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The effects of group cohesion and experiential learning activities on participation styles in a college classroom

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THE EFFECTS OF GROUP COHESION AND EXPERIENTIAL LEARNING ACTIVITIES ON PARTICIPATION STYLES IN A COLLEGE CLASSROOM

by

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Dedication

Dedicated to my number one supporter, my mother, who has been there for me in everything that has influenced me to pursue my degree, and continues to believe in me. Thank you for helping me become who I am today.

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Abstract

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Adventure education is a long standing form of education that has been used both internationally and throughout America more than many initially realize. Adventure education has proven to have a diverse range of benefits to its participants, and has become an essential, widely acknowledged, and promoted approach to learning. Not only has past research connected a participation styles to adventure education and formal education, but several studies have noted the multitude of benefits that adventure education can have on student retention and college performance. This line of research continues to expand in applying experiential education in formal, college education settings. The purpose of this study was to examine the effects of implementing group cohesion and adventure education-based activities based on the experiential learning model in a college course on student participation styles, and to determine the way experiential education in a classroom setting influences those participation styles. This research collects data on the possibility of a time-efficient intervention influencing classroom participation in a college course. Primary participants were 27 college students in an intermediate psychology course and their instructor. Data was collected using a mix of quantitative and qualitative techniques and was analyzed using standard interpretive methods and a paired samples t-test. While interview data sheds light on the promising benefits of the intervention, statistical data showed no significant change between groups. Limitations and implications are discussed.

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Chapter 1

Introduction

1.1 Need for Study

Adventure education is a long standing form of education that has been used both internationally and throughout America more than many initially come to realize (Neill, 2004; Outward Bound, 2006). In fact, nature itself has been found to be stimulating not only psychologically but also educationally and has enabled individuals in several aspects of life for centuries (Cornell, Hadley, Sterling, Chan, & Boechler, 2001). Time and again adventure education has proved to have a diverse range of benefits to its participants. A range of psychological and physical benefits have been noted by several different studies (Baena-Extremera et al., 2012). For example, like many studies before them Baena-Extremera et al. (2012) found that student's participation in adventure education resulted in continued satisfaction and enjoyment even after the activity ended, as well as significant improvement in body image, physical condition, self-esteem, self-efficacy, interpersonal relationships with peers, collaboration with peers and determination to follow through on difficult tasks. It wasn't until the 1990s that adventure education made its way into the curricula of physical education in the United States as a formalized approach to education (National Association for Sport and Physical Education, [NASPE], 1991). When properly facilitated, adventure education has thrived both outside of schools and especially within a formal school setting. Among those who are familiar with adventure education, it is an extremely beneficial, essential, widely acknowledged, and promoted approach to learning (Association for Challenge Course Technology [ACCT],

2004; Peter, 2004; Wurdinger & Steffen, 2003). Not only has past research connected a variety of participation styles to adventure education as well as the formal education classroom, but several recent studies have noted the multitude of benefits that Adventure Education can have on student retention and performance in a college setting (Rocca, 2010). Furthermore, research has shown a positive impact on lessons following an experiential learning model on the overall college experience (Rocca, 2010). Still, little research has been done on the direct impact adventure education based activities can have on classroom participation when implemented within a class setting. This study focuses on the direct impact of an experiential learning activity on classroom participation within a college course.

1.2 Purpose

The purpose of this study is to examine the effects of implementing a group cohesion activity based on the experiential learning model in a college course on student participation styles, and to determine the way experiential education in a classroom setting influences those participation styles.

1.3 Hypothesis One

College students' participation in experiential education programming will have a positive impact on participation styles in a classroom setting.

1.4 Hypothesis Two

Different types of participation styles in a college classroom setting effect classroom experience.

1.5 Operational Definitions

Adventure Education: Approaches to adventure education vary widely throughout research, the education field, and the world. However, generally they focus on creating emotionally and physically safe communities, positive social norms, sense of belonging, supportive relationships, and opportunities to build individual social skills (Forgan & Jones, 2002). Traditionally, adventure education stresses the group process and focuses on skills such as trust, problem solving, communication, leadership, and conflict resolution (Shirilla, 2014). For the purpose of this research, adventure education will be considered a form of experiential education. This is adapted from a combination of Rhonke's Model of the 7 stages of adventure education and Kolb's Model of Experiential Learning (Kolb, 1984: in Evans, Forney, & GuidoDiBrito; Zmudy, Curtner-Smith, & Steffen, 2009). Additionally, widely acknowledged for their leadership in applying adventure education to school settings is Project Adventure Inc. Their definition is also noteworthy, and identifies five concepts/conditions that comprise the adventure education experience: (a) Active student engagement, (b) Personal challenge, (c) Healthy risk-taking, (d) Physical and emotional safety, and (e) An atmosphere of fun (Panicucci, Falkingham-Hunt, Kohut, Rheingold, & Stratton, 2002). These programs often utilize a combination of problem solving and cooperative games focusing on group and personal development.

Participation Styles: Research has shown that students have varying and different experiences in physical education, adventure education and formal classroom settings (Zmudy, Curtner-Smith, & Steffen, 2009). This difference in experience is attributed to the differing ways students participate in activities and their dynamic compared to the

rest of the group (Griffin, 1985). For example, a student at the top of a hierarchy in a game of dodge ball both participates differently and has a different experience than a student at the bottom of that hierarchy, such as a. “Wimp” (Griffin, 1985, 1985). Similarly, a student who raises their hand frequently and engages with the professor may have a different experience that the student who is late for class and sits in the back (Felder & Silverman, 1988). In this study, participation will be measured by several markers of observational classroom participation styles.

Classroom Experience: This refers to the overall experience that a student has is the classroom, and is a reflection of both their performance and their satisfaction with their experience.

1.6 Assumptions

This study assumes that students already have a class participation style.

1.7 Limitations

Study is limited to a two class sample size, second semester college classes.

1.8 Summary

In summary, this research could be of great benefit to the education system and to professors working on perfecting their pedagogy and the way they interact with students. If adventure education is beneficial to the dynamics, interactions, and learning taking place in the classroom, then incorporating it into the curriculum could be highly influential on the overall experience and take away students have from their education.

Chapter 2

Literature Review

2.1 Relevant History of Adventure Education

Adventure education is a long standing form of education that has been used both internationally and throughout America more than many initially realize (Neill, 2004; Outward Bound, 2006, Rocca, 2010)**.** In fact, nature itself, a major component to adventure education, has been found to be stimulating psychologically as well as educationally enabling for centuries (Cornell, Hadley, Sterling, Chan & Boechler, 2001). The beginning of adventure education dates as far back as writings and philosophies of Plato in 400 BC (Hunt, 1990). In the early 1900s Kurt Hahn became a crucial leader in adventure education for several of his start-up organizations such as the development of the Salem School in Germany in 1920, the Gordonstoun School in Scotland in 1934, and the first Outward Bound School in Wales in 1941 **(**Hahn, 1941). Outward Bound quickly became a leader of adventure education, its programming and philosophies spreading rapidly and internationally **(**Outward Bound, 2006), and became an influential leader for several programs including Project Adventure (Neil, 2006). Project Adventure went on to be a leader in providing an adventure curriculum in both formal and non-formal education settings. Project Adventure's curriculum and their 5 conditions of adventure education continue to influence the curriculum of both formal and non-formal education settings (Panicucci, Falkingham-Hunt, Kohut, Rheingold & Stratton, 2002).

It wasn't until the 1990s that adventure education made its way into the formal school setting through the curricula of physical education in the United States as a formalized approach to education (National Association for Sport and Physical

Education, [NASPE], 1991). Now, the acceptance of adventure education continues to grow, and although its placement seems permanent, many unfamiliar individuals may remain both unaccepting and uneducated on its effectiveness (Zmudy, 2015). In other countries, such as the United Kingdom, adventure education has grown into physical education as well (Department of Education and Science & Welsch Office, 1992; Qualifications and Curriculum Authority, 2007). When properly facilitated, Adventure education has thrived both outside of schools and even within a formal school setting (Karppinen, 2012). Among those who are familiar with adventure education, it is an extremely beneficial, essential, and widely acknowledged and promoted approach to learning (Association for Challenge Course Technology [ACCT], 2004; Peter, 2004; Wurdinger & Steffen, 2003). Adventure education continues to be used and added daily to physical education classroom curriculums so that a more comprehensive and up-to-date model of education is being facilitated (Baena-Extremera et al., 2012).

Shortly before and along with the acceptance and use of adventure education in elementary and middle school education, adventure education started to make its way into higher education settings (Ribbe, 2011). The first adventure education program in higher education began in 1935 at Dartmouth College, followed by Prescott College in 1968 and Wheaton College in 1969 (Bobilya, 2004). Today, over 200 adventure education program in higher education exist serving a plethora of collegiate needs from transitional needs to retention rates to higher education degree programs (Bell, Holmes & Williams, 2010)

2.2 Benefits of Adventure Education

Time and again adventure education has proved to have a diverse range of benefits to its participants, from social inclusion and acceptance to positive youth development (Hersman, 2007; Palmer, 2015). A range of psychological and physical benefits have been noted by several different studies (Baena-Extremera et al., 2012). For example, Baena-Extremera et al. (2012) found that student's participation in adventure education resulted in continued satisfaction and enjoyment even after the activity ended, as well as significant improvement in body image, physical condition, self-esteem, self-efficacy, interpersonal relationships with peers, collaboration with peers and determination to follow through on difficult tasks. Furthermore, Baena-Extremera et al.'s (2012) meta-analysis of 96 studies found that the effects of adventure education programs on self-esteem are higher than other educational programs. Similarly, Beightol et al. (2012) concluded that adventure-based programing led to an increase in resilience traits among students, which research has shown also correlates with safety perceptions in school settings and school performance (Hanson & Austin, 2003; Padron, Waxman, & Huang, 1999). Beightol et al. (2012) also added additional data to support the belief that adventure education encourages strong, supportive relationships and meaningful participation to achieve positive benefits.

In addition to the general benefits of adventure education, benefits of adventure education both inside and outside of the classroom include cooperative learning, student persistence, college retention, social integration, perceived empowerment and resilience, increase in school focus, friendship development, group cohesiveness, family cohesiveness, and even academic success (Fernandez-Rio, 2015; Quinn, 2015; Shellman,

2009; Morrissey, 2014; West et al., 2009). Not only are many of these psychological and measurable benefits of adventure education long-lasting but they are transferable to other sectors of life **(**Hattie et al., 1997; Sinthrop, 2011). The depth of research in this field has reached specific populations as well. Studies have shown adventure education to be particularly beneficial to the development and inclusion of individuals with intellectual disabilities (Hersman, 2007; Palmer, 2015) and the retention of first-year college students (Morrow & Ackermann, 2012).

As adventure education makes its way into the formal education setting, the question of transferability grows exceedingly more important (Furman, 2011). The benefits of adventure education are only truly notable by formal educators in so far as they transfer to other realms of education. Importantly, Randall Williams (2012) in-depth study found that not only does adventure education lead to powerful changes in overcoming obstacles, achievement, and even decreases perceived hyperactivity, but that these gains are transferable to the classroom setting. Relatedly, several studies have shown the transferability of adventure education with all ages, from elementary education to high school and higher education (Sibthorp et al., 2011; Zmudy, 2015). For example, Ebbeck and Gibbons (1998) found that middle school and high school students who experienced adventure education lessons not only had more positive feelings about their schoolwork, but their participation in adventure education also improved social relationships and conduct. Additionally, Karppinen (2012) did an in-depth, scientific evaluation of adventure education in a public school setting, and his findings showed that,

"the idea of using nature as a context for learning…will be increasingly essential in the future challenges of education and that outdoor adventure education can be included in the public school curriculum as a supportive and holistic pedagogic and teaching method, which maintains motivation and well-being in the school day"(p.41-42).

Karppinen (2012) also found adventure education particularly transferable for students in special education, and that it can be implemented with minimal costs and resources compared to other methods of rehabilitation and additional educational support.

In addition to transferability in middle school settings, research has found adventure education to play an especially influential and potentially life-changing role for freshman college students (Paquette et al., 2014; Upcraft, Gardner, & Barefoot, 2005). At a time when life changes are numerous, uncertainty is inevitable, and stress can be overwhelming, adventure education has the proven ability of helping to determine how freshman will deal with the traditional impact of transitioning into college (Upcraft, Gardner, & Barefoot, 2005). Ribbe (2011) found, for example, that adventure orientation programs for freshman significantly increased adaptation to college in terms of social adjustment, attachment to the college, and identity formation. Similarly, research on the positive effects on adventure education programs in relation to higher GPAs and academic success remain consistent (Brown, 1998; Gass, 1986). Several subsequent studies have confirmed the numerous benefits that adventure education freshman orientation programs as well as outdoor college programs can have on student retention, leadership, academic success and well-being (Cumming, 2010; Hattie et al., 1997; Springer et al., 1999).

In collection with the multitude of transferable benefits gained through adventure education that have been identified, group dynamics can be positively impacted by participation in adventure education (Osborn, 2015). Group dynamics can refer to the change-producing moral, social and intellectual forces among a group of individuals (Cartwright & Zander, 1968). Not only is the ability to work in a group one of the most important skills an individual can acquire, but group dynamics also play a large role in influencing participation in a classroom setting (Cartwright & Zander, 1968; White, 2011). One major influencer in group dynamics as well as classroom participation is trust (Sutherland, 2010; White, 2011). The immense role that trust plays in the group dynamics of a classroom, and the direct relationship between adventure education and trust building as an aspect of group dynamics, has drawn researchers attention (Sutherland, 2010). Given the decreasing level of participation in the college classroom, and the mounting concerns regarding lack of participation and participation disparities among students, group dynamics has become a growing concern in academia (Hill, 2011). Miles & Priest (1990) found in a meta-analysis of adventure education several studies concluded that participation in adventure education activities improved group dynamics by improving levels of trust, communication, cooperation, decision making, judgement, and willingness to test oneself in physically and mentally risky activities. Additionally, the meta-analysis expressed how studies show that although adventure education has a unique approach compared to traditional education by focusing on things like canoeing and climbing, these skills are in fact secondary to the transferable skills that are truly being learned such as trust, interpersonal skills, and intrapersonal skills (Miles & Priest, 1990).

Group cohesion activities and adventure education activities in a tradition school setting have shown a positive impact to group dynamics and classroom participation in several instances (Rocca, 2010). In fact, such activities have been beneficial in building trust and increasing communication with peers, understanding of classroom content, likelihood to participate, and likeliness that a student enjoyed the class content (Bell, 2012; Pierce, 2002; Rocca, 2010, Sutherland, 2010). The field of research in group dynamics in a traditional school setting as it relates to adventure education is a growing field offering the potential to significantly impact the direction of educational understanding (Pierce, 2002).

2.3 Participation Styles in Adventure Education

Many researchers have begun to determine that although their findings concede an overall positively significant impact of adventure education on its participants, varying experiences do in fact exist. Many studies have shown that in traditional physical education settings students report having different and varied experiences (Bain, 1985; Bennett, 2000; Griffin, 1984, 1985; Pope & 0'Sullivan, 2003). In the work done by Griffin (1984; 1985) results of research on physical education studies reported several participation styles in middle school team sports activities. Griffin reported that there was also a hierarchy of participation styles in physical education, and students who were not at the top of the hierarchy reported feelings of unhappiness and lack of success due to being lower on the hierarchy. The hierarchy also reflected patterns in bullying. Those lower down on the scale, such as the. "Wimps" were taunted by those on the top of the hierarch, such as the, "Machos". Griffin found a similar pattern among girls in physical education settings (Griffin, 1984, 1985). In addition to Griffin's groundbreaking research,

others have also found participation styles among students in physical and recreational education settings (Bain, 2000; Bennet, 2000; Pope & O'Sullivan, 2003). The results of these studies as well as others continue to show that students have different experiences in physical education settings based on their participation styles (Constantinides, 2011; Romar et al., 2011).

The notion of participation styles was applied to adventure education by Zmudy, Curtner-Smith, and Steffen (2009) in two, week-long summer adventure camps including activities for students such as high and low ropes courses, canoeing, caving, indoor climbing, hiking, orienteering, caving, and camping. . Contrary to previous findings and popular belief of universal experiences, the results of their study determined that students in adventure education not only participate in different ways but also have varying experiences. This research was extended to afterschool youth adventure education programs which supported the findings of participation styles in adventure education with limited hierarchy and bullying among participants (Shmikler et al., 2010).

2.4 Classroom Participation Styles

The notion of participation styles also extends to the classroom. Research has found that learning styles and preferences can determine the way students participate in the classroom (Rocca, 2010). Specifically, cognitive personality, information processing style, social interaction, and instructional preference all play a role in how students participate and learn best in the classroom setting (Hsieh et al., 2011). Additionally, learning styles can contribute to how students participate in given activities. For example, an active learner will participate more readily and successfully in a group project, while a

reflective learner will be more engaged individually or with a partner. Consequently, students learning styles and participation styles will influence how much they learn and thus their experience as well (Felder & Silverman, 1988).

Although a relatively new field of study, research on the positive benefits of participation in classroom learning on the undergraduate collegiate experience is abundant. Research supports that different styles of participation in the college classroom yield different experiences. One example of this is how active participation facilitates learning as opposed to passive participation (Kenney & Banerjee, 2011). In other words, students that participate in class differently will not only have different experiences but will retain knowledge at different rates as well. Additionally, several personality traits can determine level, or amount, and type of participation. Communication apprehension, self-esteem, learning style preferences, assertiveness and responsiveness, willingness to communicate, level of support felt from the professor, and self-consciousness are all contributing factors, among others (Rocca, 2010).

Personality traits as well as various student traits contribute to the ways college students participate in class. For example, whether a student is a traditional or non-traditional student can determine their level of active participation. Age, gender, culture/ethnicity, socioeconomic status, parents' education, and personality traits have also been found to be contributing factors to participation style (Bailey-Shea, 2009; Rocca, 2010). Additionally, learning styles and subsequently participation style is greatly influenced by the point at which a student is in their college career. Importantly, as a student's cognitive development continues through college, their perception and

experience of learning and knowledge changes, and they not only participate differently but experience learning in entirely different ways (Meyers, 2010).

Apart from the several unique and personal influencers that an individual's differences can make in terms of their classroom participation and experience, a markedly significant shift in overall learning styles has recently occurred, changing the way students are learning and retaining information in colleges today compared to 30 years ago. Specifically, millennial students (born after 1982) require a more engaging, student-centered, collaborative class environment that they can relate to outside of the classroom due to a generational shift in participation styles (Kenney & Banerjee, 2011). Consequently, students are learning differently and experiencing their education differently, and a new challenge has arisen for teachers to find new ways to inspire classroom participation and engagement. However, this shift is not necessarily a bad thing. Not only has active participation in the college classroom been linked with critical thinking skills, better retention of material, motivation, and better communication skills, it is also directly correlated with receiving higher grades (Rocca, 2010). In fact, the variety in participation styles that exists not only affects experience but overall performance as well (Alghasham, 2012).

As leaders in education begin to address the various learning styles that students exhibit in the classroom setting, they have identified methods for enhancing learning related to specific learning styles (Alghasham, 2012; Hermann & Foster, 2008). Consequently, several types of participation styles have been identified based on gender, race, course content and other variables (Allen et al., 2007; Baneshi, Tezerjani, & Mokhtarpour, 2014; White, 2011). By identifying how, why and when students

participate, researchers and educators will be able to develop methods for maximizing participation and consequently learning through improving pedagogic strategies (White, 2011). One study that gained recognition in the field was done by Grasha and Riechmann (1996) where six participation/learning styles were identified. Their categories consist of individuals with avoidant style, individuals with participative style, individuals with collaborative style, individuals with dependent style, individuals with independent style, and individuals with competitive style. Several studies conducted in relation to their study have supported and expanded upon their findings (Baneshi, Tezerjani, & Mokhtarpour, 2014). Consequently, the Grasha-Riechmann learning styles scale has served as a platform for measuring participation styles in the classroom (Baneshi, Tezerjani, & Mokhtarpour, 2014). Numerous studies focusing on identifying types of participation styles or amount of participation in the classroom have successively led to methods for increasing participation (Alghasham, 2012). Methods such as conducting activities that involve a wide variety of students (Provitera-McGlynn, 2001), beginning classes with actively engaging material from the first day of class (Hermann & Foster, 2008), sharing personal information about oneself (McKeachie and Svinicki, 2006), altering educational spaces (Park & Choi, 2015), requesting feedback from students (Igbal, 2013), professor education on participation styles (Anderson & Adams, 1992), adventure education and group work (Zmudy, Curtner-Smith, and Steffen, 2009), and engaging in kinesthetic activities throughout the class period (Hegelson, 2011) are only some of the methods that have been identified as ways to help increase participation and subsequently improve learning. Continued assessments and measures have been created to further assess and improve upon the effects of these methods (Reinke et al., 2015;

Tatum et al., 2013). Despite such advances, educators are still looking for a quick, easy and effective solution to successfully engaging college students in their course content (Mustapha, Rahman, & Yunus, 2010).

2.5 Adventure Education in a Formal Education Setting

Due to the statistical significance suggesting that elementary and middle school experiences can have a profound impact on adult success and performance, increased attention is being drawn towards the lack of focus on social and emotional development education in elementary and middle schools. With a strong focus on academics, students are rarely learning how to get along with one another, a possible contributor to increases in harassment, selfishness, and other socially related skills that are important for adulthood (Shirilla, 2014). Additionally, Shirilla (2014) found that an abundance of research suggests that adventure education has a direct impact on social competency skills, which is internally linked to student success and ability to learn in the classroom. Although limited, research proposes that social development as well as other factors contributing to classroom success have been found to be directly linked to participation in adventure education activities when implemented in a classroom setting.

A major struggle identified by instructors of higher education is encouraging more active participation (and therefore better learning) in the college classroom setting (Kenny & Banerjee, 2011). Student learning is important because it allows teachers to check student understanding and it allows students to self-assess their own comprehension. Additionally, it allows students to hear other viewpoints, compare ideas, and contribute to an active learning approach which increases retention and

comprehension of material (Kenny & Banerjee, 2011). Subsequently research has identified several factors contributing to lack in classroom participation in a college course, including student emotions such as fear or confidence (Kenny & Banerjee, 2011). In fact, Fassinger (1995) found that the single most contributing factor students felt underwrote their participation in the classroom was confidence, and this finding was supported with numerous other studies (Rocca, 2010). Several methods have been identified for increasing participation through increasing confidence, including group work, multi-sensory activities and activities that incorporate humor and emotion (Kenny & Banerjee, 2011). Conversely, Kenny & Bannerjee (2011) found that fear was the number one contributor to low/no participation, and students felt a safe environment would be essential for participation to take place. Other studies have also supported the theory that fear to speak in front of peers is a major contributor to low participation (Kemmy & Bannerjee, 2011), and Neer & Kircher (1989) found that students were more likely to participate in class once they got to know their classmates.

Recreation activities not only impact classroom participation directly but can have a broad range of trickling down effects that have been noted. For example, researchers have been particularly interested in how experiences as a freshman determine future success as a college student and likelihood to graduate (Upcraft & Gardner, 1989). Gibbison et al. (2010) found that participation in recreational activities on campus not only correlates to higher retention rates but higher grade point average as well. Gibbison et al. (2010) also found that schools may benefit from funding recreational activities by attracting better students, and increasing cognitive functioning through stress release, depression reduction, and increasing campus life integration. In addition, Bell (2012)

found that a non-traditional adventure based first year experience (FYE) college course was as effective and more effective in variables related to a successful first year transition than a traditional FYE course. In fact, students in the adventure based FYE course showed better outcomes in areas such as knowledge of wellness, connection with peers, knowledge of academic services, improved critical thinking, and felt the course included an engaging pedagogy while also providing an improved sense of belongingness (Bell, 2012). Together research has resulted in a staggering amount of evidence supporting the vital role experiences in college have on future success (Upcraft & Gardner, 1989).

2.6 Guiding Framework

Several experiential learning models have been evaluated and utilized within adventure education throughout the United States. For example, the model developed by Rhonke (1989) outlines seven stages of adventure education that include participants becoming acquainted, warming up, communicating, solving problems, developing rust, and using low and high ropes course elements (Zmudy, Curtner-Smith, and Steffen, 2009). This model is developed with the intention of achieving physical and psychosocial goals (Zmudy, Curtner-Smith, and Steffen, 2009). This model is effective when used in combination with Kolb's (1984) model of experiential learning. In Kolb's (1984) model of experiential learning, participants are guided through a three part process of experience, reflection and application under the supervision of a qualified facilitator (Kolb, 1984: in Evans, Forney, & GuidoDiBrito, 1998; Joplin, 1995). In addition The Experiential Learning model being a widely recognized and utilized model of adventure education in both a traditional and non-traditional school setting, Project Adventure is particularly noteworthy for their curriculum in applying adventure education to a school

setting (Panicucci, Falkingham-Hunt, Kohut, Rheingold, & Stratton, 2002; Victor, 2012). Project Adventure offers a system made effective by following the achievement of five concepts/conditions: (a) Active student engagement, (b) Personal challenge, (c) Healthy risk-taking, (d) Physical and emotional safety, and (e) An atmosphere of fun. In addition, they combine cooperative games with problem solving and a focus on group and personal development (Panicucci, Falkingham-Hunt, Kohut, Rheingold, & Stratton, 2002).

Participation styles have been measured in classroom settings using a variety of measurement tools (Reinke et al., 2015; Tatum et al., 2013). Researchers in the field have used rating scales, interviews, questionnaires and systematic observational data collection (Bahr, Gouwens, & Genevieve, 2012; Reinke et al., 2015; Tatum et al., 2013). Two widely used questionnaires include the Grasha-Riechmann learning styles scale (Baneshi, Tezerjani, & Mokhtarpour, 2014) and the Classroom Participation Scale (Fassinger, P.A., 1995). However, one problem wit the use of surveys and questionairs is that what students report may differ from how they actually participate (Fritschner, 2000). Also widely recognized as a proper source of data collection is observational data (Fritschner, 2000; Reinke et al., 2015; Tatum et al., 2013). Researchers such as Fritschner, 2000 and Nunn, 1996 have categorized types of observational participation such as fact checking questions, higher order thinking questions, calling out vs. raising ones hand, types of teacher praise, etc. (Tatum et al., 2013). In addition, researchers have used detailed seating charts, video-taping and inter-rater reliability while coding data to improve reliability in data collection (Tatum et al., 2013).

Adventure education has been applied in college settings in several studies, but most applications have been outside of the classroom in a class-enhancing or after -class

capacity (Paquette et al., 2014). In classrooms in which experiential education has been used within the classroom setting, results yielded positive outcomes in terms of participation, self-concept, academic understanding, and class enjoyment (Schwab & Dustin, 2014). Many of these studies have consisted of taking students outside of the classroom days to weeks at a time to engage in adventure education activities, or consist of shorter group cohesion activities yielding themselves to experiential education (Schwab & Dustin, 2014). Still, many areas of this specific domain remain un-explored, particularly in the area of higher education (Mustapha, Rahman, & Yunus, 2010).

Adventure education dates back centuries, and it's history is both long and plentiful as many accomplishments have been made in recognizing its significance in education, particularly in the last 30 years (National Association for Sport and Physical Education, [NASPE], 1991). As adventure education made its way into elementary and middle schools as well as secondary education, it made a name for itself as being an entirely positive experience (Bain, 1985; Bennett, 2000; Griffin, 1984, 1985; Pope & 0'Sullivan, 2003). It wasn't until recently that researchers began to question not only the validity of those positive experiences but how to enhance them, ensure them, and the transferability to other areas of life as well (Osborn, 2015; Zmudy, Curtner-Smith, and Steffen, 2009). As research continued to grow, researchers discovered the difference that participation styles in adventure education can make on the experiences those individuals have. Paralleled to this discovery, researchers in the field of education have been exploring the many important points of recognizing participation styles in the classroom and their instrumental effects on learning (Fritschner, 2000; Reinke et al., 2015; Rocca, 2010; Tatum et al., 2013). Given the vast amount of depth in study that has been given to

the attainment of knowledge in these fields of inquiry, and the important role they play in the educational possibilities for the future, it is quite possible that the merging of these two domains could yield an interesting significance.

Chapter 3

Methodology

3.1 Participants

Primary participants were 27 undergraduate students. Of the 27 participants 20 were female, 4 were male, and 3 were unreported. Of the 27 participants 13 were between the ages of 18-20, 10 were between the ages of 21-23, 1 was 24, and 3 were unreported. All but one participant reported being a psychology major, and the majority of participants were juniors in college. Of the 27 participants, 59% was Caucasian, 15% Hispanic/Mexican, 7% was African American, 4% was Chinese, 4% was mixed races/ethnicities, and 11% went unreported. The professor was a Rowan University Psychology Professor. The intervention and interviews were conducted by primary researcher.

Participants were recruited to be a part of this study if they were current students in the psychology course in which the study took place. To be included in the study, participants needed to sign an informed consent document and an additional document for interviews. Participants received extra credit in the course for participating in the study.

3.2 Setting

The research was conducted at a public, state university that serves approximately 16,000 students and is located roughly 20 minutes from Philadelphia, PA. The research took place specifically in an undergraduate intermediate psychology course in a college

classroom setting consisting of six rows of tables and chairs, with three students per table and three tables per row. The class met on Mondays and Wednesdays from 9am-10:30am for the duration of the second semester. Research was collected during these class periods between February 1st, 2016-April 15th, 2016.

3.3 Materials

Items used for data analysis include the observational data collection chart designed to quantify participation styles and amount of participation among participants. This chart facilitated the researcher's ability to record how often participants were actively or passively engaging in class activities by recording their behavior in intervals. Although a relatively new form of data collection, the chart combined previous methods used for recording participation styles in classroom settings (Bahr, Gouwens, & Genevieve, 2012; Reinke et al., 2015; Tatum et al., 2013).

In addition, videotaping was used to supplement observational data and allow for the research to verify participant classroom participation. Interview questions were developed based on past research in adventure education and participation styles (Zmudy, Curtner-Smith, & Steffen, 2009).

3.4 Data Collection

On the first class in which data collection began, the study was explained to students, consent forms were reviewed, distributed, signed, basic demographic information was collected, and observational data was obtained only to finalize the observational data chart. Following the first class, the following five classes consisted of observational data collection. The class was videotaped from the front of the classroom

while the researcher sat in the back of the class to collect data. At the end of observational data collection, qualitative data collection in the form of interviews took place. Individual interviews with participants lasting 5-10 minutes, and were conducted with 9 participants. All interviews were recorded and transcribed, and then reviewed for trends and patterns.

On the seventh class period once data collection began, the intervention took place. Students were taken outside to a large, grassy area that allowed for several experiential based games and activities to take place. The intervention was conducted following the stages of adventure (Forgan & Jones, 2002; Panicucci, Falkingham-Hunt, Kohut, Rheingold, & Stratton, 2002). The intervention lasted 90 minutes, and included 5 activities such as ice breakers, communication building activities and problem solving activities. The activities were followed by a 20 minute debriefing session. The following five classes after the intervention consisted of observational data collection, and interviews were conducted after observational data collection was complete.

3.5 Data Analysis

This study combine both experimental design and correlational design to analyze the data. Standard interpretive methods were used to analyze the data (Guerrero & Frankfort-Nachmias, 2015). Data from the observational data chart were input into SPSS and analyzed using a paired samples t-test. The t-test used observational data supplemented by videotaping from before and after the intervention took place. The t-test compared the percentages of active participation versus passive participation of the participants before and after the intervention. Data from the interviews were videotaped,

transcribed, categorized and coded using analytic induction and continuous comparison so any patterns or trends could be identified.

Chapter 4

Results

This study analyzed the correlation of an adventure education and experiential model-based intervention on the participation styles of college students in an intermediate psychology course. This study compared the percentage of participant's active participation before and after the intervention. This study also analyzed participant's thoughts, feelings, and opinions regarding the intervention via interview.

4.1 Statistical Results

Data were collected on participants before and after the intervention regarding their participation in the classroom. Data was analyzed to separate examples of engaged/active and unengaged/non-active participation. For example, an engaged student may be looking at the professor while she is speaking while an unengaged student may be on their cell phone. Engaged students were making eye contact with the professor, taking notes, looking at their notes, discussing with their peer, asking a question, or making a comment. Unengaged students were on their cell-phone, engaging in unrelated tasks, sleeping, staring off, or otherwise unengaged. Percentages of engagement of those who attended the intervention were determined for both before and after the intervention, and analyzed using a paired samples t-test. The one tailed paired samples t-test revealed that the mean score of participants before the intervention (m=.89315, s=.17815) was higher than after the intervention (m=.7933, s=.20558), $t(26)=1.202$, p=.140.

Figure one demonstrates a side-by-side visual comparison of the percentages of active participation before and after the intervention for each participant.

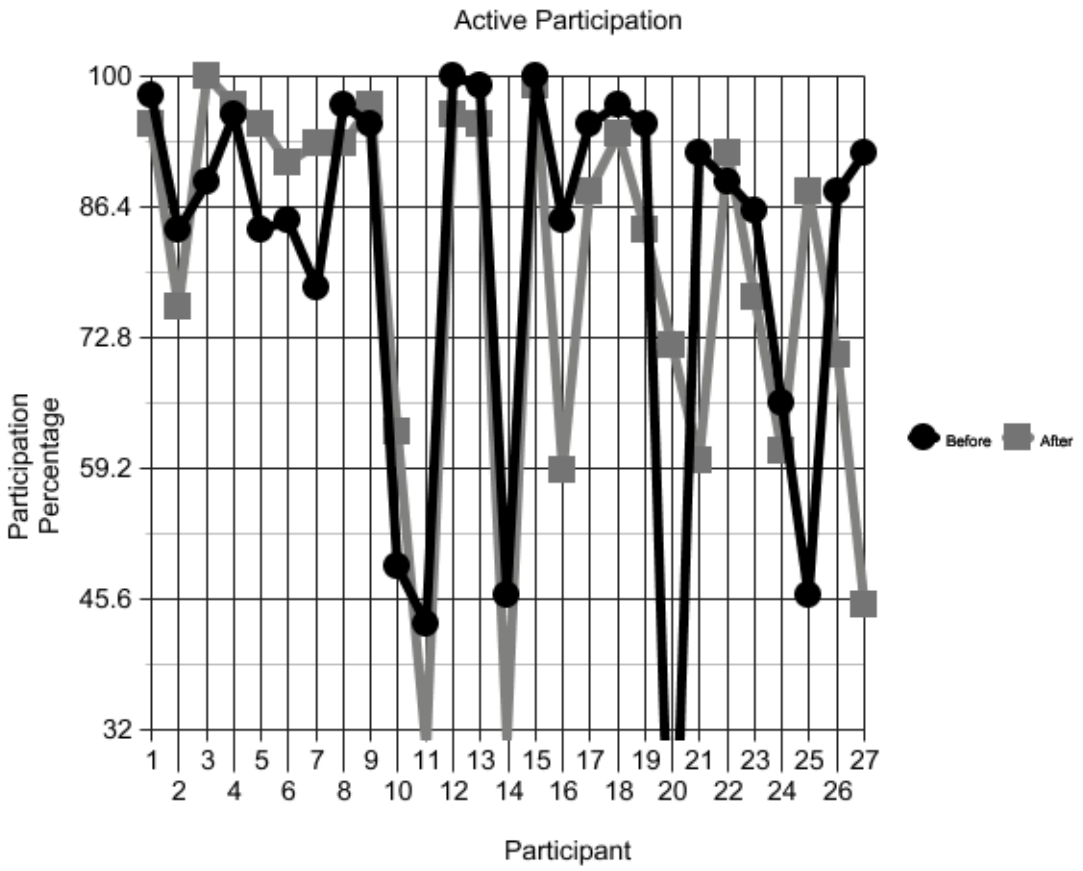

Figure 1. Participant and Active Participation Percentages Before and After Intervention

4.2 Qualitative Results

Interviews were recorded with nine of the participants who volunteered to participate in the interviews. Interviews were then transcribed verbatim, categorized and coded using analytic induction and continuous comparison so any patterns or trends could be identified. Analyzation of the interviews found that all interviewees were able to describe the activities that took place during the intervention and all interviewees reported enjoying the activities. Eight out of nine of the interviewees were happy with their participation and/or type and level of participation in the activities while one interviewee felt they could have participated more. All interviewees reported feeling more, "comfortable" and, "confident" in interacting with their classmates both inside and outside of the classroom and all interviewees also claimed direct benefits from the intervention to interacting with others in the class generally. For example, one interviewee stated, "…The activities impacted me in terms of…getting to know my classmates. I'll say, 'Hi' to them on campus now". Some of the statements made may be examples of benefits from the intervention as well as the debriefing session meant to allow for reflection and conceptualization. For example one interviewee stated, "Now I know that I need to be more interactive with classmates…it impacts your learning when you know people…it can be really helpful."

In addition, three of the nine interviewees reported feeling more "comfortable" and confident in answering questions or making comments during class time, listing it as a direct benefit of knowing their peers. This is an example of active participation.

Chapter 5

Discussion

5.1 Summary

For this study there were two hypotheses. The first hypothesis stated that college students' participation in experiential education programming will have a positive impact on participation styles in a classroom setting. Results yielded both quantitative and qualitative data. While the statistical data was insignificant in proving this hypothesis, participants interviewed reported that the experiential education intervention made them feel more comfortable and confident participating in the classroom. However, in congruence with the statistical results, most of those interviewed did not feel that the intervention impacted their actual classroom participation significantly. Thus, the null hypothesis accepted is; College students' participation in experiential education programming did not have a positive impact on participation styles in a classroom setting.

These results do not support past research findings (Baena-Extremera et al., 2012; Felder & Silverman, 1988; Hanson & Austin, 2003; Karppinen, 2012; Padron, Waxman, & Huang, 1999'; Rocca, 2010). Little research has been done that utilizes such a short term intervention in this specific setting with these measuring tools and variables. However, research that has utilized experiential education and adventure education as an intervention with college students as well as students of a range of ages has largely yielded positive results in terms of its effects on classroom participation as well many other positive benefits it promotes (Baena-Extremera et al., 2012; Karppinen, 2012). Researchers have found overwhelming evidence that these types of interventions have

not only lead to an increase in attrition in college and better grades but also promoted positive relationships with peers, self-efficacy and self-esteem, and comfortability in a college setting (Fernandez-Rio, 2015; Morrissey, 2014; Quinn, 2015; Rocca, 2010; Shellman, 2009; West et al., 2009).

The second hypothesis stated; different types of participation styles in a college classroom setting affect classroom experience. Qualitative interview data was used to determine how participant's participation correlated with their experience. While participant's reported positive benefits to their classroom experience in result of the intervention, not enough data was available to make a significant conclusion. Thus, the null hypothesis accepted is; Different types of participation styles in a college classroom setting did not affect classroom experience.

Research on classroom participation is abundant and overwhelming supportive of the relationship between participation style and classroom experience (Kenny & Banerjee, 2011; Meyers, 2010). Many researchers suggest that an active participation style is correlated with better learning outcomes and a more positive experience. Subsequently, research also suggests that passive learning is more often associated with poorer learning outcomes and reports of more negative experiences in the classroom such as fear and boredom (Baneshi, Tezerjani, & Mokhtarpour, 2014). For example, one study using a similar data collection chart found strong correlation between participation style and learning outcome and experiences (Baneshi, Tezerjani, & Mokhtarpour, 2014). While the research was not able to support past findings on this topic, it also did not challenge these findings. A discussion of limitations in this study will reveal that past findings should still be accepted as reliable sources on the matter.

Although the two original hypotheses were rejected, research still yielded some interesting results. The interviews with participants shed important light on the fact that despite the brief length of time of the intervention, participants still reported positive benefits to their learning experience. The benefits that they reported were not able to be measured in this study as many of them occurred outside of classroom time, such as feeling comfortable to converse with classmates before, after and outside of class. These results indicate that these benefits could translate to several benefits to the overall learning experience and end results of learning, as students indicated. An ability to talk outside of class with classmates and form bonds with classmates can lead to better learning outcomes, as also supported by past findings (Kenny & Banerjee, 2011). Additionally, participants reported reduced anxiety and increased comfort and confidence in the classroom, even though they felt their participation wasn't directly affected. This is also in alignment with past research findings that students comfort increases as they get to know their peers better (Kenny & Banerjee, 2011). This increase in comfort is important as it is correlated with higher amounts of active participation (Kenny & Banerjee, 2011). Perhaps with different data collection methods, it will be possible to find further data on the potential positive rewards of such a short intervention within and outside of the college classroom.

5.2 Limitations

Several uncontrollable variables and limitations may have contributed to the insignificant statistical results and the inability to accept both hypotheses. One limitation of the study was the small sample size. Although more students were in the class, only 27 came to the intervention, thus limiting the amount of available data. Additionally, only

nine participants volunteered to interview, most likely due to time constraints, thus further limiting the sample size. This small sample size may have contributed to the insignificant findings.

In order to compare the statistical findings, percentages of participation from before and after the intervention were compared. In many cases, the differences in percentages were between 1-5%. The fact that such a small difference was seen may be a limitation, since many other factors could contribute to such small changes. For example, one variable that may have affected the data was class content and how it varied from day to day. Many of the classes before the intervention took place involved class speakers which seemed to make an effort to engage participants in classroom discussion. Conversely, classes after the intervention consisted solely of lecture and note taking, and lent themselves to a more passive learning environment. There is no doubt that the type of content/teaching style could influence participation (Fassinger, 1995).

Another impacting variable is the placement of the midterm, which took place directly before the intervention. Test placement could have an effect on how much students participate and pay attention in anticipation for an exam, whereas after the exam they may feel less need to be engaged. Additionally, after the intervention there was only one class period held before spring break occurred. Spring break may have interrupted the momentum or benefits of the intervention, as after spring break students may comeback with a different motivation for learning. Yet another variable is course content. Since the course content of this class was largely one dimensional, it did not give many opportunities for students to actively participate. Consequently, many students passive participation manifested as spending time on their phone or laptop in a disengaged

manner. Class expectations may have also influenced results. For example, if students were not allowed on their cell phones during class time results may have differed.

One particularly important limitation to consider is the impact of observation bias. It is possible that due to the fact that a researcher was in the class watching and a videotaping was occurring that this could have impacted the results. Several studies have shown that simply being observed can change an individual's behavior one way or another (Hernan & Robins, 2005). Thus, it must be taken into consideration that observation bias contributed to the findings of this study.

Some of the findings indicated benefits to participation outside of the classroom, or before and after data collection took place. Due to limitations of not being familiar enough with the individual participants, I was unable to collect data on participation before and after lecture. For example, how students interacted before the professor began talking, which students stayed after class to speak with the professor or one another, etc. These aspects were hard to collect accurate information on as there was often a lot of bustle and moving around by participants that prevented data collection. Being able to collect data in these instances may have provided further valuable insight in to how the intervention effected participation outside of specific classroom constraints.

5.3 Future Directions

Given the results of this study, it is clear that further research is needed to gain a better grasp as to whether or not a short term intervention such as the one in this study can benefit students and teachers in a classroom setting. More specifically, how long an intervention needs to be to be effective, and what is the optimal intervention time period.

There is simply not enough data on this topic to make any significant conclusions on this specific matter.

While several studies have shown the benefits of adventure education, future studies could focus on exploring different time lengths of interventions. They could also explore interventions in different courses with different class content, different grades, and different activities within the intervention itself. A promising avenue for further research could also be in examining participation styles and experiences outside the specific, limited constraints of lecture/direct classroom time.

In order to find consistency in future research, it would be beneficial for a universal measurement tool to be developed that allows researchers to accurately and reliably measure participation styles within the classroom. While several tools have been created, adapted, and utilized, future directions should include the development of a more standardized tool. With a standardized tool, results can be trusted and taken with confidence by educators looking for ways to improve the classroom outcome.

Finally, at some point researchers in the field of adventure and experiential education will need to more readily address the issue of growth and acceptance of this field of study within the formal education and psychological settings (Zmudy, 2015). While countless researchers have provided evidence-based findings indicating the numerous psychological and educational benefits of adventure and experiential education, the field goes largely unrecognized and/or unaccepted by professionals in the fields of education and psychology. If educators and psychologists are going to be effective professionals in providing the best possible services, they will need a better

understanding of this field and why it is so important and valuable to utilize. Whether reasons for hesitation are financial, lack of knowledge, lack of understanding, or other reasons, these reasons need to be addressed if we are to increase active participation in classroom settings and produce better outcomes for learners as well as for educators.

Successful future studies will consider increasing the overall sample size and controlling for more extraneous variables like observation bias, lecturing style, and a universal model for data collection. Additionally, measuring changes in variables like length of intervention, content of intervention, and class content may also provide valuable information on influencing participation. If a shortened form of adventure education can be incorporated into formal classroom settings on a college campus, then learning could be greatly enhanced and outcomes significantly increased without requiring significant time or funding. This could reshape education and many frequent issues and concerns that educators commonly express. However, to do so, researchers must begin to address the distressing issue of why despite these struggles that educators face, many psychologists, educators, and professionals in the field are hesitant to accept the evidence-based benefits of adventure and experiential education.

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Appendix A

Adult Consent Form

CONSENT TO TAKE PART IN A RESEARCH STUDY

TITLE OF STUDY: The Effects of Group Cohesion and Experiential Learning Activities on Participation Styles in a College Classroom
Principal Investigator: Terri Allen
This consent form is part of an informed consent process for a research study and it will provide information that will help you to decide whether you wish to volunteer for this research study. It will help you to understand what the study is about and what will happen in the course of the study.

If you have questions at any time during the research study, you should feel free to ask them and should expect to be given answers that you completely understand.

After all of your questions have been answered, if you still wish to take part in the study, you will be asked to sign this informed consent form.

Elizabeth Shmikler or another member of the study team will also be asked to sign this informed consent. You will be given a copy of the signed consent form to keep.

You are not giving up any of your legal rights by volunteering for this research study or by signing this consent form.

Why is this study being done?
This study is being conducted as part of a Thesis for graduate requirements. This study is evaluating the effects of a given intervention on a typical college classroom setting.

Why have you been asked to take part in this study?
You are being asked to participate in this study because you are a student in an introductory college course in which this study will take place.

Who may take part in this study? And who may not?
Anyone who is a student in the course in which this study will take place is eligible to participate.

How many subjects will be enrolled in the study?
50

How long will my participation in this study take?
The study will take place over a period of the first 8 weeks of the second college semester at Rowan University. As a participant, we ask you to attend class where data collection will take place during class hours that occur during these 8 weeks. The majority of this time will consist of observational data and simply requires your attendance.

Where will the study take place?

This study will take place on the Rowan University Campus.

What will you be asked to do if you take part in this research study?

Participants will be expected to participate in class as they normally would without any interruptions. Participants will be asked to participate in a group activity and debriefing session lasting the length of 1-2 classes. Participants might be asked to answer some brief interview questions lasting approximately 15 minutes.

What are the risks and/or discomforts you might experience if you take part in this study?
This study will require interaction with classmates, however there is minimal risk associated with this study.

Are there any benefits for you if you choose to take part in this research study?
The benefits of taking part in this study may be:

> This study may enhance your learning experience and introduce new relationships with classmates.

However, it is possible that you might receive no direct personal benefit from taking part in this study. Your participation may help us understand which can benefit you directly, and may help other people to experience more enriching classroom experiences.

What are your alternatives if you don't want to take part in this study?
The following alternative treatments are available if you choose not to take part in this study:
There are no alternative treatments available. Your alternative is not to take part in this study.

How will you know if new information is learned that may affect whether you are willing to stay in this research study?
During the course of the study, you will be updated about any new information that may affect whether you are willing to continue taking part in the study. If new information is learned that may affect you, you will be contacted.

Will there be any cost to you to take part in this study?
There will be no cost to take part in this study.

Will you be paid to take part in this study?
Participants will receive course credit for participation in this study.

How will information about you be kept private or confidential?
All efforts will be made to keep your personal information in your research record confidential, but total confidentiality cannot be guaranteed. Your personal information may be given out, if required by law. Presentations and publications to the public and at scientific conferences and meetings will not use your name and other personal information. Data will be stored on a data encrypted and protected laptop in a locked drawer in a private area without public access.

What will happen if you are injured during this study?
If you are injured in this study and need treatment, contact the University Wellness Center and seek treatment.

We will offer the care needed to treat injuries directly resulting from taking part in this study. Rowan University may bill your insurance company or other third parties, if appropriate, for the costs of the care you get for the injury. However, you may be responsible for some of those costs. Rowan University does not plan to pay you or provide compensation for the injury. You do not give up your legal rights by signing this form.

If at any time during your participation and conduct in the study you have been or are injured, you should communicate those injuries to the research staff present at the time of injury and to the Principal Investigator, whose name and contact information is on this consent form.

What will happen if you do not wish to take part in the study or if you later decide not to stay in the study?
Participation in this study is voluntary. You may choose not to participate or you may change your mind at any time.

If you do not want to enter the study or decide to stop participating, your relationship with the study staff will not change, and you may do so without penalty and without loss of benefits to which you are otherwise entitled. If you decided not to participate, you can still attend classes and data will not be collected related to you.

You may also withdraw your consent for the use of data already collected about you, but you must do this in writing to Terri Allen.

If you decide to withdraw from the study for any reason, you may be asked to participate in one meeting with the Principal Investigator.

Who can you call if you have any questions?
If you have any questions about taking part in this study or if you feel you may have suffered a research related injury, you can call the Principal Investigator:

Terri Allen
Department of Education
856-256-4500 x3110

What are your rights if you decide to take part in this research study?
You have the right to ask questions about any part of the study at any time. You should not sign this form unless you have had a chance to ask questions and have been given answers to all of your questions. You can contact the Office of Research Compliance if you have questions regarding your rights as a subject.

Office of Research Compliance
856 256-5150

AGREEMENT TO PARTICIPATE

I have read this entire form, or it has been read to me, and I believe that I understand what has been discussed. All of my questions about this form or this study have been answered.

Subject Name:_____

Subject Signature:_____ Date:_____

Signature of Investigator/Individual Obtaining Consent:

To the best of my ability, I have explained and discussed the full contents of the study including all of the information contained in this consent form. All questions of the research subject and those of his/her parent or legal guardian have been accurately answered.

Investigator/Person Obtaining Consent:_____

Signature:_____ Date: _____

Appendix B

Interview Consent Form

Rowan University

The Effects of Group Cohesion and Experiential Learning Activities on Participation Styles in a College Classroom
Informed Consent for Interviews or Interviews with Record Reviews
(Expedited Review with identifiers)

Please read this consent document carefully before you decide to participate in this study.

You are invited to participate in a research study about understanding how group cohesion activities effects participation in a college course. This study is being conducted by researchers in the Department of Education at Rowan University. The Principal Investigator of the study is Terri Allen.

Participation in this study is voluntary. If you agree to participate in this study, you would be interviewed for about 30 minutes. The number of participants in the study is 50.

In addition to collecting observational data during classes, we will conduct interviews. Participating in the baseline data collection does not obligate you to participate in any of the subsequent data collection. You may decide at that time whether or not you want to participate in the next wave of data collection.

There is little risk in participating in this study; after the interview, you may have questions about your target diabetic values which will be answered immediately by a member of the study team.

Your identity will be kept confidential to the extent provided by law. Your information will be assigned a code number that is unique to this study. No one other than the researchers would know whether you participated in the study. Study findings will be presented only in summary form and your name will not be used in any report or publications.

Participating in this study may not benefit you directly, but it will help us learn how to best engage students in college courses. *Your participation in this study is completely voluntary. If you choose not to participate in this study, this will have no effect on the services or benefits you are currently receiving.* You may skip any questions you don't want to answer and withdraw from the study at any time without consequences.

If you have any questions about this study, please contact Terri Allen at allente@rowan.edu. If you have questions about your rights as a research participant, please contact the Rowan University SOM IRB Office at (856) 566-2712 or Rowan University Glassboro/CMSRU IRB at 856-256-4078.

YOU WILL BE GIVEN A COPY OF THIS FORM WHETHER OR NOT YOU AGREE TO PARTICIPATE.

Social and Behavioral IRB Research Agreement I have read the procedure described above. I voluntarily agree to participate in the procedure and **I have received a copy of this description.**

Name (Printed) _____

Signature: _____

Date: _____

Principal Investigator: _____ Date: _____

Appendix C

Audio/Video Consent Form

ROWAN UNIVERSITY INSTITUTIONAL REVIEW BOARD
AUDIO/VIDEOTAPE ADDENDUM TO CONSENT FORM

You have already agreed to participate in a research study conducted by Elizabeth Shmikler. We are asking for your permission to allow us to include audio and video tape as part of that research study.
The recording(s) will be used for analysis by the research team.

The recording(s) will include partial facial recording.
The recording(s) will be stored in a locked file cabinet with no link to subjects' identity and will be retained until completion of the study, where it will then be destroyed upon completion of the study procedures.

Your signature on this form grants the investigator named above permission to record you as described above during participation in the above-referenced study. The investigator will not use the recording(s) for any other reason than that/those stated in the consent form without your written permission.

If you chose not to participate in the study because you do not want to be recorded, you can still attend class sessions without participating in the study or being recorded. Only those who consent to audio and videotape recording will be recorded.

Participant Signature: _____

Date: _____

Appendix D

Observation Data Chart

	Engagement with Teacher-A	Engagement with Peers-B	Engagement with Topic/materials-C			
	Eye Contact-A1	Make Positive Comment in Reponse to Peer Comment-B1	Looks at Materials-C1			
	Raise Hand with Prompt-A2	Make Negative Comment in Response to Peer Comment-B2	Looks at Non-Related Materials-C2			
	Blurt Out Answer-A3	Make Neutral Comment in Response to Peer-B3	Perception of Understanding-C3			
	Stays After Class to Talk with Teacher-A4	Offer Unsolitied Validation to Peer-B4	Perception of Work Quality- C4			
	Raises Hand Without Prompt-A5	Stays After Class to Talk With Peers-B5	Perception of Experience-C5			
	Higher Order Thinking Question-A6		Percent of Class Time that is Class Participation-C6			
	Fact Checking Question-A7		Online Interactions-C7			
Class	1	2	3	4	5	
Student						
1						
2						
3						
4						
5						
6						
7						
8						
9						
10						
11						
12						
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Appendix E

Interview Protocol

The Effects of Group Cohesion and Experiential Learning Activities on Participation Styles in a College Classroom

Interview Protocol: Student Participant

Interviewee:

Interviewer: Elizabeth Shmikler

Date:

This interview is in regards to the research study on participation styles that took place in your introductory psychology college course.

The interview should take between 15 and 20 minutes. Thank you for agreeing to participate.

May we have your consent to make an audio recording to the interview?

This interview will remain anonymous, meaning we will not use your name in any presentations or publications.

1. **Describe the activities you participated in for this study. What where they and how were you involved? How did you participate in the activities?**
2. **What did you think about the activities? Did you like them or dislike them? Why or why not?**

3. **Describe your participation in the activities? Do you think you were actively or passively engaged?**
4. **Do you think your participation in the activities could have been different? If so, how? If not, why not?**
5. **How would you describe your classroom participation before the activities?**
6. **How would you describe your classroom participation after the activities?**
7. **Do you think the activities and debriefing session impacted your classroom participation? Why or why not?**
8. **Do you think the activities and debriefing session impacted your learning experience in others ways? How so? (e.g., interaction with others, grades, content understanding, etc.)**
9. **Do you think the activities and debriefing session impacted you in any other way? How so?**
10. **Anything else you would like to add to this interview?**

Thank you for your participation in this interview. I look forward to sharing the results of the study with you when they are available.