially and academically successful students who are less likely to drop out of college. The increase of social self-efficacy ought to lead to a stronger social system, social support and closer relationships, thus increasing success in college life.

Self-Efficacy

Albert Bandura (1997) defines self-efficacy as “beliefs in one’s capabilities to organize and execute the courses of action required to produce given attainments” (p. 3). Self-efficacy is often confused with self-esteem. These are two separate and completely different ways a person’s views the self.

Self-esteem refers to a person’s self-worth. Rosenberg (1965), and Coopersmith (1967), two of the first scholars to research self-esteem, describe it as how an individual evaluates him/herself, and it expresses an attitude of approval or disapproval towards the self (Rosenberg, 1965), and as a personal judgment of worthiness that an individual holds toward him or herself (Coopersmith, 1967). On the other hand, self-efficacy is the way a person judges his or her personal capability in specific events (Bandura, 1997). This capability is outside any judgment of self-worth.

Clearly self-efficacy refers to a different aspect of the self. If a person does not have strong self-efficacy when it comes to an activity such as fishing, he or she may not care about having such skills and it will not effect the way he or she feels. However, if a person puts a lot of value in fishing skills, he or she may have a low self-esteem by not having fishing skills (Bandura, 1997). Although self esteem and self-efficacy are

different, they are related. Many studies have shown the positive relationship between these two constructs (Bandura, 1997; Blake & Rust, 2002; Kelly et al., 1997). These studies have all showed that increased self-efficacy can lead to an increased self-esteem.

Self-efficacy is an important concept when it comes to the success and the future of an individual. When a person chooses to partake in an event or task, he or she will consider the outcomes before acting (Bandura, 1997). If the perceived outcome looks positive to the individual, he or she is more willing to act. However, if the person perceives failure, he or she may act with weak confidence or not act at all. Even if someone has strong skills in an activity, the perceived ability is stronger than the skills themselves. Schwartz and Gottman (1976) found that people who know how to execute and have the skills to accomplish a task, often fail to have high levels of performance when they believed they could not perform optimally. In addition, Bandura (1992) found that people who do not have weaker skills, but do have a strong self-efficacy toward those skills, perform better because they believed they could do it. Self-efficacy does not pertain to the actual skills a person has, but rather the belief in one's ability to perform those skills in a certain situation (Bandura, 1997).

When people are faced with overwhelming obstacles that are perceived to be unattainable, they will often avoid these situations (Bandura, 1997). However, people with a strong efficacy will use whatever skills they have to challenge these obstacles because they believe they can. Personal goals and performance attainment comes from one's personal self-efficacy towards a specific situation. If people have a strong self-efficacy they will set higher goals and in turn maintain higher levels of performance. In

addition, these people will put more effort into their endeavors and face difficult tasks as challenges. This will heighten their effort rather than giving up.

Furthermore, people with high self-efficacy will see failure as a specific letdown in that precise situation rather than a more broad, overall feeling of failure (Bandura, 1997). These individuals can quickly recover their self-efficacy. However, people with low self-efficacy see failure as a common, global trait of themselves, and they see success as a specific situation that is not normal for them. Therefore, it is imperative that college students obtain a strong self-efficacy for success in college as soon as possible in their college career. Otherwise, every perceived failure will prevent future involvement, and will strengthen their low self-efficacy beliefs.

Sources of Self-Efficacy

Self-efficacy has been studied and conceptualized into the Self-Efficacy Theory (Bandura, 1997). Through this theory, Bandura describes four main sources that establish a strong self-efficacy (SE): enactive mastery experiences, vicarious experience, verbal persuasion, and physiological and affective states. The most prominent source for self-efficacy is mastery experiences.

Enactive mastery experiences refer to actual, hands-on experiences (Bandura, 1997). This is the strongest source of self-efficacy because it directly tells individuals if they are accomplishing the task or not. If an individual cannot hit a tennis ball over the net, one will know that he or she cannot complete the task through first hand experience. No matter how many times a person watches someone else do a task, actual hands-on experience is stronger when it comes to efficacious beliefs (Bandura, et al., 1975).

When these experiences are successful, a sense of accomplishment and self-efficacy is established (Bandura, 1997). Conversely, when failures occur, a low self-efficacy is developed, unless there was a sense of self-efficacy already in place. It is also important to understand that easy tasks provide immediate success; this creates a problem, however. During the times of difficult tasks, the inability to instantly accomplish the goals can result in a sense of failure. People learn their level of ability and formulate their outcomes as a result of situations. When people know, from past experiences, that they will have negative outcomes, they will be less willing to participate. On the other hand, when past, personal experiences have resulted in encouraging outcomes, people are more willing to partake in future situations.

The second way a person can establish stronger self-efficacy is through vicarious experiences (Bandura, 1997). Often, people partake in situations where they do not have previous experiences to evaluate their abilities. In these situations people can evaluate the effectiveness of models. Bandura explains that the most valuable models are those that most resemble the observer. If a person watches someone of the same ability accomplish a task, he or she will have stronger beliefs in their own ability. However, if the model is a different gender, age, education level, or skill level, the viewer will not gain efficacious beliefs. For example, a 10-year-old boy will not gain any self-efficacy in doing pull-ups by watching a 30-year-old body builder doing pull-ups. However, if the model is a 10-year old boy of the same body size, the viewer can recognize the resemblance between himself and the model; therefore, he can establish some personal efficacious beliefs about doing pull-ups. Even though he has never tried a pull-up, the model has given him reason to believe he can accomplish the task. This is one example

of how people can gain self-efficacy outside of mastery experiences. A third way to do this is through verbal persuasion.

Verbal persuasions are a third source of improving self-efficacy (Bandura, 1997). When a person is encouraged by others about his/her ability to complete a task, the individual will have more faith in his/her ability to succeed, and put in more effort. Conversely, people will have a low self-efficacy when others express doubt about their ability to accomplish an undertaking. This is especially important when it comes to new tasks. When a person is just learning a skill, the feedback about his/her ability is largely related to the person's efficacious beliefs. However, this verbal support must be realistic and accomplishable. If an instructor tells a student that they can easily accomplish the goal, and the goal is not attained; the student will lower his/her self-efficacy because it was believed that he/she was within the ability to be successful. Both verbal persuasion and vicarious experiences involve outside individuals to enhance self-efficacy.

The fourth source of Albert Bandura's theory is separate from the influences of external people. Physiological and affective states are the fourth and final source in the Self-Efficacy Theory (Bandura, 1997). Anytime a person is involved in an activity, mentally or physically, they will be physiologically and emotionally involved. Depending on the activity, these physical and mental states can enhance performance or discourage it. A person can experience anxiety, mood shifts, stress, arousal, loss of attention, fatigue in mental, emotional and physical states, and others. All these attributes can affect the self-efficacy a person has towards an undertaking. This is especially important when it comes to activities involving physical strength and stamina. Bandura explains that this fourth way of improving self-efficacy can enhance physical status,

reduce negative emotional proclivities as well as stress levels, and correct misinterpretations of bodily state. Physiological states play an important role along with mastery experiences, vicarious experiences and verbal persuasion in improving self-efficacy. People who experience increased involvement among these sources of self-efficacy will have the confidence in their ability to accomplish specific tasks in life.

Dimensions: Level, Strength, and Generality

Not only does self-efficacy derive from four distinct sources, it also deals with specific tasks; therefore, there are multiple ways to evaluate efficacious beliefs and outcomes depending on the situation. These three dimensions of evaluation are level, strength, and generality (Bandura, 1997). The first dimension discussed is the level of self-efficacy. Throughout life people are faced with varying levels of situations and obstacles. When it comes to the efficacy one has toward these obstacles, a person will have a range of efficacious beliefs based on the level of difficulty. For example, if a student has to speak in front of a group of peers, the level may be based on the size of the group. A student may have strong efficacious beliefs in speaking in front of a group of 5 people, yet feel apprehensive when speaking among a group of 20. Although it might seem like the same task these two tasks obviously vary in difficulty.

The strength of self-efficacy an individual has toward an activity expresses the degree of certainty toward the undertaking (Bandura, 1997). Although people may feel they can accomplish a task, their level of assurance may vary. This concerns a person's degree of confidence in task performance. Even though a person feels they can accomplish a task, he/she may have a low level of certainty, complete certainty toward a

task, or somewhere in-between. In the previous example, a person may feel efficacious toward speaking amid a group of 5, and a group of 20; however, the strength toward a group of 5 may be of complete certainty, whereas he or she may have little certainty towards a group of 20. This variance on strength can affect the performance one would have toward these two situations. Bandura explains that when people have an elevated strength in self-efficacy, they will attack the task with more conviction. In addition, a sturdy strength provides more determination among tough obstacles and difficulties; on the contrary, weak efficacious strength is reduced in times of failure. Level, strength and generality are three dimensions that affect perceived outcomes and performance. Both level and strength can be increased through generality of self-efficacy from similar activities.

Before looking at generality, it is important to understand that self-efficacy is domain specific (Bandura, 1997). Events throughout life vary in multiple ways. Each type of activity calls upon different feelings of self-efficacy. A person who is efficacious in playing tennis may not feel efficacious at playing volleyball. Even though they are both athletic sports that involve a ball and a net, they are two diverse activities. It is important to understand that self-efficacy is learned through previous experiences. A new college student who has never lived with a roommate has no immediate past experiences to relate to. This may cause the student to have low self-efficacy in living with a roommate for the first time. Fortunately, self-efficacy can transfer to similar situations. Research has shown that self-efficacy increases in one domain can generalize to others (Bandura, 1997; Ellis, Maughan-Pritchett & Ruddell, 1993; Kelley et al., 1997).

Generality pertains to the transferability of self-efficacy (Bandura, 1997).

Although self-efficacy beliefs are domain specific, these beliefs can move to similar situations. Although a student may have never lived with a roommate, similar situations (e.g. living with roommates at summer camp, living with a sibling, staying in hotel rooms on a ski retreat) may give him/her efficacious thoughts. Without the ability to transfer, people would be establishing new efficacious beliefs with every new situation throughout life. However, many people have difficulty recognizing similarities among situations in order to transfer self-efficacy beliefs. It is important to understand that self-efficacy can move from one similar set of experiences to new, inexperienced situations. Level, strength and generality all influence an individual's performance.

Transferring Self-Efficacy

Through mastery experiences, people can transfer efficacious beliefs between comparable events (Bandura, 1997). One way to transfer these beliefs is through similar subskills. Many actions in life involve subskills that are novel along with those that are similar to previous experiences. For example, a rock climber who is learning how to ice climb may feel completely inadequate to do so. However, if the climber focuses on the skills he/she already knows (putting on a harness, tying into a rope, setting an anchor, belaying another climber), he/she may feel more efficacious about the event because it is not completely foreign to him/her. Otherwise, if the climber focuses on the novel aspect of the activity (swinging an ice axe, proper crampon placement, removing an ice-screw), he/she may be overwhelmed. People who can focus on similar subskills will transfer more self-efficacy than those who focus on the new unfamiliar skills (Cervone, 1989).

A second way to transfer self-efficacy is through generalized coping skills (Bandura, 1997). Certain activities relate to each other based on the coping skills that could be used. These coping skills allow people to respond to situations with a certain amount of control. A new, stressful event, for example, could relate to a similar stressful event one has previously experienced. Even though the experience is new, a person may recognize the same feelings and anxieties that have come up in prior situations. By recognizing the parallels between the two situations, a person may approach the novel event with more self-efficacy. Mastery experiences give an individual more of these relatable coping skills to choose from. Successful accomplishments among comparable mastery experiences can help transfer coping skills, whereas unrelated tasks are not transferable (Brody, Hatfield & Spalding, 1988).

Codevelopment is a third way to transfer self-efficacy (Bandura, 1997). When two contrasting activities are attained together, self-efficacy beliefs can be positively related even though the two activities do not relate. Bandura found that students who obtained math and language skills together, acquired positively associated self-efficacy between both skills. This can be a helpful way to use one activity that may result in positive self-efficacy to help foster positive the self-efficacy in another unrelated domain.

Another way to transfer self-efficacy beliefs is by structuring cognitive commonalities (Bandura, 1997). By structuring an activity where an individual can see the analogous attributes among two diverse events, people can transfer their self-efficacy. By framing an experience, a person can further understand the resemblance of the activity at hand with future situations (Cervone, 1989). This is beyond similar subskills because it can transfer to activities which do not obtain consistent subskills. For example, high

cardiac activity on a treadmill, involving physical strain, related to other physical and emotional activities that would cause intense cardiac activity in one's life (Taylor, Bardura, Ewart, Miller & DeBusk, 1985). These different ways to enhance the transfer of self-efficacy are important to understand, and can be used in self-efficacy programming. Because self-efficacy is domain specific, it is imperative to be able to transfer efficacious beliefs when previous experiences are not available. This can be done through mastery experiences, similar subskills, coping skills, codevelopment, and cognitive commonalities.

Social Self-Efficacy

Now that the many elements of self-efficacy have been explored, it is important to discuss the domain of social self-efficacy, one of the most relevant self-efficacies for the success of freshman college students. Social self-efficacy is related to the ability to develop relationships, and partake in social interaction (Bandura, 1997). Social self-efficacy enables people to establish beneficial, supportive relationships. People with supportive relationships have an easier chance succeeding in life goals because their friends help maintain their objectives through positive support. A strong social self-efficacy increases the ability to not only develop these relationships, but it also helps to preserve these relationships (Glasgow & Arkowitz, 1975).

It is important to understand that social support and social self-efficacy are two different things. Social self-efficacy deals with one's belief of their ability to engage in social situations (Bandura, 1997); whereas, social support involved one's perception of being valued, cared for, and led by others (Vaux, 1988). One's peers, family, and/or

community give this support. Positive social support can promote a healthier lifestyle and provide help during stressful times in one's life. Social self-efficacy can increase one's ability to establish social support by providing the person with the confidence to approach social situations, which may lead to relationships providing social support. However, it is important to understand that not all relationship will provide positive social support.

The confidence to establish relationships is more important than concrete social skills. Glasgow and Arkowitz (1975) found that some people who were anxious in social situations had a lower self-efficacy, rather than low social skills. Even though people knew what to do in a social situation, they were afraid to partake in them because they had low social self-efficacy. This shows that self-efficacy is more important than the actual ability to succeed in a situation.

Social self-efficacy has been found to be an important attribute for many different populations and it has been measured among a variety of populations (Bandura, 1997; Connolly, 1989; Cutrona & Troutman, 1986; Holahan & Holahan, 1987; Matsushima & Shiomi, 2003; Wheeler & Ladd, 1982). A strong social self-efficacy has been found to reduce postpartum depression (Cutrona & Troutman, 1986). Cutrona and Troutman found that many new mothers feel inadequate in raising their new child. However, social support with other mothers and friends who encourage and applaud the mothers' ability reduced their depression. This social environment provides mothers with support and encouragement about their success, but what provided the environment was a strong social self-efficacy.

The transitional times in ones' life can be stressful (Rotenberg & Morrison, 1993). Elderly adults frequently experience these transitions through retirement, moving to a new place, entering a retirement home, the death of a spouse, and many other situations. Holahan and Holahan (1987) studied the level of social support these adults had after one of these events. Adults with a high level of social self-efficacy had more supportive relationships one year after their event than those with low self-efficacy. People who are introduced to chronic stressors have an easier time reducing these stressors when there are people in their lives who support them. This study reaffirms the importance of social self-efficacy instead of actual social skills. The importance of social efficacy continues throughout life and it is equally important during adolescents.

Young people with low social self-efficacy can experience depression (Connolly, 1989; Wheeler & Ladd, 1982). Adolescents who perceive a strong ability to establish encouraging relationships do so compared to those filled with self-doubt. A child with low social self-efficacy will withdraw from social situations, which does not allow him or her to establish satisfying relationships. Furthermore, these students perceive that their peers do not accept them, which can lead to low self-esteem and low self-worth. Adolescents who believe they cannot form friendships and partake in social environments have been found to have more numerous periods of depression (Bandura et al., 1996). Depression is also prevalent among young adults, specifically college students.

The adolescent time period is also a stage when people can develop aggressive behaviors (Feldman & Elliott, 1990). These actions, stemming from poor self-esteem, can lead to belligerent, unsociable conduct and recklessness (Kaplan, 1982). This conduct can have detrimental effects on the future success of the child (Donnellan &

Peck, 2005). Von Ah (2004) found that students who had a high social self-efficacy were less likely to display delinquent behavior and they were more likely to take on positive healthy conduct. People who are confident in their ability to make friends are more likely to act authentically, rather than being persuaded by peer pressure in order to be accepted.

On a more positive note, Fogle et al. (2002) found that social self-efficacy among adolescence was positively related to life satisfaction. He also found that the perception of social competence was more relevant to life satisfaction than actual social competence. When it comes to challenging school-related problems, adolescents were able to cope with these circumstances better when they had peers who were able to emotionally support them (Stanton-Salazar & Spina, 2005). Finally, adolescents who have positive friendships and a strong social self-efficacy have a stronger self-esteem (Blake & Rust, 2002).

Social self-efficacy is important to college students because of its links to other variables. The typical college student is not only dealing with a transition but is also dealing with growing up in an adolescent world. The traditional residential college or university acquires many freshman college students each year. This transition is a stressful period of time for many students (Rotenburg & Morrison, 1993). A large amount of these students are recent high school graduates leaving home for the first time. This alteration in life separates many students from strong emotional relationships including, family, friends, schoolteachers, religious counselors, and others. Although they may still have these connections, their proximity to them has been drastically altered. Therefore, social self-efficacy is extremely important during these times (Bandura, 1997). People must establish new relationships and close ties with people

around them. This can be difficult, because many people are socially reserved and don't feel comfortable with new encounters. An increased social self-efficacy gives a person the confidence to socially interact.

College students who just left a supportive social environment at home can often battle with loneliness (Rotenberg & Morrison, 1993). Students who have a low social self-efficacy can be reclusive and resist social interaction. Not only is college a stressful period of time, but many students do not have close friends to interact with, which can reduce those stressors (Hermann & Betz, 2004; Matsushima, Shiomi, 2003). Loneliness has been found to be most prevalent between ages 18 and 25 (Medora & Woodward, 1986). This period of time involves moving out of the home, going to school, getting a job and pulling away from close emotional ties established through childhood. New college students who miss their former friends can experience a decrease in self-esteem, and a decreased confidence not only with developing new friends, but with maintaining them as well (Lewin, 1935-1946). This inability to intermingle in social situations can prevent the development of new relationships and lead to loneliness. Many studies have found the relationship between low college social self-efficacy and loneliness (Medora & Woodward, 1986; Rotenberg & Morrison, 1993), which leads to depression (Blai, 1989; Holahan & Holahan, 1987). Esra and others (2005) found that social support was the second predictor to depression behind problem solving, and Hermann and Betz (2004) found that low social self-efficacy increased depressive symptoms among college students.

Depression is one of many negative aspects of life that has been associated with low social self-efficacy. Interpersonal relationships bring satisfaction to people's lives,

they provide help, and support during times of stress, and moderate the unpleasant effects of stressors (Bandura, 1997). These stressors are a cause of depression. Bandura also found that these relationships diminish exposure to physical illness, stress, and depression, and in turn provide a better quality of life. Again, as mentioned earlier, an increased self-efficacy actually increases outcome performance, which can reduce stress and increase performance.

Matsushima and Shiomi (2003) also found that a supportive social environment can reduce stressors leading to depression. People who feel trusted by their friends and who trust their friends have less interpersonal stress. In addition, people with high social self-efficacy have more friends to get help from when they are involved with stressful events. It was found that social self-efficacy was more important than their stress coping ability. Loneliness and depression are just a few problems that parents and society are concerned with among adolescents.

Social self-efficacy is also related to academic success. This is another concern for college students' success. Ferrari and Parker (1992) found that students who could network with fellow students, as well as their instructors and professors, were more academically successful. Academic success is another factor associated with college retention and college satisfaction (Gabrielle, 2002). This further emphasizes that social self-efficacy is related the success of college life.

As mentioned earlier, self-efficacy is domain specific (Bandura, 1997). Even though a person feels socially efficacious in a high school situation, he or she may not feel the same in a college environment. The social situation may seem the same; however, there may be environmental, situational, and behavioral dimensions that are

altered. This new college environment may not allow any transferability of social self-efficacy in high school situations to social self-efficacy in college life.

This study will specifically look at college social self-efficacy. This self-efficacy concerns beliefs about one's capabilities to form and maintain relationships in a college or university setting (Bandura et al., 1996). This college social self-efficacy is important for the success of the student to continue education and a healthy lifestyle leading to a higher quality of life.

A strong college social self-efficacy has been significantly related to college satisfaction (Dewitz, 2002). Ultimately, college satisfaction can prevent a student from transferring to a new college as well as dropping out of school all together (Terenzini, 1996). In addition, students who interact with the colleges' staff, including instructors and professors find increased levels of satisfaction toward their college (Astin, 1997). This satisfaction is related to college retention and graduation (Lau, 2003). Astin's (1997) Student Involvement Theory deals with college retention and explains that when a student increases his or her physical and emotional investment on their college campus, their rate of retention will increase. Likewise, Vincent Tinto's (1987) Dynamic Model of Institutional Departure explains that students who are satisfied with formal and informal academic and social systems are more likely to stay in college. Both of these conjectures involve the social environment a college student has; however, the underlining question involves the students' willingness to pursue social environments (self-efficacy), not if they have the skills to do so.

Social self-efficacy has been measured many different ways (Bandura et al., 1996; Fan & Mak, 1998; Hermann & Betz, 2004; Priscilla, 2003; Sherer & Adams, 1983).

These scales have been used to look at specific age groups such as children (Bandura et al., 1996; Priscilla, 2003), and groups of people in specific situations (Payne & Jahoda, 2004). Payne and Jahoda (2004) used a scale that focused on the social self-efficacy among intellectually disabled students, and Fan and Mak (1998) looked at social self-efficacy among culturally diverse college students. Smith and Betz (2000) designed a scale that specifically measures social self-efficacy among college students. This scale pertains to general social events found on the average campus. Many other scales have focused on specific college students, whereas the Smith and Betz scale measures the typical college student. The scale focuses on six situations that are typical for the average college student: making friends, pursuing romantic relationships, social assertiveness, performance in public situations, groups/ parties, and giving and receiving help.

Adventure Education

Adventure education (AE) provides an ideal setting for the specific programming needed for self-efficacy development necessary for college success. This education takes students through experiences where social engagement and interaction are required (Walsh & Golins, 1975). Adventure activities are physically and emotionally challenging and often involve a sense of real and apparent danger, which can lead to optimal experiences (Csikszentmihalyi & Csikszentmihalyi, 1990; Jones, Hollenhorst, Perna & Selin, 2000). This type of programming also permits individuals to perceive a sense of control over their situation, which can increase one's perceived competence toward their actions (Priest, 1992). Adventure education uses enjoyable and exciting activities that

foster perceptions of risk and competence among other individuals (Ewert & Hollenhorst, 1989; Priest, 1992).

Adventure activities confront people to face challenging obstacles and stressful situations with their peers (Meier, Morash & Welton, 1987; Miles, 1978). Successful accomplishments in these activities can lead an individual to find success in future, difficult tasks (Bandura, 1997; Paxton, 1999). Much evidence exists to support the positive effects of adventure education on a variety of variables including self-efficacy (Kelly et al., 1997; Paxton, 1999; Propst & Koesler, 1998), trust (Priest, 1998), self-concept (Bandoroff & Scherer, 1994), self-confidence (Smith, 1984), self-esteem (Alvarez & Welsh, 1990), family interaction (Gass & Gillis, 1993), and social development (Humberstone & Lynch, 1991; Sachs & Miller, 1992; Sutherland, 2001).

Adventure Education and Social Engagement

Social interactions are an essential part of adventure education (Hastie, 1995; Walsh & Golins, 1975). Group dynamics and group size shape the experiences throughout the course. These social environments are developed by the participants and the instructor and are unique to the individuals of the group. This type of group interaction and development is especially significant among new college students because many students look to their peers to help understand personal views. Social contact through adventure education helps students be involved with the creation of social systems and social support (Humberstone & Lynch, 1991). In a study by Hastie (1995), these social systems developed through adventure education increased communication skills, tolerance or appreciation for others, and responsibility. Adventure education's

curriculum engages students through continuous social participation among each other, thus increasing individuals' mastery experiences of social systems, support, and development.

Unique experiences found in adventure education develop and modify students' values, attitudes and behaviors (Walsh & Golins, 1975). Participants who are open and willing to learn change their predetermined beliefs when they are placed in a novel, physical setting among unique groups of people. These groups are then challenged with difficult, yet accomplishable tasks. Following these experiences the participants are then exposed to personal reflection and feedback from other students and instructors. The instructor facilitates prescribed events in order to aid in this growth as well as increasing mastery skills. This process forces students to engage in social interaction in order to accomplish their goals. This process, known as the Outward Bound Process, takes participants through progressively difficult tasks as the educational course develops (Walsh & Golins, 1975). As tasks become more difficult, the social involvement and cooperation can become more complex forcing individuals to work under difficult circumstances. These experiences not only promote individuals to restructure their values, beliefs, and behaviors towards other people, but they also create mastery of social experiences through multiple levels of complex social events.

Adventure education works most effectively with longer programs (Hattie, Marsh, Neill & Richards, 1997). Programs that involve more time allow for more intense interactions and progressed problem solving and decision-making among participants, all of which are common features of adventure programming. Multiple days allow for many social occasions among an assortment of other students. In addition, the lengthened time

allows for more opportunities of challenging situations such as weather, challenging problems with food/water/shelter, i.e., more complex scenarios (Meier et al., 1987). These difficult times force students to work together to problem solve and encourage better communication, teamwork, and cooperation. On the contrary, shorter programs allow for students to isolate themselves and people can more easily avoid social interaction. Plus, shorter programs lack the ability for the course of time to create more complicated, challenging scenarios.

Another common feature to adventure programming is the use of wilderness or backcountry settings (Hattie et al., 1997). Gass (1993) describes the use of wilderness settings, "One of the goals of adventure experiences is to take participants out of familiar environments and immerse them in situations that are new and unique" (p. 6). Sachs and Miller (1992) studied the effects of a wilderness experience on the social interaction among adolescents. The students involved with the wilderness program improved cooperative behavior significantly more than the non wilderness students. Using a wilderness setting provides a program significant for human development and, using natural environments forces individuals to act and respond differently from their environment found at home. The wilderness atmosphere drives students to cooperate with each other, critically think and plan out their day (e.g., meals, water sources, weather considerations, sleeping sites, daily activities), carefully observe their peers, instructors and environment, be resourceful, adapt to their surroundings, and persist in difficult and tiring times (Rhoades, 1972). This context forces people to work, cooperate, and critically solve problems with individuals and groups of people allowing them to learn from their experiences.

Some of the most popular types of adventure recreation is through outdoor activities including rock climbing, mountaineering, backpacking, whitewater rafting, and ropes courses. These and other outdoor activities broaden people's repertoire of effective coping skills and increases their number of successful experiences in life, both of which are associated with increased self-efficacy (Bandura, 1997; Kelley et al., 1997; Solberg et al., 1993), and self-esteem (Schoel, Prouty & Radcliffe, 1988). Outdoor activities offer certain traits above and beyond everyday activities and offer elements of challenge (Berry, 2005), fear (Meier et al., 1987), teamwork (Berry, 2005), and trust (Haras, Bunting & Witt, 2005). Challenging activities affect the physical, mental and social domain of an individual (Meier et al., 1987). Outdoor activities also require groups to work together in activities. Sutherland (2001) used rock climbing to increase self-efficacy as well as trust, social relations and group dynamics. Each individual must trust others when partaking in these activities, which helps students develop trusting relationships and feel that people are willing to trust them (Priest, 1998; Haras et al., 2005). Finally, when people accomplish seemingly impossible tasks, which can be perceived in outdoor activities, people face future difficult tasks with more confidence and less intimidation (Bandura, 1997; Kelly et al., 1997).

People are placed in real situations through adventure education, which brings about true pleasure, pain, anxiety, exhaustion, and other emotions (Miles, 1978). These challenging situations are not contrived in a safe environment (on-campus) trying to simulate socially challenging events. These are authentic events that are not controlled by the student or the instructor. People share intense personal experiences as they struggle with heavy packs and pounding hail. These adventures take students through

multiple days involving moments of difficulty and gratification (Meier et al., 1987). This type of programming involves 24-hour interaction resulting in close social engagement and intimate relationships. Students rely on each other for their most important needs of food, shelter and safety (Maslow, 1968). Individuals must rely on each other to carry and prepare meals, conserve water, and avoid natural hazards such as: avalanches, rock fall, bears, and others (Meier et al., 1987). Students work together to plan out daily activities, locate campsites, daily chores, choosing tent-mates, and more. For example, setting up tents and organizing all the equipment in such tight quarters increases the need for cooperation. These powerful connections are real and can transfer to future genuine social interactions (Bandura, 1997). This type of participation in outdoor adventures has been shown to increase self-efficacy immediately following and 1 year after outdoor programming (Paxton, 1999; Propst & Koesler, 1998).

Adventure Education in Colleges and Universities

Higher education has recognized the increased popularity toward adventure/wilderness programming (Bell, 2006; Gass, 1987; Galloway, 1999). Many colleges and universities have created orientation programs utilizing outdoor settings and adventure recreation to help with the transition into the new college lifestyle. Although all institutions do not offer outdoor orientations, many are available. In fact, the first college outdoor program of this type was used at Dartmouth in 1935. Outdoor orientation programs are helpful for college students' difficult transition into college life (Hsiao, 1992). Most of the curriculums for these programs focus on socialization, peer relationships, having fun, emotional adjustment to college, enhancing self-esteem, self

confidence, and college retention (Davis-Berman & Berman, 1996; Galloway, 1999; Gass, 1999). Gass (1987) found that outdoor college orientation programs not only increase college retention, but they also improve interpersonal skills and relationships, and have a higher GPA.

College orientations have been studied to show positive attributes through adventure education. Stremba (1991) found increased self-efficacy through a three-day outdoor adventure orientation program. Another study by Brown (1997) looked at three types of college orientations. These included a classroom setting, an alternative option (service learning/ curriculum based), and an outdoor setting. Nearly three hundred students completed the Student Adaptation to College Questionnaire (SACQ) immediately following the three programs. Results present significant support for the outdoor orientation. Students who engaged in the outdoor program developed the best overall adjustment, especially in the areas of: social, personal-emotional, academic, and institutional attachment. Furthermore, the students who participated in the outdoor orientation maintained the strongest college retention rate for 12 of the last 13 years. Research has also revealed the use of wilderness orientations to increase social provisions among six subfactors of social support: attachment, social integration, reassurance of worth/ competence, reliable alliance/ tangible support, guidance, and opportunity for nurturance (Bell, 2006). This study and others (Davis-Berman & Berman, 1996; Brown, 1997; Gass, 1999) encourage the integration of outdoor activities into college orientations in order to increase social support and interaction.

Adventure programming enters people into an uncomfortable environment where basic life needs are not simply provided (Hattie et al., 1997). As mentioned earlier, this

forces people to work together and enter real social, challenging engagement. Students must work together to carry food, water, clothing and shelter. They must work together to provide adequate food and sufficient shelter. An on-campus orientation may try to contrive activities that require teamwork and communication; whereas, with an adventure program this happens naturally. In addition, adventure orientations require social interaction throughout the day. Adventure orientations involve not only social contact with basic life needs, but also students with activities that involve trust (Davis-Berman & Berman, 1996). Adventure programming provides positive social interactions (Bell, 2006), which is the groundwork for the growth of social self-efficacy.

Adventure Education and Self-Efficacy Theory

Adventure education is a rich medium for self-efficacy improvement because it allows for optimal opportunities for mastery experiences and vicarious experiences. As previously discussed, the most effective way to enhance self-efficacy is through mastery experiences (Bandura, 1997). Many people practice tasks before embarking on future events in life. Athletes typically practice their skills before competition. The same idea relates to a new student entering college for the first time. If a student could perform college social tasks before going to college, he/she could have more social self-efficacy among college situations. Therefore, a college orientation program that involves adventure/outdoor education should provide additional mastery of social experiences, which increase social self-efficacy (Bandura, 1997). Not only would students gain more mastery experiences, also, they could use their new ability and confidence to socialize in other facets of life (college social events not yet experienced). College orientation

programs involving adventure education allow for a students' first successful accomplishment of social ability among other college students. By accomplishing the challenging tasks involved with adventure education, students will pursue future situations with more positive assurance (Bandura, 1997; Kelley et al., 1997). Conversely, people have less self-efficacy when introduced to new situations that differ from previously accomplished situations (Bandura, 1997). These first experiences must be successful, otherwise self-efficacy will be lower and future situations will be more intimidating. Without adventure programming, college students may not initially succeed in complicated social mastery experiences. If these first social interactions are unsuccessful, college students may begin college with low social self-efficacy.

The second important way to increase self-efficacy is through vicarious experiences (Bandura, 1997). Vicarious experiences allow models to help increase self-efficacy. Research has displayed evidence for these self-efficacy gains (Bandura, 1986; McAuley, 1985; Schunk et al., 1987). A program facilitated by non collegiate instructors may not provide vicarious experiences through the leaders of the group (Bandura, 1997). Models are most effective when they are similar to the learner. An instructor who graduated college 10 years ago is not as comparable as a current college student who is leading the orientation. Therefore, a program implementing vicarious experiences through the instructors should utilize current students from the institution because they are actual students at the students' institution and closely relate to them. The leaders for the college program are role models for the students and can vicariously demonstrate social success within the student's institution. The instructor can help establish desirable group norms by modeling and working with the students (Luckner & Nadler, 1997;

Schoel et al., 1988). In addition, participants can absorb vicarious experiences through the other students (Bandura, 1997) by observing other members of the orientation successfully working together as they prepare meals, perform daily activities, choose tent-mates, and socially interact.

Outdoor activities offer new surroundings, involving risk and challenge (Meier et al., 1987). Offering a variety of new experiences can enhance self-efficacy by encouraging an individual to test new physical limits and develop new physical and mental skills (Bandura, 1997). New activities in the outdoors can add to a person's repertoire of successful experiences in life, and teach a person the ability to adapt to the environment. These feelings of confidence and control can generalize from one activity to another (Bandura, 1997; Gass & Gillis, 1993; Gass & Priest, 2006; Paxton, 1999), and can be transferred across activity domains to new unfamiliar surroundings (Bandura, 1997; Ellis et al., 1993). More specifically, adventure programming can transfer self-efficacy from outdoor programs to everyday life at home (Paxton, 1999). The inherent benefits of adventure education allocate it to be a more effective way to promote social self-efficacy compared to an on-campus program. However, in order for self-efficacy to most effectively transfer, students need to see similarities between the adventure program and future college situations. Participants who effectively process and reflect upon their experiences may recognize the resemblance between these two different settings. One of the more popular ways to facilitate student reflection is through Experiential Education (EE) (Isenhart, 1983; Kesselheim, 1976).

Experiential Education

Many theories encourage the use of Experiential Education (Kelly, 1955; Kolb, 1984). In the 1980s David A. Kolb developed the Process of Experiential Learning (Kolb, 1984). His theory entails a series of four fundamental stages: concrete experience, reflective observation, abstract conceptualization, and active experimentation. An individual must go through these four stages in a continuous progression in order to learn. During the first step a person will live through an immediate experience. In this concrete experience the person will be consumed by the event until it is complete. Following the experience the individual reflects upon it. He or she will now contrast the experience with reality and identify similarities and differences with all previous experiences. As this person moves to abstract conceptualization he or she will consider substitute solutions to the situation and try to expand concepts and generalizations for forthcoming similar experiences. After this, the individual may actively experiment by seeking out future related encounters to investigate their perceived notions (Kolb, 1984). Human beings have a basic need to understand their future, therefore people will pursue future events in life that will help answer their hypotheses (Blowers & O'Connor, 1996).

The Process of Experiential Learning can be used for education through Experiential Education (Kolb, 1984). Although Experiential Learning takes place within an individual, Experiential Education allows a person to learn from external viewpoints by using professionals to help a person learn from experiences and from other individuals (Isenhart, 1983; Kesselheim, 1976). After an individual encounters an event, proper programming can assist a this person's reflection upon the event. Since the reflection is not solely internal to the student, the facilitator can manipulate and assist the student by

processing his/her experiences. Using this counseled reflection, the student can use additional, external information from others to conceptualize thoughts. In Kolb's (1984) theory, an external person or group of people can help revolutionize and influence the way another individual learns and views the world. This influence can be used to facilitate the growth of college social self-efficacy.

It is important to understand that in order for learning to occur individuals must experience confusion, anxiety and frustration (Kolb, 1984). Kolb's theory states that a person must experience cognitive dissonance, a state of confusion, in order to learn. This apprehensive event is weird and wonderful to the individual. He or she must create new assumptions of this new world, and in the process he or she will gain new knowledge and learn from the experience. Adventure education places people into unfamiliar environments (Ewert & Hollenhorst, 1989). This uncomfortable atmosphere not only creates confusion, and anxiety, but it also forces people to try to make sense of their new surroundings (Kolb, 1984). As people experience new and more occurrences, their method to built hypotheses will evolve. Experiential Education promotes students to internalize their thoughts, creating a more pure thoughtful hypothesis of the world. The more experiences a person encounters, the easier it is to understand an assortment of events (Kolb, 1984). This internal thought process can increase self-efficacy (Bandura, 1997).

Facilitated processing/reflection can be done in a variety of ways (Luckner & Nadler, 1992). One popular way to encourage students to think about their experiences is by debriefing the day's events through group discussions. After a group has experienced an activity or the day's activities, the instructor will bring all the students together for an

organized discussion. Three popular ways to begin dialogue includes open forums, questioning, and rounds. Open forum is where the instructor asks for open feedback about the days events. For example the leader might ask, "I'm interested in hearing peoples' reactions to today's activity" (Luckner & Nadler, 1992, p. 116). Questioning involves specific questions asked to the participants that focus on the goals of the activity. These should be open-ended questions which encourage thoughtful reply and can be sequenced by the facilitator: "What happened?, What did you learn?, How can you use this knowledge in the future?" (Luckner & Nadler, 1992, p. 116). Finally, the third way to open up discussion is through rounds, which involve quick, simple questions that can be answered by a number, a word or a phrase. One question will be asked to the whole group and each person answers the question. For example, "From 1 to 10, how valuable was today's activity to you." Here each student can simply reply without feeling pressured to speak to the group. Group discussions are valuable ways to debrief the day's events because it allows people to see the perspectives of others. Open forums, questioning, and rounds simply open up discussion among the individuals. Ideally the group will begin to feel comfortable opening up to one another which can lead to priceless reflection. This setting allows for students to reveal personal thoughts and beliefs about everyday life and how the day's experiences resemble and effect life at home. By evaluating the values and beliefs of other peers, students can consider their own ideas and internally learn from their experiences. Proper facilitation by a trained instructor can create the learning atmosphere, which should increase a students' ability to develop internal learning through adventure education.

The facilitator providing Experiential Education has much influence on the student's development (Estes, 2004). The Association for Experiential Education (1994) defines experiential education as "a process through which a learner constructs knowledge, skill and value from direct experience" (p. 1). Here, the learner is actively engaged in posing questions, experimenting, investigating, being curious, assuming responsibility, being creative, solving problems and constructing meaning. Experiential Education involves an action-reflection process where the student should be empowered to generate his/her own learning (Estes, 2004). Education is achieved when the learner develops critical thinking skills used to inspect experiences. Unfortunately, teachers can prevent such learning from happening. It is important that the instructor avoids the use of "teacher led discussions." This type of reflection puts the control of the reflection onto the teacher and not the learners. In turn, the educator has more influence than the students, and can avert students' learning potential (Estes, 2004). Instead, it is important that reflection is student lead, allowing the most optimal learning atmosphere (Greenaway, 1993). Although the reflection should be student lead, the instructor still provides invaluable facilitation. The instructor should lead students into discussion and direct students into positive dialogues and open communication among themselves. Eventually, the students should be asking the questions and leading the discussion allowing the instructor to step back from these responsibilities. Once the students control the discussion, they can mold the reflection towards their personal inquiries and growth. However, the instructor remains engaged and can refocus the students if the discussion wanders from an educational conversation.

Experiential Education provides the optimal learning opportunity for students to learn from experiences. Debriefing through group discussions allow students to internally develop ideas through the personal values and beliefs of their peers. These experiences allow participants to interact among other individuals and develop a closer understanding of their acquaintances. A program with instructors who can effectively process experiences through group discussions should provide more increases in social self-efficacy because of its inherent effect upon the student.

Adventure/Outdoor Activities and Experiential Education

Adventure/outdoor activities are an effective way to implement Experiential Education (Kesselheim, 1976). Kesselheim utilizes a basic set of principles, which incorporate “outdoor learning.” These five principles are environmental contrast, physical activity, the intentional use of stress, a small group context, and the employment of newly acquired knowledge and skills. These elements open an avenue where a person is free to learn and develop. These five aspects may be implemented in non-outdoor programs; however, they are most effectively used in outdoor activities, allowing students’ to learn through their experiences (Kolb, 1984).

Experiential Education has been implemented with success in many fields, and is often used in the outdoor environment (Isenhart, 1983). It has also been researched in the context of public schools (Mink & O’Steen, 2003), social justice (Warren, 2005), at-risk youth (Long, 2001), workplace education (Nagle & Collins, 1999), higher education (Munsell, 1992), and others. Experiential Education’s popularity and acceptance is constantly increasing in the educational world (Miles & Watters, 1984). Smith (1984)

used EE to increase self-confidence, interpersonal skills and effectiveness, sensitivity for others, leadership skills, and group interaction processes through rock climbing, backpacking and rafting. Wright (1983) used a 26-day course to study the increases of self-efficacy, self-esteem, locus of control, physical fitness and problem-solving skills. The adventure program was successful in significantly increasing self-efficacy.

Outward Bound, a leader in Experiential Education, has shown the positive increase and transferability of self-efficacy through outdoor education (Paxton, 1999). Paxton (1999) found that adventure programming did increase self-efficacy beliefs. This particular study focused on the self-efficacy found in the students' daily life at home. The most important finding in this study was that the students' increased self-efficacy from the outdoor program transferred to the students' home environment. In addition, the study investigated the students' self-efficacy 1 year following the outdoor program and found continuing increases in self-efficacy. Facilitated reflection was an important aspect of this program because it allowed the participants to see the viewpoints of other people and develop new internal beliefs.

One of the key elements leading to the success of outdoor activities in facilitating Experiential Education is the fact that they are exciting and adolescents want to be involved with them (Meier et al., 1987). As mentioned earlier, a person must be interested and open to learning in order to process any changes (Isenhart, 1983). If a child is dragged into a boring program and is not open to the experience, he/she will close all doors to personal change. However, if a child is invested, and is excited to partake in an activity, personal change is more likely to occur (Kolb, 1984). Outdoor activities offer a fun exciting classroom where students are personally interested and invested in the

experience (Meier et al., 1987). A student's willingness to learn is important for experiences to have an effect on internal learning through participation (Kolb, 1984).

Summary

Many college students have a difficult time with the transition into college life. One of the many stressful aspects of this new life is social interaction and developing new supportive relationships. A strong social self-efficacy encourages students to pursue social interaction, which can develop future relationships and create a positive community. The best way to increase perceived self-efficacy is through mastery experiences. Outdoor education uses a curriculum that surrounds participants with multiple situations involving social interaction, which increases mastery of social relations. Success through these interactions allow for positive perceptions of social self-efficacy. Many college students who are developing their college social self-efficacy through outdoor activities need help transferring their new self-efficacy to everyday life in college. Facilitated reflection through Experiential Education can help students see the similarities between their new experiences and their future events in life.

Outdoor based programming, because of inherent interest and authentic platforms for social experiences and interaction should be better at fostering social self-efficacy than non outdoor programs. In addition, programs involving facilitated reflection should be more effective at increasing social self-efficacy than programs without this reflection. Therefore, this study will evaluate four college orientation programs and their ability to increase the social self-efficacy among new college students. Students who are exposed to an orientation program involving outdoor

education should increase mastery of experiences and vicarious experiences of social engagement, which ought to increase college social self-efficacy more than those who are exposed to an on-campus orientation not involving outdoor programming. Furthermore, a college orientation program including facilitated reflection should increase social self-efficacy more than the control group.

Definitions

These definitions apply to the purpose of this study.

Self-efficacy Beliefs in one's capabilities to organize and execute the courses of action required to produce given attainments.

Social Self-Efficacy Beliefs in one's capabilities to develop relationships, and partake in social interaction

College Social Self-Efficacy Beliefs in one's capabilities to form and maintain relationships in a college or university setting

On-Campus Orientation This is an orientation that is located on a college campus. Students spend 2 days on campus involved in any of the following: social interaction, leadership games, listening to speeches, watching skits, meeting faculty, group initiatives, group meals, social gatherings, and more. These orientations do not include outdoor activities.

On-Campus Orientation with Facilitated Reflection This is the same as an on-campus orientation; however, students will be involved with facilitated reflection at the end of the second day.

Outdoor Orientation This includes 2 days away from the campus in a backcountry settings. Daily activities may include one or more of the following activities; rock climbing, whitewater rafting, whitewater kayaking, sea kayaking, mountaineering, hiking, or backpacking, or others.

Outdoor Orientation with Facilitated Reflection This is the same as an outdoor orientation; however, students will be involved with facilitated reflection at the end of the second day.

Hypotheses

Based upon this review of the literature, the following hypotheses about social self-efficacy will be tested.

H1 Outdoor orientations will increase social self-efficacy more than on-campus orientations.

H2 Orientations with facilitated reflection will increase social self-efficacy more than orientations without this reflection.

CHAPTER 3

METHODS

Overview

This study examined the social self-efficacy of college students before and after four different types of college orientation programs. These four programs were used to evaluate the effectiveness of outdoor programming and facilitated reflection. This section will describe the setting, participants, and measurement tool, as well as, explain the procedures and the design of this quasi-experiment.

Setting

This study involved an outdoor college orientation program in Colorado. Western State College (WSC), located in Gunnison, Colorado offers an outdoor orientation program called the Wilderness Based Orientation (WBO), which is operated by the campus outdoor program known as Wilderness Pursuits. The wilderness orientation is available to any student who is entering WSC for the first time including freshmen and transferring students. Western State College also offers four, on-campus orientations for new students to the college. These on-campus orientations are offered during four weekends throughout the summer. The first three provide consistency between each

weekend with the same specific curriculum, time and staff, whereas, the fourth orientation is offered in a shorter timeframe.

The on-campus orientation is a 2-day program in which students sleep in a dormitory and engage in activities around the campus with other freshmen students and orientation leaders. The on-campus orientation is \$95 and all new students are required to attend either the on-campus program or the WBO. The WBO charges between \$199 and \$649 depending on the trip, and operates on a first-come, first-serve basis. In years past, the Wilderness Based Orientation has offered these courses to over 80 students and the on-campus orientation facilitates nearly 700 students each year. The on-campus orientations consist of smaller groups of 8 to 12 students and two instructors. These smaller groups meet throughout the orientation for specific activities. These smaller groups join together with the large group for certain activities throughout the day allowing individuals to be among all the students in the orientation, anywhere from 120 to 160 students.

Each outdoor orientation consists of around ten students and two instructors and offers longer courses that are located off-campus in nearby wilderness environments. The Wilderness Based Orientation offers eight different programs ranging from three to seven days in length (Jake Jones, personal communication, May 15, 2006). The eight programs include 7 days whitewater rafting through Cataract Canyon for \$649, 7 days rock climbing for \$449, 7 days backpacking for \$449, 7 days mountaineering for \$449, 5 days whitewater kayaking for \$349, 5 days sea-kayaking for \$349, 5 days backpacking for \$349, and 3 days camping for \$199. All the orientation leaders for the eight

wilderness based and the four on-campus orientations were current college students at Western State College.

Participants

Eighty percent of the students involved in the wilderness and on-campus orientations were freshmen students entering college directly following their high school education. Students chose to enroll into the outdoor orientations. Out of the 158 students who filled out the survey, 69 attended a wilderness orientation, and 75 students reported not attending a wilderness orientation because of time constraints ($n=20$), financial concerns ($n=21$), lack of interest ($n=20$), unknown knowledge of program ($n=9$), and other reasons ($n=5$).

Western State College is a state school and many of the students are from Colorado; however, the outdoor orientations are more diverse because many of the out-of-state students are interested in learning about and experiencing the outdoors (Jake Jones, personal communication, May 15, 2006). Overall, these orientations, both on-campus and wilderness based, were the student's first social encounters as a college student, among other college students. Western State College is a residential college and freshman students are required to live in the dormitories and eat at the college's food cafeteria. These college students will all be leaving their childhood homes and forced into living with a roommate and socially interacting among other students throughout their first year of college life.

Multiple demographics were collected for this study to evaluate the population. A total of 158 students from all four orientations fully completed the questionnaire. There

were 149 students who had no previous college experience and 145 of the students were under the age of 20. Sixty-one percent of the students were male and 144 were Caucasian, representing a typical population for Western State College (Jake Jones, personal communication, May 15, 2006).

Measurement

Social self-efficacy has been measured among a variety of populations (Bandura, 1997; Connolly, 1989; Cutrona & Troutman, 1986; Holahan & Holahan, 1987; Matsushima, Shiomi, 2003; Wheeler & Ladd, 1982). This study used the Smith and Betz (2000) self-efficacy scale to measure college social self-efficacy because it focuses on the general social situations found in college. This scale has been used in multiple studies (Hermann & Betz, 2004; Smith & Betz, 2000; Witter, 2004) and it has been shown to be reliable among college students. Smith and Betz (2000) found their scale to have a high degree of internal consistency with a coefficient alpha = .94, and a test-retest reliability over a 3-week interval was $r = .82$. In addition, Hermann and Betz's (2004) study found this scale to have a coefficient alpha value of .94 among college students. This scale was found to be a successful and reliable instrument to measure social self-efficacy among college students.

Smith and Betz (2000) scale measures social self-efficacy using 25 questions. This scale uses a Likert-type Scale from 1 to 5. Each question in the instrument asked the student how confident he/she is on a scale from 1 (cannot do it at all) to 5 (certain I can do it).

As self-efficacy is domain specific, this scale asks specific questions pertaining to college situations and involves six areas of social interaction: making friends, pursuing romantic relationships, social assertiveness, performance in public situations, groups/parties, and giving/receiving help. Students used in this study self-selected their orientation between wilderness and on-campus; therefore, the social self-efficacy pretest was used for a covariate.

Procedures

Students were invited to voluntarily partake in this study. Those who participated were required to be 18 years old and were asked to complete the self-efficacy questionnaire before the orientation, during the program's on-campus registration process. After the second day of programming, students were asked to complete a second questionnaire. The wilderness orientation leaders had students complete their posttests at the end of the second day of programming. This was completed in the field and surveys were returned to the author of the study at the end of the orientation. The first questionnaire included demographic questions (Appendix A) and the social self-efficacy scale (Appendix B) by Smith and Betz (2000). The second questionnaire, given directly following the program, contained the same social self-efficacy scale by Smith and Betz, but did not repeat the demographic questions. Students used a numbered code (date of birth and shoe size) for their identification, needed to match pre- and posttest scores, in order to allow for confidentiality. All the students from the orientations used for data collection were encouraged to partake in this study.

This quasi-experimental design used four different types of programming (on-campus control group, on-campus treatment group, outdoor control group, and outdoor treatment group), therefore each instructor received training specific to the program they facilitated for this study. The on-campus leaders were involved with weekly trainings during the spring semester, previous to the summer orientations. In addition, they attended a weekend conference for college orientation counselors. The on-campus orientations were offered during four different weekends throughout the summer. The first three (June 23-24, July 7-8, and July 13-14) were the most consistent because they involved two days of orientation with identical timelines and curriculum (Appendix C). The fourth and final orientation was offered the weekend before classes began (Aug 18) and only consists of one day of programming. This study utilized the second and third orientations to collect questionnaire data and the first and fourth orientations were not evaluated. The first orientation allowed leaders to become comfortable with student organization and program facilitation. The second orientation was used to collect questionnaire scores of the on-campus control group, and the third orientation collected questionnaire scores for facilitated reflection, treatment group. Orientation leaders were not educated outside of the training offered by the Western State College orientation staff and conference provided prior to the first two orientations. However, before the third orientation, all the orientation leaders were trained to provide facilitated reflection (debriefing through group discussions). This training paralleled the training provided for the student instructors for the outdoor orientation with facilitated reflection, and is discussed later in this paper.

As with the on-campus orientations, the outdoor orientations offered two different program types; therefore, the eight outdoor orientations were divided into two similar groups as well. One set of outdoor orientations was the control group (outdoor orientation), and the other set involved facilitated reflection (treatment). In order to create parallel groups, the outdoor orientations were specifically divided into group A (control group), and group B (treatment). Group A included: 7 day rock climbing, 5 day backpacking, 5 day river kayaking, and 3 day camping. Group B included: 7 day whitewater rafting, 7 day backpacking, 7 day mountaineering, and 5 day sea-kayaking. These groups were divided based on activity type and general social interaction within the activity. Having students complete their posttest questionnaires at the end of their second day in the field controlled program length. Group A was used as the control group and experienced the type of outdoor programming currently offered by Wilderness Pursuits, or business as usual. These trips did not offer the specific facilitated reflection techniques (debriefing through group discussions) by the instructors. The outdoor activities associated with these orientations were not manipulated and took place naturally.

All the instructors who provided the orientations with facilitated reflection participated in a training provided by the author of this study. This involved all the on-campus leaders prior to their third orientation (previously mentioned), and the outdoor instructors in Group B, due to the fact that the outdoor orientations were provided at the same time. The training for these instructors were offered at different times (on-campus is in July and outdoor is in August); however, the trainer provided consistency between the two trainings. These training programs provided orientation instructors an effective

way to process the experiences of each orientation through group discussions at the end of the program. During the training, the trainer took the role of the leader and let the future orientation leaders take the role of the freshmen students. The trainees experienced a similar activity seen during their orientations and worked through the problem solving techniques while cooperating and communicating with the other leaders. After completing the activity, the students experienced facilitated reflection lead by the trainer. After seeing this process first hand the trainees were taught how to effectively take students through a reflection process. They role-played and reflected upon all the activities offered during their future orientation by debriefing the experience through group discussions.

On-campus leaders were instructed how to appropriately debrief the activities that were provided during the entire day of the on-campus orientation. The schedule for the on-campus and outdoor orientations with facilitated reflection were changed to allow 1/2 hour to 1 hour of debriefing at the end of each day. The trainer went through the day's curriculum and provided information on how to facilitate a group discussion about the connection between social interaction in college and that day's events. This included group activities, meeting with faculty, eating with other students, orientation skits, living with a roommate, and other aspects of the curriculum. The outdoor instructors learned the appropriate way to debrief the specific activities and experiences of each day's curriculum. This included the specific outdoor activities (mountaineering, backpacking, rafting, and sea-kayaking), and the general events that take place in outdoor programming (cooking and cleaning meals, choosing tent mates and sharing tents, dealing with weather, group decision making, and others). Overall, the entire training offered to the

on-campus and outdoor instructors who performed the treatment lasted two hours. This training itinerary can be found in Appendix D.

The instructor provided each instructor with a form that could be used to assist them with debriefing each day's overall events. All the instructors were asked to use Appendix E to help facilitate their group discussions. This form was designed to be a simple review of how to facilitate the desired reflection for this study and to provide consistency between instructors and leaders after the training.

Method of Data Analysis

This study involves one dependent variable (social self-efficacy), and two independent variables: program type (on-campus vs. outdoor), and program design (control vs. treatment (facilitated reflection)). Data were cleaned and screened and entered into SPSS 14.0. Basic descriptives were run to describe the study's sample. Hypotheses were tested with a 2X2 Analysis of Covariance (ANCOVA) with the pretest as the covariate, involving two levels of program type (on-campus vs. outdoor), and 2 levels of treatment (treatment vs. control). The college's second on-campus orientation served as the on-campus orientation control group, and the third on-campus orientation involved the on-campus orientation treatment group. Data collected from Group A of the outdoor orientations were used for the outdoor control group, and group B were used for the outdoor treatment group. This study evaluated the interaction between all four levels, the difference between the on-campus orientations and the outdoor orientations, and the difference between the treatment groups and the control groups. Results are described in the following chapter.

CHAPTER 4

RESULTS

This study examined the impact of outdoor education and facilitated reflection on college social self-efficacy. Data from four college orientations (on-campus control, on-campus treatment, outdoor control, and outdoor treatment) was gathered to evaluate two hypotheses. This chapter will cover the results from this data analysis.

The scale used for this study showed a high degree of reliability. Internal consistency was found for both the pretest and the posttest. The pretest resulted with a Cronbach's alpha of .95, and the posttest alpha was .97. Descriptive statistics for all four orientations are presented in Table 1. The posttest results show little difference between the means of all four orientations. The highest possible score on this scale is a 5. All four means represent a high degree of social self-efficacy and may reflect a slight "ceiling effect." This does not allow the variability needed to find differences between programs. In addition, the relatively small standard deviations show minor variance between students' self-efficacy scores. Table 2 shows a paired t-test comparing pre and posttest scores revealing a positive finding that students from all four programs ended with a significant increase of social self-efficacy perceptions ($T=-7.765$, $DF=157$, $p<.001$, two-tailed).

Table 1.

Descriptive Statistics for Social Self-Efficacy

Orientation Type	Pretest		Tests			Posttest	
	M	SD	<u>N</u>	M	SD	<u>N</u>	
Wilderness Control	4.28	.48	32	4.47	.51	32	
Wilderness Txt.	3.96	.64	37	4.2	.62	37	
On-campus Control	3.88	.55	45	4.07	.72	45	
On-Campus Txt.	3.83	.58	44	4.14	.63	44	

Table 2.

Paired Samples t-test

	<i>t</i>	<i>df</i>	<i>p(two-tailed)</i>
PreSSE-PostSSE	-7.765	157	.000

(PreSSE is pretest for social self-efficacy)

(PostSSE is posttest for social self-efficacy)

The descriptives on Table 1 show that there is a difference between pretest means. Students were not randomly selected because students chose to do a wilderness orientation or not; however, students within the on-campus group and the wilderness group were indiscriminately placed into the treatment and control orientations. The wilderness mean score showed an overall higher social self-efficacy among students who participated in a wilderness orientation (on-campus $M=3.86$, wilderness $M=4.12$).

Hypotheses tests were conducted using a 2X2 Analysis of Covariance (ANCOVA) with the pretest as the covariate, involving two levels of program type (on-

campus vs. outdoor), and 2 levels of treatment (treatment vs. control). The self-efficacy scale used for this study met the assumption of homogeneity of variance with a Levene's Test of Equality at (.445), which demonstrates equal variance across groups. The pretest was used as a covariate to adjust for the different pretest scores. Although all four orientations showed an increase in social self-efficacy scores from the pretest, there was no significant difference between orientations. Table 3 shows the results of the Analysis of Covariance (ANCOVA). The PreSSE is a significant covariate showing that the pretest scores were related (shared variance) with the posttest scores. The Treatment score represents the second hypothesis while Wilderness reflects the first hypothesis, and the Wilderness Txt. score is the interaction. The limited variability among programs prevented any differences in social self-efficacy between the four orientations to be detected.

Overall, this study did not find any significant differences between the four orientations. Therefore, both hypotheses cannot be supported by the data found in this study. Limitations and future implications can be found in the following chapter.

Table 3.

Analysis of Covariance (ANCOVA) for Social Self-Efficacy

<u>Source</u>	<u>df</u>	<u>F</u>	<u>Partial Eta Squared</u>	<u>p</u>
PreSSE	1	277.8	.645	.000
Treatment	1	1.102	.007	.296
Wilderness	1	.041	.000	.841
Wilderness Txt	1	.558	.004	.456
Error	153			

CHAPTER 5

DISCUSSION

This study examined methods of increasing college students' social self-efficacy. Four different college orientations were used to evaluate the increase in social self-efficacy between each orientation. It was hypothesized that outdoor orientations would increase social self-efficacy more than on-campus orientations and that orientations with facilitated reflection would increase social self-efficacy more than orientations without this reflection. No significant differences were found between the four orientations. However, all four orientations resulted in an increase of social self-efficacy. Without significant results from the data, it is not possible to interpret any differences between the four orientation types. This chapter will discuss the integration with previous research, the limitations and delimitations of the study, and provide implications for future research.

Integration with Previous Research

The past research and literature on wilderness based orientations has struggled to document the efficacy of such programs. This may be because of difficulties in determining the value of wilderness programs over on-campus programs, the

investigation of unsuitable variables, the challenges of transferring learning back to campus life, the difficulty in measuring the benefits, and the challenges of self-selection bias in wilderness programs. Multiple studies help to explain the finding of this study.

Hinton, Twinney, and Mittelstaedt (2006) had difficulty showing value in freshman wilderness experiences when their study did not find significant results, and they did not compare the wilderness program with a non-wilderness program. Hinton and others did see an increase in overall self-efficacy, development in friendship, and in sense of belonging, although none had significant results. In addition, this study did not compare the results with a control group posttest, failing to allow observable differences between a wilderness program and an on-campus program. The difficulty to show significant increases of self-efficacy and social support in wilderness programs, and the lack of accurately comparing wilderness programs with non wilderness based programs seems to be two themes that plague the investigation of this type of programming.

Additional studies, such as those from Paxton (1999), Bell (2006), Brown (1997), and Kanters, Bristol, and Attarian (2002), also failed to support the benefits of an wilderness programs over those confined on campus. Paxton (1999) found that while adventure programming did increase self-efficacy beliefs, it was no more significant than a non-wilderness experience. Bell (2006) noticed that a wilderness program increased social support, but was also unable to provide substantial evidence that it worked better than an on-campus program. Brown's (1997) study examined three types of college orientations (classroom, service learning/curriculum based, outdoor), results indicated that the outdoor orientation students had the best adjustment means in the social component of the College Transition Questionnaire (CTQ); however, there were no

significant results. Finally, Kanters and others (2002) found that their Outdoor Experiential Training (OET) had no effect on college students' perception of social support.

Consistent findings in previous research show that wilderness programs may not have the ability to increase self-efficacy and/or social support more than an on-campus program; therefore, another variable might be more appropriate for investigation. It is understood that the cited wilderness programs did not show significant differences compared to on-campus programming; however, it is equally important to know that the on-campus programs also failed to show significantly higher scores over the wilderness programs. Not only do the wilderness programs increase self-efficacy and social support similar to the on-campus programs, but the wilderness may contain elements beyond the scope of an on-campus program and more importantly, beyond the outdoor skills and efficacy gained through standard outdoor programming. Outdoor programming may provide beneficial changes among unstudied variables, those which would not be affected as much through on-campus programming. Perhaps future studies could look at other variables outside of self-efficacy and social support to evaluate the value of wilderness programming. For example, Sloan (1996) found that the most long-lasting effect of a 4-day Outward Bound type college orientation was friendship formation. Although friendship formation may contain a social component, it may be considered a separate variable from social self-efficacy.

Bandura (1997) explains that self-efficacy can transfer through cognitive commonalities, however, not as much as mastery experiences. Brody, Hatfield and Spalding (1988) found that unrelated tasks did not transfer self-efficacy. In addition,

Travor and Lynn (2004) found that people who learn a skill directly have higher increases of self-efficacy compared to those who learn through lecture and discussion activities. They also found that self-efficacy increased as performance increased. The on-campus orientation students were interacting on campus, in situations similar to those experiences in college and analogous to the test scale, allowing them to increase their performance. On the contrary, the wilderness orientation students experienced a social context among outdoor activities, which may not have related as much as an on-campus social context.

Similar to this study, Sheard and Golby (2006) found increases in self-efficacy from an outdoor adventure education program, but they were not significantly larger than a non outdoor control group. One of the explanations was that an outdoor curriculum might not be the ideal place to influence a change in self-efficacy and personality. On-campus orientations may provide a more appropriate environment to develop personal variables such as social self-efficacy. This type of orientation encourages students to interact socially and gain comfort with campus social situations and environments. On the other hand, wilderness orientations involve students who are interested in outdoor activities and a staff focused on activity safety as well as teaching specific outdoor skills. Although both of these orientations (on-campus and wilderness) have a social component, there is obviously a different focus to the wilderness experience. The wilderness must transfer learning back into campus life above and beyond the on-campus program, which does not require transfer. However, it is encouraging that this study as well as Sheard and Golby's (2006) study both saw similar increases in self-efficacy among students who were on the outdoor program and those in the control group.

Previous literature suggests additional techniques to transfer learning from wilderness experiences to life at home. As mentioned earlier, Paxton (1999) found that adventure programming did increase self-efficacy beliefs from outdoor programming to daily life at home. In this study, wilderness orientation students increased self-efficacy scores; however, not any more than the on-campus students. On-campus students did not need to transfer their mastery experiences, which took place on-campus. It may be more important for the wilderness instructors to have a stronger ability/training to assist their students in this transfer, whereas the on-campus instructors may not require these skills or training since transfer is not necessary. Gass and Priest (2006) suggest that supplementary techniques can be used to increase transferability from the wilderness to urban life. They endorse the use of metaphors and isomorphs along with debriefing in order to allow more transfer. Although this cannot replace the influence of mastery experiences found on-campus, the integration of metaphors and other techniques may offer more powerful sources for college social self-efficacy improvement when using a wilderness orientation. Overall, a student may acquire new social skills in the wilderness that may benefit him or her on campus; however, measuring this may be difficult.

The scale used for this study (Smith & Betz, 2000) pertained to college situations that take place in, on, or near the campus environment, and therefore, the on-campus orientations may have reflected a closer experience than the wilderness orientations. Bandura's (1997) theory of Self-Efficacy explains that mastery experiences are the most powerful influences on self-efficacy. An actual, hands-on experience disregards the need for transfer. On the other hand, the wilderness orientation students had to transfer their different social perception to a new situation in a new context (the on-campus situations

in the social self-efficacy scale). Even though people can transfer self-efficacious beliefs, mastery experiences are more influential (Bandura, 1997). Transfer from the wilderness program would have had to outweigh mastery experiences in order for this study to find significance in program type and facilitated reflection may not be powerful enough to show significance with this study's treatment. This scale may be useful for evaluating college social self-efficacy since all the questioned situations involve a college setting; however, if overall social self-efficacy is what is to be measured, a different scale may be more appropriate.

Students involved in this study may have scored higher social self-efficacy pretest scores even though they had minimal social experience in a college setting. Previous research shows that people may have a strong self-efficacy even though they have minimal skills. Moseley, Reinke, and Bookout (2002) found that teachers who had little formal exposure to educating did not reflect low self-efficacy. Instead, they started with high self-efficacy and as they learned more about their own teaching ability, their self-efficacy scores actually declined. This reflects a response shift bias. Actually self-efficacy may not be decreasing; instead, teachers begin to understand their actual ability may be lower before having mastery experiences. After having these mastery experiences, people can have a better understanding of their real capability. The students in this study reflected relatively high pretest scores considering they had no prior college experience. This high pretest score may have prevented the posttest to show significant changes during a 2-day program. It would be interesting to evaluate the students' social self-efficacy scores 6 months later to see if they would experience a response shift bias resulting in lower self-efficacy scores throughout the year, showing consistency with

Moseley and others' (2002) study. The difficulty of measuring the benefits of wilderness programs is visible in this study through response shift bias; in addition, this field has difficulty with providing random samples due to self selection bias.

Consistent literature exists that supports the difficulty with random sampling because college wilderness orientation programs are self-selected (Bell, 2006). Bell found that students who attended a wilderness program had more social support than those who did not. However, he did not have a random sample and was not able to draw any definitive conclusions to his study. Students involved in wilderness orientations typically register for these outdoor pursuits. Wilderness orientations are increasing in popularity; however, they do require more funding and often times entail longer periods of time. For example, in this study, the students who were involved with the Wilderness Based Orientations spent 7 days in the field and paid up to \$650 dollars to participate, compared to the on-campus program which only lasted 2 days and cost \$95 dollars. In addition, while certain people are attracted to outdoor programming, others may not want to be involved. The problem with self-selecting programs makes it difficult for colleges and universities to provide researchers with a random sample for the investigation of wilderness orientations. Without random samples it is difficult to understand why changes occurred through the experiment, which is yet another difficulty with measuring and determining the benefits of wilderness orientations.

Previous research provides more understanding when it comes to the difficulties in quantifying the value of wilderness programs over on-campus programs, the investigation of unsuitable variables, the challenges of transferring learning back to campus life, the difficulty in measuring the benefits, and the challenges of self selection

bias in wilderness programs. Previous research helps explain some of the results found in this study, this paper will now discuss the delimitations and limitations involved with this study.

Delimitations

Delimitations were recognized before the data collection and may have affected the results of this study. These concerns included the short amount of time allowed for training, the lack of random selection, the difference between the orientation instructors, and the large number of instructors implementing the study.

The first delimitation is the length of training provided for the orientation instructors. Two hours may not be a sufficient enough time to teach facilitated reflection. The instructors were trained one day previous to their orientations; however, the limited time for training may have prevented sufficient guidance. Orientation leaders may need a longer training in order to sufficiently learn how to process a day's events through facilitated reflection. Furthermore, students learning this debriefing technique may need hands on experience in order to adequately execute this intervention. Estes (2004) explains that the educator has more influence than the students, and can avert students' learning potential. This highlights the importance of the leaders ability to properly facilitate a debriefing in order to have positive learning opportunities.

A second delimitation for this study involves nonrandom selection of participants to the four orientations. Western State College requires every student to attend one orientation throughout the summer. Students can choose to do an outdoor orientation if they are willing to pay an additional fee, not allowing for random selection. Therefore,

this study used a pretest as the covariate in order to look at similar groups of students. If funding was available, this study could have used random selection to choose which students participate in each orientation. There may have been a difference between the students attracted to wilderness versus those who choose the on-campus orientations. Pretest scores showed a higher self-efficacy level among students participating in a wilderness orientation. The wilderness trips were much longer than the on-campus orientations (3-7 days rather than 2 days) and involved a specific outdoor activity (e.g., rock climbing). Students who signed up for these activities knew they were going to be involved with a much longer orientation that involved challenging activities among other college students. These students may have a higher social self-efficacy driving them to participate in these orientations. Bell (2006) also agrees with the importance of using random selection when comparing college orientations. Bell's study found significant evidence in that students who attended a wilderness program had more social support than those who did not. Bell believes one of the explanations for the significance is that students who sign up for wilderness programs may be more apt to developing social support. However, he was unable to determine if this difference is due to the programming or other variables because he did not have random selection.

Removing the pretest may be more effective because students wouldn't see the same questionnaire 2 days later, allowing them to score according to their first test. This could also remove some instructor bias. Students who liked their instructor could score high scores compared to their pretest, and the opposite could occur for disliked instructors. The pretest allows a student to have a better understanding of the purpose of the study, which permits the student to know how to manipulate the posttest scores.

A further concern for this study involves the difference between the on-campus and wilderness-based orientation instructors. Outside of this study's training, the on-campus instructors were involved in more orientation trainings. Weekly trainings and a weekend conference covered reflection techniques and discussed the type of curriculum that is optimal for college orientations. The outdoor orientation leaders were involved in outdoor leadership training and curriculum used for general outdoor education. The big difference between these groups is the emphasis placed on orientation pedagogy and what works well with introducing the college experience to new college students. Outdoor instructors were just trained in outdoor education for all outdoor trips. On-campus instructors had more previous experience with debriefing techniques and effective ways to facilitate group discussions following an initiative. This allowed the on-campus instructors to have a deeper understanding of the importance of debriefing as well as more hands on experience in facilitated reflection. The variance among the instructors' previous knowledge and experience did not allow for consistency with the two-hour training provided for this study. One group (on-campus leaders) received training that was more of a refresher, and the other group (outdoor leaders) learned a new educational technique.

In addition, the on-campus instructors had one practice orientation before leading the control group and two practice orientations before leading the treatment group. As previously discussed, there were three on-campus orientations provided throughout the summer. This study collected on-campus data from the second orientation (control group) and the third orientation (treatment group). Therefore, the leaders had led one orientation before they provided the control group and by the time they led the treatment orientation

they had two previous orientations under their belt. The outdoor instructors did not have any practice before their orientations, both control and treatment. Although they may have instructed other outdoor adventures the previous year, each orientation trip, both control and treatment, was the first time the wilderness instructors were leading the orientation students for that year. Even an experienced instructor or leader may be rusty the first time they are put back into a leadership position each year among the new population. The inconsistency between the amount of immediate experience between wilderness and on-campus instructors may have affected the differences between wilderness and on-campus self-efficacy scores.

A final delimitation involving the orientation instructors is the number of instructors among all the orientations. There were over 30 instructors between the on-campus and the outdoor orientations. This large number of instructors allows for substantial differences between orientations. Although some of the instructors may have provided a quality reflection at the end of the course, in the treatment group, others may not have had the ability to properly facilitate the desired reflection. Also, those instructors in the control group who already had previous knowledge and experience with facilitated reflection, may have provided reflective debriefing. In addition, some of the instructors may have had a positive attitude toward the intervention they were asked to do and put forth serious effort, whereas others may have complied with modest concern.

Limitations

A variety of limitations may have affected this research. These limitations include the influence of mastery experiences, the ability to transfer self-efficacy, the concern of facilitated reflection on its own, and the length of the scale.

One major limitation with this study involves the general curriculum between the on-campus and the wilderness orientations. It was hypothesized that wilderness orientations would improve social self-efficacy more than on-campus orientations. However, when looking at the measurement scale, all the questions deal with situations experienced on-campus or during normal college life. As previously mentioned, enactive mastery experiences are the strongest source of self-efficacy and they come from actual, hands-on experiences (Bandura, 1997). Although both orientations have mastery experiences, the on-campus orientation provides more experiences that actually have to do with college life among a larger amount of students. The wilderness orientation involved smaller groups of 10 to 15 students. Although relationships developed throughout the course may have been more in-depth and intimate, the on-campus students experienced engagement between larger groups exceeding one hundred students. The on-campus orientations involved the students in numerous activities and events throughout the two days. Here, the students were meeting several other students in multiple situations. A wilderness orientation may finish with eight strong connections with other students, but an on-campus student ends the orientation with forty small connections with other students. The greater amount of mastery experiences during this orientation may have provided for a powerful working environment for social self-efficacy.

A second consideration involving the limitation of orientation itinerary involves the ability to transfer self-efficacy. The on-campus students experienced social situations in the context of the campus itself, the very same place described in the measurement scale. However, the wilderness orientation students experienced social engagement in an outdoor setting. Therefore, these students had to transfer the knowledge learned from their new outdoor experiences to the setting of a college campus. Self-efficacy can transfer to like situations (Bandura, 1997). However, Brody, Hatfield and Spalding (1988) found that unrelated tasks do not transfer self-efficacy. In this study, students may not have been able to see the relationship between the wilderness and campus life without a proficient instructor who could assist with proper reflection.

Wilderness orientation leaders may need to be highly trained and skilled in order to provide the transfer of self-efficacy as easily as the on-campus orientation leaders. As previously discussed, a 2-hour training may be insufficient. Wilderness orientations may not be a better place to increase college social self-efficacy without trained professionals who can assist with transferring new social skills learned in the wilderness to future life events that take place on-campus.

Another important limitation may be that facilitated reflection alone may be insufficient for increasing social self-efficacy. Gass and Priest (2006) suggest that other techniques can be used to increase the ability for transfer to take place. They recommend the use of metaphors and isomorphs along with debriefing in order to allow more transfer. Although facilitated reflection may be useful for increasing social self-efficacy, the integration of metaphors, or other techniques may offer additional sources for social self-efficacy improvement. On-campus orientations may work better for transferring

social self-efficacy because it is closer to the actual college situations that will emerge in college life, whereas outdoor orientations may not relate to the everyday life experienced by a college student. Therefore, facilitated reflection alone may not create a strong enough difference in social self-efficacy without a properly trained professional who is competent with debriefing techniques. Once again, a 2-hour training may not provide appropriate education.

An additional limitation involves the social self-efficacy scale used for this study and the environment in which it was administered. The scale involved 25 questions describing social situations found in college life. The students participating in this study filled out the survey at the beginning of each orientation's registration. The atmosphere surrounding the student completing the survey may not have allowed for accurate self-evaluations. Not only were the students rushed to complete the registration forms; they were instructed to complete an optional 25-question self-efficacy scale as well. Meanwhile, other college students surrounded them in a hectic and exciting environment, which might encourage the student to quickly complete the forms in order to meet all the other new students. The length of this scale may have been too long for the students to truthfully evaluate their social self-efficacy. In addition, these students were in a new social atmosphere surrounded by other students and may have answered the questions based on the social desirability to have strong social skills.

Another concern involving the scale used for this study pertains to its inability to measure level and generality. Bandura (1997) explains that there are multiple ways to evaluate efficacious beliefs and outcomes depending on the situation. These three dimensions of evaluation are level, strength, and generality. The Smith and Betz (2000)

scale used in this study only measures self-efficacious strength. This scale expresses the degree of certainty toward the undertaking explained in each question. The scale cannot explain a student's self-efficacious beliefs among varying levels of difficulty and more importantly it cannot tell if a student can generalize these beliefs to similar situations. Studies that evaluate the transfer of wilderness experiences to life at home may want to choose a different scale that can look at level, strength, and most importantly, generality. This is one of many improvements for future research involving self-efficacy.

Implications for Future Research

The results of this study lead to multiple implications for future research on social self-efficacy among college students. Considerations should be taken for random selection, training instructors, and the scale used for the study.

Research that evaluates the differences between wilderness and on-campus orientations should try to use random selection. This may be difficult because many institutions charge additional fees for wilderness programs and students choose to attend on-campus or wilderness orientations. Random selection would provide a cleaner and more valid experiment, as well as, avoiding the problems associated with a pretest. Bell (2006) found statistical evidence between wilderness orientations and social support. However, because he collected data only one time (6 months after a series of college orientations) he was unable to conclude any differences between different types of orientations because the students chose their orientation. Both this study and Bell's (2006) research could not use random selection, which hindered their ability to find positive evidence toward wilderness orientations. Although it is extremely difficult to

obtain the funding for such a study, random selection should be used when comparing wilderness and on-campus orientations.

Changes for future research may also include a longer training for orientation leaders. A 2-hour training may be an inadequate amount of time to prepare future instructors to facilitate reflection. A longer training could include hands-on experience in facilitating a reflection group. In addition, multiple trainings could be beneficial, allowing leaders more time to absorb the new information. A training provided one day prior to implementation may be too brief for some of the instructors to properly implement guided reflection. Though it may be fresh in one's mind, many student instructors have no depth of knowledge in order to provide a valuable, altering experience.

An additional concern among the orientation instructors involves the variety of training they had prior to this assignment. This research involves two different instructor styles for the on-campus and wilderness orientations. Although there are inherent differences (outdoor vs. on-campus daily activities) between the training provided for these two types of instructors, there could be more consistency between them. Obviously these instructors will be implementing two different types of daily activities (group initiatives on campus vs. rock climbing); however, all the instructors could experience some similar training. All orientation instructors could attend the weekend conference, as well as, the weekly trainings offered at the school. This way there would not be a significant difference between the on-campus and outdoor instructors. In fact, the wilderness instructors may need more training with reflective processing since they must help students transfer outdoor experiences to on-campus, college life situations.

The scale used for this study showed strong internal consistency; however, it may not be the best scale for this population. First of all, the scale uses a score of 1 through 5. A score of 1 represents a low score and a score of 5 represents a high score. This setup may not be a valuable way to represent scores among adolescents. In this study the students scored exceptionally high scores for freshmen college students (145 of the 158 students were freshmen). Using a 1 through 5 Likert type scale may make the student think that 3 is an average and anything below 3 is below average. This might be a reason for such high pretest scores in this study. Students may have thought that a score of 4 is simply above average. Future scales used for adolescents may want to have a scale that involves a greater number of response categories. This may allow for more variance and help prevent a ceiling effect.

Another consideration for this scale includes the length. This scale asks 25 similar questions about social events in college life. The scale had a good internal consistency with a Cronbach's alpha of .95 and .97 (pre- and posttests). An alpha with this magnitude may allow for a slight reduction in the number of questions and still have adequate internal consistency. A shorter instrument may allow for more accurate scores among adolescents. The current length may be too long for students to truly concentrate on the questionnaire because the surrounding environment may distract them. Other students who have not started or who have already completed the survey may be surrounding a student who is filling out the questionnaire. This student may feel awkward and might want to join in on the social engagement and might quickly complete the survey without an accurate assessment of social self-efficacy. In order to avoid the problems surrounding the students' pretest during the registration period, it may be

helpful to have the pretest taken a few weeks before the orientation while the students are still at home.

Although this study did not find a difference between orientations, it did find that all four orientations increased students' social self-efficacy. This study found no evidence showing that wilderness orientations work better than on-campus orientations; however, they do offer an additional opportunity for interested students to meet other freshmen students in a venue that increases social self-efficacy. Out of all the new students at Western State College, many chose to go on a wilderness trip and were willing to pay a much larger fee to participate in the outdoor activities. By offering an orientation with outdoor adventures, Western State College and other colleges and universities can provide an exciting introduction to college life where students can experience new, challenging activities among other freshmen students with similar interests. In addition, many colleges, including Western State College, require students to participate in an orientation (Shelly Janson, personal communication, June 20, 2006). The opportunity to select an on-campus or a wilderness orientation allows students to enter the orientation with excitement and optimism, rather than feeling they are only there because they were required to attend with no choice in the matter. This openness may allow for more growth and development for many students.

Future research should continue studying the effects of on-campus and wilderness orientations on college social self-efficacy among higher education students. Continued support for evidence in this field can offer colleges and universities alternative and exciting sources of social integration for their students. Not only would the institution be able to publicize these thrilling orientations, but the students would gain personal growth

as well. This study did find that college orientations increase social self-efficacy.

Students who enter college with a positive social self-efficacy are more willing to pursue social situations and will engage with more confidence and have a better chance developing a supportive social network (Bandura, 1997). College orientations, both on-campus and wilderness based, provide the opportunity for students to increase their social self-efficacy leading to a more enjoyable college experience (Tinto, 1987), and increase a student's willingness to stay at that institution and graduate (Astin, 1997).

APPENDIX A

QUESTIONNAIRE COVER PAGE
AND DEMOGRAPHIC
QUESTIONS

Thank you for your participation in this study.

Here is some information regarding your participation.

1) This research is being conducted by Thomas Zimmer in the Parks, Recreation, and Tourism Department at the University of Utah (719-648-1574, or tzcwi@hotmail.com).

The purpose of this study is to evaluate the effectiveness of college orientations.

2) This questionnaire will take approximately **10 minutes**.

The return of this questionnaire will serve as consent to participate in this study.

3) Please complete the entire questionnaire; otherwise all other information must be thrown out.

4) If you have questions regarding your rights as a research participant, or if problems arise which you do not feel you can discuss with the Investigator, please contact the Institutional Review Board Office at (801) 581-3655.

5) Your data will be kept confidential. Your date of birth and shoe size is used to match your first and second questionnaires in an anonymous way. Please be sure to be consistent in your answers.

6) Your questionnaires will only be viewed by the researcher.

Please complete the entire questioner below:

SECTION 1-

Course Code: _____ *This will be given to the students*

Name of Orientation Leader (if available): _____

Birth Date: _____ *This will be used to align the pre and post tests*

Shoe Size: _____ *This will be used to align the pre and post tests*

of Completed College Credits: _____

of Months Lived on a College Campus: _____

Did you transfer from another school: Y N Where: _____

How many months since you graduated high school: 1-4 5-8 9-12 13-24 25+

Age: _____

Sex: Male Female

Ethnicity: Caucasian African American Hispanic Pacific Islander

Asian American Prefer not to answer 2 or more ethnicities Other: _____

Were you informed about the Wilderness Based (outdoor) Orientations: Y N

Are you participating in a Wilderness Based (outdoor) Orientation in August: Y N

If no, why not: High Cost Time Issues Lack of Interest

Didn't know about it No Availability Other: _____

SECTION 2- The following questionnaire asks 25 specific questions. Please take your time and answer these questions as truthfully as possible. Your answers are confidential and honest questionnaires can be used to improve college orientations. Thank you for your time.

APPENDIX B

SCALE OF PERCEIVED SOCIAL
SELF-EFFICACY

Below, please rate how confident you are that you can successfully perform each behavior **as of right now**. Rate your degree of confidence in a scale from 1 (I cannot do it at all) to 5 (I'm certain I can do it) by circling the appropriate number.

1	2	3	4	5
Cannot do it at all		Moderately certain I can do it		Certain I can do it

EXAMPLE: Your belief that you could make a new student feel comfortable with your group of friends? THEN CIRCLE ONE OF THE NUMBERS BELOW

1	2	3	4	5
---	---	---	---	---

1. Your belief that you could start a conversation with a student you don't know very well?

1	2	3	4	5
---	---	---	---	---

2. Your belief that you could express your opinion to a group of students discussing a subject that is of interest to you?

1	2	3	4	5
---	---	---	---	---

3. Your belief that you could work on a class project with students you don't know very well?

1	2	3	4	5
---	---	---	---	---

4. Your belief that you could help to make another student you've recently met feel comfortable with a group of your friends?

1	2	3	4	5
---	---	---	---	---

5. Your belief that you could share with a group of students an interesting experience you once had?

1	2	3	4	5
---	---	---	---	---

Below, please rate how confident you are that you can successfully perform each behavior **as of right now**. Rate your degree of confidence in a scale from 1 (I cannot do it at all) to 5 (I'm certain I can do it) by circling the appropriate number.

1	2	3	4	5
Cannot do it at all		Moderately certain I can do it		Certain I can do it

6. Your belief that you could put yourself in a new and different social situation in college?

1	2	3	4	5
---	---	---	---	---

7. Your belief that you could volunteer to help organize an event in college?

1	2	3	4	5
---	---	---	---	---

8. Your belief that you could ask a group of students who are planning to engage in a social activity (e.g. go to a movie) if you can join them?

1	2	3	4	5
---	---	---	---	---

9. Your belief that you could get invited to a party that is being given by a prominent or popular student?

1	2	3	4	5
---	---	---	---	---

10. Your belief that you could volunteer to help lead a group or organization in college?

1	2	3	4	5
---	---	---	---	---

11. Your belief that you could keep up your side of the conversation?

1	2	3	4	5
---	---	---	---	---

Below, please rate how confident you are that you can successfully perform each behavior **as of right now**. Rate your degree of confidence in a scale from 1 (I cannot do it at all) to 5 (I'm certain I can do it) by circling the appropriate number.

1	2	3	4	5
Cannot do it at all		Moderately certain I can do it		Certain I can do it

12. Your belief that you could be involved in group activities in college?

1	2	3	4	5
---	---	---	---	---

13. Your belief that you could find another student to spend a weekend afternoon with?

1	2	3	4	5
---	---	---	---	---

14. Your belief that you could express your feelings to another person in college?

1	2	3	4	5
---	---	---	---	---

15. Your belief that you could find someone to go out to lunch with in college?

1	2	3	4	5
---	---	---	---	---

16. Your belief that you could ask another student out on a date?

1	2	3	4	5
---	---	---	---	---

17. Your belief that you could go to a party or social function where you probably won't know anyone in college?

1	2	3	4	5
---	---	---	---	---

Below, please rate how confident you are that you can successfully perform each behavior **as of right now**. Rate your degree of confidence in a scale from 1 (I cannot do it at all) to 5 (I'm certain I can do it) by circling the appropriate number.

1	2	3	4	5
Cannot do it at all		Moderately certain I can do it		Certain I can do it

18. Your belief that you could ask someone for help when you need it?

1	2	3	4	5
---	---	---	---	---

19. Your belief that you could make friends with another student?

1	2	3	4	5
---	---	---	---	---

20. Your belief that you could join a lunch or dinner table where other students are already sitting and talking?

1	2	3	4	5
---	---	---	---	---

21. Your belief that you could make friends in a group where everyone else knows each other?

1	2	3	4	5
---	---	---	---	---

22. Your belief that you could ask someone out after he/she was busy the first time you asked?

1	2	3	4	5
---	---	---	---	---

23. Your belief that you could get a date to a dance that your friends are going to?

1	2	3	4	5
---	---	---	---	---

Below, please rate how confident you are that you can successfully perform each behavior **as of right now**. Rate your degree of confidence in a scale from 1 (I cannot do it at all) to 5 (I'm certain I can do it) by circling the appropriate number.

1	2	3	4	5
Cannot do it at all		Moderately certain I can do it		Certain I can do it

24. Your belief that you could call someone you've met and would like to know better?

1	2	3	4	5
---	---	---	---	---

25. Your belief that you could ask a potential friend out for a soda or a bite to eat?

1	2	3	4	5
---	---	---	---	---

(Smith & Betz, 2000)

APPENDIX C

WESTERN STATE COLLEGE ON-CAMPUS

ORIENTATION SCHEDULE

WSC ORIENTATION 2006

FRESHMEN ORIENTATION TENTATIVE SCHEDULE

DAY ONE

TIME	ACTIVITY
9:00 am – 12:00 am _____	Check-In / Registration
11:00 am _____	Lunch
12:00 pm _____	Western Welcome
	Dr. Jay Helman, President of Western State College Kebler Ballroom Taryn Mead, President of Student Government Association Carlos Rodriguez & Maureen Sherlock, Orientation Coordinators
1:00 pm _____	Team Meeting
1:30 pm _____	Academic Expectations
	Meet with FAC (Faculty Advising Corps)
2:30 pm _____	Leadership Games 2006
4:30 pm _____	WOL Exhibit
	Discover Program Kebler Ballroom Gunnison Community Presentation
5:45 pm – 7:00 pm _____	Residence Hall Check-In
6:00 pm _____	Dinner with Orientation Leaders
7:00 pm _____	The Real World: Western State
8:30 pm _____	Casino Night
	FREE poker, blackjack and roulette Packers raffle drawing for prizes WIN PRIZES from local stores
8:30 pm _____	Games Room Open- College Union
	FREE pool, bowling, air hockey, etc. Lower Level
8:30 pm _____	Mountaineer Card Office Open

DAY TWO

TIME	ACTIVITY
7:00 am – 9:00 am _____	Check-out of Resident Halls
8:00 am – 12:00 am _____	Placement Testing (Math, Reading, Writing)
8:30 am – 9:30 am _____	Breakfast with Orientation Leaders
9:30 am _____	Residence Life: "Living on Campus
10:30 am. _____	Send Off
	WIN \$500 On-Campus Scholarship for 2006-07 Kebler Ballroom WIN 1/2 Board Plan Scholarship for 2007-08 <i>Note: you must be present to win scholarships</i>

APPENDIX D

TRAINING ITINERARY

The instructors' training itinerary is identical for both on-campus and outdoor orientations. The location is the same, both groups of instructors will experience the same length of training and the training will take place one-day prior to the orientation.

Training Itinerary

TIME (0:00 to 2:00 hrs)....	ACTIVITY
0:00 - 0:10	Introduce the trainer and discuss the purpose of the training.
0:10 - 0:50.....	Take the future instructors through a group activity similar to those used in the orientation.
1:30 - 2:00.....	Involve the future instructors in a group discussion similar to the reflection the orientation leaders will be facilitating.
0:50 - 1:50.....	Handout Appendix E ("Debriefing the orientations" form) -Walk the orientation leaders through Appendix E and train the desired facilitation techniques for this study.
1:50 - 2:00.....	Encourage trainees to review Appendix E later that night and the next morning. -Handout smaller forms that can be used in the field during the orientation. -Emphasize the importance of a quality debriefing and the importance of the leaders role. -Explain the value of the desired program for future college students and their important role. -Answer any questions.

APPENDIX E

DEBRIEFING THE ORIENTATIONS

Debriefing the orientations

1) At the beginning of the orientation gather the group and ask them to agree upon a “Full Value Contract”. This contract asks each participant to hold certain values throughout the orientation (Solberg et al., 1988), allows for a positive environment and encourages students to hold some responsibility during debriefing.

-I agree to follow all safety and group behavior guidelines.

-I agree to work together with the group and work towards the individual and group goals.

-I agree to give and receive feedback, both positive and constructive, and change negative behavior when it is appropriate.

2) At the end of each day gather the group in a circle or a comfortable setting to engage in a group discussion that should last between ½ to 1 hour long.

3) Briefly review the day’s events.

On-campus orientation- speeches, meeting faculty, leadership activities, group meals, meeting orientation roommate, etc.

Outdoor orientation- cooperating with tent-mate, making meals, leadership activities, outdoor activities i.e. rock climbing, kayaking, hiking, etc.

4) Tell the students the following:

1. It is important for everyone to enter the discussion because it allows the group to see a much wider perspective and see other points of view.

2. Information shared in the discussion cannot leave the discussion and is confidential.

3. No one has to talk. If you don’t feel comfortable speaking simply say “pass”, but please listen to the discussion and offer your peers attentive respect.

5) Start the discussion by asking some very easy questions (answerable by a number, word, or phrase) to the whole group. Ask people to answer the question as it comes around the circle to them.

Examples:

-From 1 to 10 (1 is low and 10 is high), how well did you get to meet new people today?

-Name one activity you did today where you meet a new student.

-What was the most difficult task you did today?

6) Try to expand upon these answers after they cycle through each individual.

-Find similar comments and encourage more discussion among the students.

-Lead the group towards discussing social interaction.

-Try to allow the students to control the discussion unless it wanders off.

-Offer personal experiences, but only engage as much as the others.

7) Key Points to discuss- if one day covered certain topics, cover others the next day.

How did today’s events relate to future college situations in-

-making friends

-pursuing romantic relationships

-seeking social activity

-performance in social situations

-your comfort in large groups/ parties

-giving and receiving help from others (friends, RA, professor, etc.)

(This form was laminated in a smaller size for the instructors to use in the field.)

Quick reference form for the field

- 1) “Full Value Contract” At the beginning of the orientation-
 - I agree to follow all safety and group behavior guidelines.
 - I agree to work together with the group and work towards the individual and group goals.
 - I agree to give and receive feedback, both positive and constructive, and change negative behavior when it is appropriate.
- 2) Gather into a group for a discussion
- 3) Briefly review the day’s events
- 4) Tell the students the following:
 1. It is important for everyone to enter the discussion because it allows the group to see a much wider perspective and see other points of view.
 2. Information shared in the discussion cannot leave the discussion and is confidential.
 3. No one has to talk. If you don’t feel comfortable speaking simply say “pass”, but please listen to the discussion and offer your peers attentive respect.
- 5) Easy questions (answerable by a number, word, or phrase)

Examples

 - From 1 to 10 (1 is low and 10 is high), how well did you get to meet new people today?
 - Name one activity you did today where you meet a new student.
 - What was the most difficult task you did today.
- 6) Encourage deeper discussion- Lead towards social interaction
- 7) Key Points to discuss- if one day covered certain topics, cover others the next day.

How did today’s events relate to future college situations in-

 - making friends
 - pursuing romantic relationships
 - seeking social activity
 - performance in social situations
 - your comfort in large groups/ parties
 - giving and receiving help from others (friends, RA, professor, etc.)

REFERENCES

- Alvarez, A.G., & Welsh, J.J. (1990) Adventure: A model of experiential learning. *Social Work in Education; 13*(1), 49-57.
- Association for Experiential Education (AEE). (1994). *AEE definition of experiential education*. Boulder, CO: Association for Experiential Education.
- Astin, A. (1997). How “good” is your institution’s rate? *Research in Higher Education, 38* (6), 647-658.
- Bandoroff, S., & Scherer, D.G. (1994). Wilderness family therapy: An innovative treatment approach for problem youth. *Journal of Child and Family Studies, 3*(2), 175-191.
- Bandura, A. (1986). The explanatory and predictive scope of self-efficacy theory. *Journal of Social and Clinical Psychology, 4*(1), 359-373.
- Bandura, A. (1992). Exercise of personal agency through the self-efficacy mechanism. In R. Schwarzer (Ed.), *Self-efficacy: Thought control of action* (pp. 3-38). Washington, D.C.: Hemisphere.
- Bandura, A. (1997). *Self-efficacy: The exercise of control*. New York: W. H. Freeman and Company.
- Bandura, A. (2001). *Guide for constructing self-efficacy scales*. Stanford: Stanford University.
- Bandura, A., Barbaranelli, C., Capara, G., & Pastorelli, C. (1996). Multifaceted impact of self-efficacy beliefs on academic functioning. *Child Development, 67*, 1206-1222.
- Bandura, A., Jeffery, R.W. & Gajdos, E. (1975). Generalizing change through participant modeling with self-directed mastery. *Behavior Research and Therapy, 13*, 141-152.
- Bell, B.J. (2006). Wilderness orientation: Exploring the relationship between college preorientation programs and social support. *Journal of Experiential Education, 29*(2), 145-167.

- Berry, K. (2005). Between a rock and a hard place. *Times Educational Supplement*, 4653, 20.
- Blai, B. (1989). Health consequences of loneliness: A review of the literature. *Journal of American College Health*, 37(4), 162-167.
- Blake, T. & Rust, J. (2002). Self-esteem and self-efficacy of college students with disabilities. *College Student Journal*, 36(2), 2.
- Blowers, G.H., & O'Connor, K.P. (1996). *Personal Construct Psychology in the Clinical Context*. Ottawa, Ontario: University of Ottawa Press.
- Brody, E.B., Hatfield, B.D., & Spalding, T.W. (1988). Generalization of self-efficacy to a continuum of stressors upon mastery of a high-risk sport skill. *Journal of Sport and Exercise Psychology*, 10, 32-44.
- Brown, D.A. (1997). Assessment of anticipated and actual college adjustment in freshman-oriented students. *Humanities and Social Sciences*, 58, 102.
- Brown, D.D. (1997). *Adolescent externalizing behavior problems and family interaction*. Unpublished doctoral dissertation, California School of Professional Psychology, Berkeley.
- Cervone, D. (1989). Effects of envisioning future activities on self-efficacy judgments and motivation: An availability heuristic interpretation. *Cognitive Therapy and Research*, 13, 247-261.
- Connolly, J. (1989). Social self-efficacy in adolescence: Relations with self-concept, social adjustment, and mental health. *Canadian Journal of Behavioral Science*, 21, 258-269.
- Coopersmith, S. (1967) *The Antecedents of Self-Esteem*. San Francisco, CA: W.H. Freeman.
- Csikszentmihalyi, M., & Csikszentmihalyi, I.S. (1990). Adventure and the flow experience. In J.C. Miles & S. Priest (Eds.), *Adventure Education*. State College, PA: Venture.
- Cutrona, C.E., & Troutman, B.R. (1986). Social support, infant temperament, and parenting self-efficacy: A mediational model of postpartum depression. *Child Development*, 57, 1507-1518.
- Davis-Berman, J. L., & Berman, D. (1996). Using the wilderness to facilitate adjustment to college: An updated description of wilderness orientation programs. *Journal of Experiential Education*, 19(1), 22-28.

- Derby, D.C., & Smith, T. (2004). An orientation course and community college retention. *Community College Journal of Research & Practice*, 28(9), 763-773
- Dewitz, J.S. (2002). Self-efficacy and college student satisfaction. *Journal of Career Assessment*, 10(3), 315-326.
- Donnellan, J., Peck, D.G. (2005). *The Implications of Self-Esteem*. Princeton, New Jersey: Princeton University Press.
- Dryfoos, J.G. (1997). The prevalence of problem behaviors: Implications for programs. In R.P. Weissberg & T.P. Gullotta (Eds.), *Healthy children 2010: enhancing children's wellness. issues in children's and families' lives Vol. 8.* (pp. 17-46). Thousand Oaks, CA: Sage Publications, Inc.
- Ellis, G.D., Maughan-Pritchett, M. & Ruddell, E. (1993). Effects of attribution based verbal persuasion and imagery on self-efficacy of adolescents diagnosed with major depression. *Therapeutic Recreation Journal*, 27(2), 83-97.
- Esra, C., Aydogan, A.C, & Yildiz, K. (2005). Depression among Turkish female and male university students. *Social Behavior & Personality: An international Journal*, 33(4), 329-339.
- Estes, C.A. (2004) Promoting student-centered learning in experiential education. *Journal of Experiential Education*, 27(2), 141-160.
- Evangelauf, J. (1990). Educational research seen in ferment: Retention studies called too narrow. *The Chronicle of Higher Education*, 34(5), 569-581.
- Ewert, A., & Hollenhorst, S. (1989). Testing the adventure model: Empirical support for a model of risk recreation participation. *Journal of Leisure Research*, 21(2), 124-139.
- Fan, C., & Mak, A.S. (1998). Measuring Self-Efficacy in a Culturally Diverse Student Population. *Social Behavior & Personality: An International Journal*, 26(2), 131.
- Feldman, S.S., & Elliott, G.R. (1990). *At The Threshold; The Developing Adolescent*. Harvard University Press.
- Farmer, H.S. (1985). Model of career and achievement motivation for women and men. *Journal of Counseling Psychology*, 32, 363-390.
- Ferrari, J. R., & Parker, J.T. (1992). High school achievement, self-efficacy, and locus of control as predictors of freshman academic performance. *Psychological Reports*, 71, 515-518.

- Gabrielle, F. (2002). In the business to retain. *Black Issues in Higher Education*, 19(13), 10.
- Galloway, S.P. (1999). *The use of assessment by wilderness orientation programs: efforts to improve college student retention*. Eugene, Or. : Microform Publications, University of Oregon. 2000.
- Gass, H.L., & Gillis, M.A. (1993). Bringing adventure into marriage and family therapy: An innovative experiential approach. *Journal of Marital & Family Therapy*, 19(3), 273-286.
- Gass, M.A., & Priest, S. (2006). Using metaphors and isomorphs to transfer learning in adventure education. *Journal of Adventure Education and Outdoor Leadership*, 10(4), 18-23.
- Gass, M. (1987). The effects of a wilderness orientation program on college students. *Journal of Experiential Education*, 10(2), 30-33.
- Gass, M. (1999). Adventure programs in higher education. In J. Miles & S. Priest (Eds.), *Adventure Programming* (pp. 373-83). State College, PA: Venture Publishing.
- Glasgow, R.E. & Arkowitz, H. (1975). The behavioral assessment of male and female social competence in dyadic heterosexual interactions. *Behavior Therapy*, 6(4), 488-498.
- Greenaway, R. (1993). Reviewing adventure activities. *Journal of Adventure Education and Outdoor Leadership*, 10(1), 11-13.
- Haras, K., Bunting, C.J., & Witt, P.A. (2005). Linking outcomes with ropes course program design and delivery. *Journal of Park and Recreation Administration*, 23(2), 36-63.
- Hastie, P. (1995). An ecology of a secondary school outdoor adventure camp. *Journal of Teaching in Physical Education*, 15(1), 79-97.
- Hattie, J., Marsh, H., Neill, J., & Richards, G. (1997). Adventure education and Outward Bound: Out-of-class experiences that make a lasting difference. *Review of Educational Research*, 67(1), 43-87.
- Hermann, K.S., & Betz, N.E. (2004). Path models of the relationships of instrumentality and expressiveness to social self-efficacy, shyness, and depressive symptoms: *Sex Roles*, 51(1/2), 55-66.
- Hinton, J.L., Twilley, D.L., & Mittelstaedt, R.D. (2006). An investigation of self-efficacy in a freshman wilderness experience program. *Research in Outdoor Education*, 8, 105-118.

- Holahan, C.K., & Holahan, C.J. (1987). Self-efficacy, social support, and depression in aging: A longitudinal analysis. *Journal of Gerontology*, 42, 65-68.
- Hsiao, K.P. (1992). *First-generation college students*. ERIC Clearinghouse for Junior Colleges, Los Angeles, CA.
- Humberstone, B., & Lynch, P. (1991). Girls' outdoor/adventure education in England and New Zealand. In Standeven, J. (ed.) et al., *Sport for all: into the 90s*, Aachen, Germany, Meyer & Meyer Verlag, c1991, 298-303.
- Isenhart, M.W. (1983). *Rafting the Green River as an Analogy to the Mid-Life Transition*, November - ERIC# ED238079.
- Jones, C.D., Hollenhorst, S.J., Perna, F., & Selin, S. (2000). Validation of the flow theory in an on-site white water kayaking setting. *Journal of Leisure Research*, 32(2), 247-261.
- Kanters, M.A., Bristol, D.G., & Attarian, A. (2002). The effects of outdoor experiential perceptions of college stress. *Journal of Experiential Education*, 25(2), 257-267.
- Kaplan, H.B. (1982). Self-attitudes and deviant behavior. New directions for theory and research. *Youth and Society*, 14, 185-211.
- Kashdon, T.B., & Roberts, J.E. (2004). Social anxiety's impact on affect, curiosity, and social self-efficacy during a high self-focus social threat situation. *Cognitive Therapy and Research*, 28(1), 119-141.
- Kelley, M.P., Coursey, R.D., & Selby, P.M. (1997). Therapeutic adventures outdoors: A demonstration of benefits for people with mental illness. *Psychiatric Rehabilitation Journal*, 20(4), 61-73.
- Kelly, G.A. (1955). *The Psychology of Personal Constructs, vols 1 and 2*. New York: Norton.
- Kesselheim, A.D. (1976). *A rationale for outdoor activity as E.E.: The Reason for Freezin'*, August 1976- ERIC# ED148530.
- Kolb, D.A. (1984). *Experiential Learning: Experience as the source of learning and Development*. Englewood Cliffs, NJ: Prentice Hall, Inc.
- Lau, L.K. (2003). Institutional factors affecting student retention. *Education*, 124(1), 126-136.
- Lewin, G. W. (Ed.). (1935-1946). *Resolving social conflicts: Selected papers on group dynamics*. New York: Harper & Row.

- Long, A.E. (2001). Learning the ropes: Exploring the meaning and value of Experiential Education for girls at risk. *Journal of Experiential Education*, 24(2), 100.
- Luckner, J., & Nadler, R. (1997). *Processing the experience: Strategies to enhance and generalize learning*. Dubuque, IA: Kendall/Hunt Publishing Company.
- Lueng, C. (2001). The psychological adaptation of overseas and migrant students in Australia. *International Journal of Psychology*, 36(4), 251-259.
- Maslow, A. (1968). *Toward a psychology of being, 2d ed.*, Princeton, New Jersey: D. Van Nostrand Co., 103-114.
- Matsushima, R., & Shiomi, K. (2003). Social self-efficacy and interpersonal stress in adolescence. *Social Behavior and Personality*, 31 (4), 323-332.
- McAuley, E. (1985). Modeling and self-efficacy: A test of Bandura's model. *Journal of Sport Psychology*, 7, 283-295.
- Medora, N., & Woodward, J.C. (1986). Loneliness among college students at Midwestern universities. *Adolescence*, 21, 391-402.
- Meier, J.F., Morash, T.W., & Welton, G.E. (1987). *High-adventure outdoor pursuits: Organization and leadership. 2d ed.*, Publishing Horizons, Inc., Columbus, Ohio.
- Miles, J.C., & Watters, R. (1985). *Proceedings of the 1984 conference on outdoor recreation: A landmark conference in the outdoor recreation field*; Rural Education and Small Schools, Idaho, ERIC #ED356932.
- Miles, J.C. (1978). The value of high adventure activities. *Journal of Physical Education and Recreation*, 49, 27-28.
- Mink, A., & O'Steen, B. (2003). Reaching beyond the choir: Taking experiential education down from the mountain and into the public school. *Journal of Experiential Education*, 25(3), 355.
- Money, Inc. (1997). How we rank the colleges. *Money*, 26(9), 115-130.
- Moseley, C., Reinke, K., & Bookout, V. (2002). The effect of teaching outdoor environmental education on preservice teacher's attitudes toward self-efficacy and outcome expectancy. *The Journal of Environmental Education*: 34(1), 9-15.
- Munsell, J. (1992). *Powell's journey: Canyon as teacher. A model for E.E.* March 1995, ERIC# ED391694.

- Nagle, R.A., & Collins, M. (1999). Workplace education: A survey of employers on experiential education programs. *Journal of Career Planning & Employment*, 60(1), 39.
- Paxton, T. (1999). Self-efficacy and adventure programs: A quantitative and qualitative analysis. Dissertation abstracts international section A: *Humanities and Social Sciences*, 59(7-A), 2717.
- Payne, R., & Jahoda, A. (2004). The Glasgow social self-efficacy scale—a new scale for measuring social self-efficacy in people with intellectual disability. *Clinical Psychology & Psychotherapy*, 11(4), 265-274.
- Priest, S. (1992). Factor exploration and confirmation for the dimensions of an adventure experience. *Journal of Leisure Research*, 24(2), 127-139.
- Priest, S. (1998). Physical challenge and the development of trust through corporate adventure training. *Journal of Experiential Education*, 21(1), 31-34.
- Priscilla, C.K. (2003). Perceptions of parent-child attachment, social self-efficacy, and peer relationships in middle childhood. *Infant and Child Development*, 12(4), 351.
- Propst, D.B., & Koesler, R.A. (1998). Bandura goes outdoors: Role of self-efficacy in the outdoor leadership development process. *Leisure Sciences*, 20, 319-344.
- Rhoades, J. (1972). *The problem of individual change in outward bound: An application of change and transfer theory*. Unpublished Ed.D. dissertation, University of Massachusetts: Amherst.
- Rosenberg, M. (1965). *Society and the Adolescent Self-Image*. Princeton, New Jersey: Princeton University Press.
- Rotenburg, K.M., & Morrison, J. (1993). Loneliness and college achievement: Do loneliness scale scores predict college drop-out? *Psychological Reports*, 73, 1283-1288.
- Sachs, J.J., & Miller, S.R. (1992). The impact of a wilderness experience on the social interactions and social expectations of behaviorally disordered adolescents. *Behavioral Disorders*, 17(2), 89-98.
- Schoel, J., Prouty, D., & Radcliffe, P. (1988). *Islands of healing: A guide to adventure based counseling*. Hamilton, MA: Project Adventure.
- Schunk, D., Hanson, A., & Cox, P. (1987). Peer model attributes and children's achievement behaviors. *Journal of Educational Psychology*, 79, 54-61.

- Schwartz, R.M., & Gottman, J.M. (1976). Toward a task analysis of assertive behavior. *Journal of Consulting and Clinical Psychology, 44*, 910-920.
- Sheard, M., & Golby, J. (2006). The efficacy of an outdoor adventure education curriculum on selected aspects of positive psychological development. *Journal of Experiential Education, 29*(2), 187-209.
- Sherer, M. & Adams, C. (1983). *The self-efficacy scale: A construct of validity study*. Counseling and Student Services, Mississippi, ERIC# ED233274.
- Sloan, A. (1996). Survival skills during freshman orientation: Its role in college adjustment. *Journal of College Student Development, 37*(3), 324-333.
- Smith, H.M., & Betz, N.E. (2000). Development and validation of a scale of perceived social self-efficacy. *Journal of Career Assessment, 8* (3), 283-301.
- Smith, Kemper D. (1984). *Beyond Wilderness Skills*, April 1984- ERIC# ED252368.
- Stanton-Salazar, R.D., & Spina, S.U. (2005). Adolescent peer networks as a context for social and emotional support. *Youth and Society, 36*(4), 379-417.
- Stremba, B. (1991). *A Wilderness and Community Building New Student Orientation Program*. Rural Education and Small Schools, Washington, ERIC# ED342596.
- Sutherland, S.L. (2001). Don't judge a book by its cover: A close look at inclusive adventure education. Dissertation abstracts international section A: *Humanities and Social Sciences, 61*(8-A), 3058.
- Taylor, C.B., Bandura, A., Ewart, C.K., Miller, N.H., & Debusk, R.F.F. (1985). Exercise testing to enhance wives' confidence in their husbands' cardiac capabilities soon after clinically uncomplicated acute myocardial infarction. *American Journal of Cardiology, 55*, 635-638.
- Terenzini, P. (1996). *Making the transition to college: Teaching on solid ground: Using scholarships to improve practice*, edited by Robert Menges, Maryellen Wierner, and Associates. San Fransisco, CA: Jossey Bass Publishers.
- Tinto, V. (1987). *Leaving college: Rethinking the causes and cures of student attrition*. Chicago: University of Chicago Press.
- Tinto, V. (1989). Misconceptions mar campus discussions of student retention. *The Chronicle of Higher Education, 36*(1), 132.

- Travor, B., & Lynn, M. (2004). The effectiveness of verbal self-guidance as a transfer of training intervention: its impact on presentation performance, self efficacy and anxiety 1. *Innovations in Education & Teaching International*, 41(3), 255-271.
- Vaux, A. (1988). *Social support: Theory, research, and intervention*. New York: England Praeger Publishers.
- Von Ah, D., Ebert, S., Ngamvitroj, A., Park, N., & Kang, D-H. (2004). Predictors of health behaviors in college students. *Journal of Advanced Nursing*, 48(5), 463-474.
- Walsh, V., & Golins, G. (1975). *The exploration of the outward bound process*. Denver, CO: Colorado Outward Bound.
- Warren, K. (2005). A path worth taking: The development of social justice in outdoor experiential education. *Equity & Excellence in Education*, 38(1), 89-99.
- Wheeler, S.A., & Ladd, G. (1982). Assessment of children's self-efficacy for social interaction with peers. *Development Psychology*, 18, 795-805.
- Wilcox, P., Winn, S., & Gauld, M.F. (2005). "It was nothing to do with the university, it was just the people": the role of social support in the first-year experience of higher education. *Studies in Higher Education*, 30(6), 707-722.
- Witter, B.E. (2004). *The impact of facilitation of challenge initiatives on college social self-efficacy generality*. Unpublished Ph.D. dissertation, University of Utah, Salt Lake City, UT.
- Wright, A.N. (1983). Therapeutic potential of the Outward Bound process: An evaluation of a treatment program for juvenile delinquents. *Therapeutic Recreation Journal*, 17(2), 3342.