Examining College Students' Motivations and Perceptions Toward Enrollment, Participation, and Engagement in Physical Activity Courses

by

Asherah Nichole Blount

A dissertation submitted to the Graduate Faculty of
Auburn University
in partial fulfillment of the
requirements for the Degree of
Doctor of Philosophy

Auburn, Alabama
August 3, 2013

Approved by

Jared A. Russell, Chair, Associate Professor, School of Kinesiology
Mary E. Rudisill, Professor, School of Kinesiology
Danielle Wadsworth, Associate Professor, School of Kinesiology
Daniel Henry, Assistant Professor, Dept. of Ed. Foundations, Leadership, and Tech.
Marie Witte, Associate Professor, Dept. of Ed. Foundations, Leadership, and Tech.

Abstract

Instructional physical activity programs offer a great opportunity for college and university students to have the opportunity to engage and participate in various physical activities on a regular basis. For students who choose to enroll, the instructional physical activity courses plays an important role in providing undergraduates with the chance to develop motor skills and technique, sport related skills and habits that will contribute to a healthy lifestyle. Student motivation to enroll and participate in College/University Instructional Physical Activity Programs (C/UIPAP) is a key component to its effectiveness. The instructional climate, including students' perceived autonomy and perceived instructor autonomy support was found to be related to the participant motivation to participate and engage in the instructional physical activity course content. A total of 217 undergraduate students enrolled on the cardio and fitness courses participated in the demographic survey, indicating why the participants were motivated to enroll in the course (*Freshmen=13.8%; Sophomore= 24.9%; Junior= 28.1%; Senior=31.3%; Other= 2%*). A top three interest toward enrollment was 1) improvement of health, 2) Interest in the activity, and 3) improved grade point average (GPA). 103 college students participated in the second part of the interview, including the pre- and post- semi-structured interviews and focus groups and pre- and post- questionnaire. The questionnaire includes the Learning and Performance Orientations in Physical

Education Classes Questionnaire (LAPOPECQ) and the Learning Climates Questionnaire (LCQ). The participant responses to the pre- and post- interviews, focus groups, questionnaires indicated a change in the participants' motivations to participate and engage in the physical activity course content over the course of the semester. Recommendations for instructors of C/UIPAP are to set goals where the students can have a sense of achievement, in turn enhancing the participants' intrinsic motivation toward engagement in physical activity.

Acknowledgements

There are many thank you's that are owed to many people who have supported me through this long journey. I thank Auburn University for the opportunity to further my education. Specifically, I would to thank my major professor, Dr. Jared Russell for advising and mentoring me through the last 4 years. To my committee (Dr. Mary E. Rudisill, Dr. Danielle Wadsworth, Dr. Daniel Henry, and Dr. Marie Witte), I appreciate the time and effort that you have put forth to help me in attaining my goal. The faculty and administrators in the College of Education have always been helpful and open to helping me throughout this process. The College of Education, especially the School of Kinesiology are my family!

To my family and close friends, your unconditional love and limitless support you have shown has meant the world to me. I am so blessed to have such a dynamic family!! I will be forever grateful to know that I have you all as my family and friends. To Mama, Daddie, and Sister, you have been a constant support through my life, especially my educational career.

To my Albany State University Family, Dr. Richard Williams, Ms. Latonya Conner, Mr. Dan Land, and Ms. Damatia Blake, I thank you for the support that you have given me from my freshmen year until now. You all had the faith in me to become Dr. Blount from the beginning of my undergraduate career.

And last but not least, if it were not for the grace and mercy of my Lord and Savior Jesus Christ, I would not have made it this far. God has blessed me with the capabilities and equip me t with the strength, patience, and self-control to travel down this road to get my doctoral degree. Without Him, none of this would be possible. Thank to you all!

Table of Contents

List of Tables

Chapter 1: Introduction

The continuous rise in health concerns and decline of participation in physical activity is taking a dramatic toll on the well-being of today's society. According to the Center of Disease Control and Prevention (2012), during the past 30 years the adolescent obesity rate has nearly tripled and more than one-third of adults in the United States are obese. Although there are a number of factors impacting the rapid increase in obese adults (e.g., genetics, stress, low-socio economic status, poor nutrition, environment, etc.), one major contributing factor to this rise in obesity is individual's lack of involvement in regular moderate-to-vigorous physical activity (Gordon-Larsen, MuMurray, & Popkin, 2000; Wright, et.al, 2001; Haomiao & Lubetkin, 2005)). However, a large percentage of Adults (60%) do not meet physical activity recommendations (U.S. Department of Health and Human Services, 2011). Studies have shown that there is a significant trend of decline in physical activity during adolescent years and rapidly continues throughout adulthood (Centers for Disease Control and Prevention, 2011; Pate, Long, & Health, 1994). This increase in sedentary behavior can lead to cardiovascular disease, diabetes, cancer, hypertension, obesity and various other conditions associated with sedentary behavior (Manson. Skerrett, Greenland, & Vanltallie, 2004). This continuous rise in physical inactivity, obesity, and diseases is of growing concern for researchers, health professionals, and educators (Koplan, Liverman, &Kraak, 2005; U.S. Department of Health Services, 2010).

The majority of Americans are familiar with, and have the opportunities to engage in various forms of physical activity, such as walking and running, weight

lifting, playing with children, recreational activities, and organized sports (Le Masurier & Corbin, 2006; Morrow, Krzewinski-Malone, Jackson, Bungum, & Fitzgerald, 2004). From childhood until adolescence, most individuals have participated in general play, organized sports, and physical education classes in elementary and secondary school. Childhood is considered the ideal time for individuals to develop and learn their fundamental motor skills with the hope that when they become adolescence and adults they will use those skills to participate in more mature physical activities (Lubans, Morgan, Cliff, Barnettm & Okely, 2010). These skills should be mastered so that more advanced skills and physical activities can be performed throughout adulthood. However, adulthood brings on more barriers that may prevent individuals from being as physically active as they once were in childhood (CDC, 2011).

Despite the lack of adult participation and engagement in physical activity, there are opportunities for adults to learn and refine motor and sports skills, learn and participate in various physical activities, and become regularly engaged in physical activity, which are not being utilized (Humpel, Owen, & Lesile, 2002). Colleges and universities give many young adults the opportunity to learn a variety of lifetime activities, and engage in physical activity while enrolled in College and University Instructional Physical Activity Program (C/UIPAPs) courses, playing on intramural sports teams, participating in recreational activities and/or enrolling in physical activity basic instruction programs. Given that college students have various options of physical activities, one could expect increases in college students' physical activity levels during these years. The College and University Physical Activity Instruction

Program (C/UIPAP) courses that are offered at colleges and universities across the United States should serve an important role in providing millions of young adults the opportunity to learn, develop, and refine motor skills that can be used throughout their lifetime and contribute to healthy living. College and University Instructional physical Activity Programs guidelines, established by NASPE state that C/UIPAP courses should, (1) have education as its central mission, (2) have a health-related physical activity/skill acquisition emphasis, (3) offer a variety of physical activity courses to reflect individual interests, (4) echo societal needs, and (5) promote safe and lifelong participation in health-enhancing physical activity (NASPE, 1998; 2007). These courses can help young adults meet the Healthy People 2020 Physical Activity Guidelines for Americans and ultimately improve overall health. It is recommended that adults engage in at least 2 hours and 30 minutes of moderate aerobic activity and muscle strengthening activities each week or 1 hour and 15 minutes of vigorous aerobic and muscle strengthening activities each week (Centers for Disease Control and Prevention, 2011 [CDC]). For even greater health benefits and improvement, it is recommended that adults engage in moderate to vigorous aerobic physical activity 5 hours each week and 2 or more days of muscle strengthening activity (CDC, 2011).

According to the National Association of Sport and Physical Education (NASPE, 2007) eighty-one percent of inactive college graduates reported that their activity patterns are the same or lower than what their physical activity levels were as undergraduates, once they left their educational institution. Only about 40% of college students participate in regular vigorous activity and only 20% participate in regular moderate physical activity. According to the Sport and Medicine Heart

Association (2010), close to 82% of college students do not meet recommendations for moderate intensity exercise. In addition, 73% of college students self-reported not meeting the recommendations for vigorous exercise. Research also indicates that almost half of all college students report decreases in their physical activity patterns after graduating (Pinto, & Marcus, 2010). According to the National Association of Sport and Physical Education (NASPE, 2007) 81% of inactive college graduates reported that their activity patterns are the same or lower than what their physical activity levels were as undergraduates, once they left their educational institution. The literature tells us that most college students are not participating and engaging in physical activities efficiently. It has also been found that physical activity patterns practiced by college seniors remain static for up to six years after graduation (Sparling & Snow, 2002). Physical activity programs implemented at colleges and university have the potential to impact students, teaching and refining motor skills, increase competence, and interest in physical activity participation, which can promote an increase in adult physical activity levels after graduation from college (NASPE, 2007).

With health behaviors still under development during adolescence and young adulthood increase in physical activity and improved health awareness have important consequences for preventing vital health problems (U.S. Department of Health and Human Services, 2011). Adults who attend higher education institutions can meet these recommendations and appropriate levels of awareness through enrollment in instructional physical activity courses. For this reason, college/universities serve a vital role in the advancement of the awareness and promotion of healthy behaviors

(Leenders, et al., 2003). C/UIPAPs can promote experiences of physical activity among college students who are inactive, educating and inspiring physical activity engagement for a lifetime. These programs provide the opportunity to develop and increase understanding and appreciation for lifelong engagement in a healthy lifestyle that involves regular physical activity (Damon, et al., 2009; Hensly, 2000; Leender et al., 2003; NASPE, 2007;Russell; 2008). C/UIPAPs may be one of the last opportunities for adults to learn the importance of physical activity, and to develop an appreciation for movement activities and regularly engage in movement activities before tackling the major responsibilities of adulthood. The development of motor skills are vitally important, in that it builds a person's self-efficacy, self-confidence, and self-determination to participate in a variety of physical activities and the likelihood of them remaining physically active throughout adulthood (Hardin, et al., 2009). College and University students also need further education in healthy practices, particularly in lifetime activities and an understanding of barriers and effective interventions that will address their new life challenges (Zwald, 2011).

With the dramatic decrease in physical activity participation during adolescence and adulthood (Stephens, Jacob, &White, 1998), leading organizations, such as the National Athletic training Association, Centers for Disease Control and Prevention, and American Cancer society have established programmatic goals to provide policies and initiatives that will encourage a culture of engagement in physical activity (U.S. National Physical Activity Plan, 2010). However, despite the policymaking, college student's engagement in physical activity is steadily declining. Therefore, it is important for organizations and educators to not only create programs

that will emphasize skill development and engagement in physical activity, but also motivate the college students to actively engage in physical education/activity courses offered at colleges and universities.

Recently, researchers have been interested in the motivation of students and their physical activity engagement in C/UIPAPs. (Morgan, 2007; Morgan & Kingston, 2010; Ntoumanis, 2001; Pearlman & Webster, 2011; Standage, Duba, Ntoumanis, 2003). There are two theoretical frameworks researchers often use in the explanation and interventions regarding student motivations to be physically active, which are the Self-Determination Theory (SDT) and Achievement Goal Theory (AGT). Instructional and intervention strategies that enhance student intrinsic motivation, autonomy, and relatedness, focusing on the learner's own progression and development of skills, as well as placing high value on skill development have been developed from these frameworks (Standage & Treasure, 2002). Both the Self-Determination Theory and Achievement Goal Theory ideals are centered on task and mastery involvement in the facilitation of an individual's intrinsic motivation (Standage & Treasure, 2002).

According to Ames and Archer (1988), achievement motivations are focused on recognizing the various types of goal structures that students have, the motivational processes that are associated with these goals, and the environment in which these goals are developed and met. These goal orientations typically emerge from two types of climates, mastery-oriented climate and performance-oriented climate that influence students' motivation to learn and engage in achievement behaviors (Ames & Archer, 1988; Ames, 1992; Nicholls, 1984, 1989). Ames (1992)

refers to the goal orientations, mastery goals and performance goals, as goals that represent different concepts of success and reasons for approaching and engaging in achieving activities. The characteristics of a mastery-oriented climate included student's initiating their own engagement and learning in learning motor skills and physical activities, as well as the teacher establishing and environment, where success is determined by the student's effort and personal achievement and improvement. The mastery-oriented climate is a student-centered approach to learning and is characterized by students exerting effort, seeking challenging tasks, and attributing success to effort. There is an internal reference of criteria for success and is the basis for mastery of a task (Solmon, 1996). The teacher influencing the class and establishing greater emphasis on competition and outperforming others to determine the students' success characterizes the performance- oriented climate. Performance goal orientation is associated with motivational patterns, which can result in avoidance of challenging tasks, negative, feelings when one fails, and judgment of one's lack of ability.

There have been numerous studies conducted emphasizing the importance of student motivation and achievement goals in the classroom setting, as well as their effects on students physical activity behavior. The goal orientations affected the students' performance, their perceptions of their classroom experiences and goals related to their task choices, attitudes, and beliefs. Many studies investigated the influence of motivational climate on students' physical activity behavior when they were exposed to a mastery-oriented climate and then exposed to a performance-oriented climate (Dunn, 2000; Maehr, 1983. 1984; Morgan, 2007; Morgan &

Kingston, 2010; Ntoumanis &Biddle, 1999b; Parish &Treasure, 2003; Treasure, 1997; Yoo, 1999). When the students were exposed to a mastery-oriented climate their physical activity behaviors included increases in: intrinsic motivation towards participation in physical activity, lecture feedback, effort and progress, beliefs that effort and ability lead to success, and engagement in physical activity. However, when the students were exposed to a performance-oriented climate the students were engaged in less encouraging physical activity behaviors, including low perceived competence, lack of motivation towards physical activity, disinterest pertaining to physical activity, and belief that ability leads to success (Dunn, 2000; Maehr, 1983; 1984; Morgan, 2007; Morgan & Kingston, 2010; Ntoumanis &Biddle, 1999b; Parish &Treasure, 2003; Treasure, 1997; Yoo, 1999).

Typically, researchers utilizing the achievement goal theory tend to conduct interventions on the motivational climate and students' engagement in physical activity. A majority of these studies have been conducted on young children in elementary physical education programs. There are very few studies examining college-age students' motivation toward physical activity engagement within an instructional physical activity program. Morgan (2007) examined the effects of a mastery intervention on the teaching styles that influence motivational climate and the students' physical activity behaviors in an undergraduate soccer module. As well as, investigated the effects of the intervention program on undergraduate students perception of the motivational climate. Morgan & Kingston (2010) further evaluated the effects of an intervention program to promote a mastery motivational climate on teaching behaviors and the students learning experiences in a soccer module. This

study showed increases in student mastery goals, more flexible time to learn, increased effort and progress of individual students, and greater differentiation of tasks. These studied have shown that there is a positive effect on college students' classroom experiences as it relates to the implementation of classroom structures that promote mastery motivational climate in a soccer module. However, some issues were identified in relation to the implementation of the classroom structures, including the level of students experiences required to set effective learning goals, the level of authority to give students within class, the administration of public versus private feedback, and disparity between mixed ability groups and the distinction of tasks for optimal change (Morgan & Kingston, 2010).

The SDT framework approach attempts to determine human motivation, investigating inherent growth tendencies and psychological needs that are the basis of their self-motivation (Deci and Ryan, 2000). According to SDT, an individual's motivation change in quality and quantity along a continuum described by extrinsic motivation (behaviors that contribute to the fact that activities completed for external reasons), intrinsic motivation (engaging in activity for the inherent pleasure and satisfaction) and amotivation (behavior displaying a lack of motivation) (Deci & Ryan, 2000; Hastie et al, 2011)

Further analysis of these studies indicate that more research needs to be conducted, considering the classroom structures and the needs of college-age students who are enrolled in the C/UIPAPs courses. Although these findings in the motivational climate of this study are informative, there is still concern about what actually motivates college students' to enroll in C/UIPAP courses and how the

motivational climate affects their motivation to engage in physical activity over the course of a semester. Answers to these questions will helps C/UIPAPs implement instruction that will better serve and benefit all college students.

Statement of Purpose

The purpose of this study is to (a) investigate college students' motivations to enroll in C/UIPAP courses, (b) examine their motivations toward participating and engaging physical activity classes, and (c) gain an understanding of how college students perceive the instructional climate implemented by their C/UIPAP course instructors and how the perception of instructional climates relate to the students' motivation. Self-Determination theory will serve as the theoretical framework for this research as defined by Deci and Ryan (1985, 2000). The participants' motivation and perceptions of the climate implemented by the instructors will be the dependent variables and the instructional climate will be the independent variable. The relationship between the students' motivations and the perceptions of instructional climate will be measured quantitatively and qualitatively. Students' demographics and motivation for enrolling in the C/UIPAP courses will be determined using a survey. The Learning Climate Questionnaire (William & Deci, 1996) and the Motives for Physical Activity Measure- Revised questionnaire (Ryan, et al., 1997) will be used to assess the participants' perception of the instructional climate and their motivation to participate and engage in their C/UIPAP courses. Classroom perception was also be assessed by conducting semi-structured interviews and focus groups interviews (Creswell, 2007).

Hypothesis

- College students' motivation to engage in physical activity during the instructional physical activity course will become more intrinsic in nature throughout the course of the semester.
- College students' motivation to engage in instructional physical activity content would be in direct correlation to the participants' perception of the classroom climate and instructor autonomy support.

Research Questions

1. Why are college students motivated to enroll in College/University Instructional Physical Activity Program courses?
2. What motivates college students to participant and engage in College/University Instructional Physical Activity Program content during the semester?
3. What are the college students' perceptions of the instructional climate of the College/University Instructional Physical Activity Program courses during one semester?
4. What are the college students' perceptions of the instructor's autonomy support during one semester?
5. What is the relationship between instructional climate of instructional Physical activity courses and college students' motivation in the instructional physical activity courses during one semester?

Assumption

- Participants' motivation will not change over time regardless of their perceptions toward the classroom environment or teacher behavior.

Limitations

The delimitations setting the scope for the study are:

- Limited Sampling, the participant recruitment and selection was limited to cardio and fitness courses.
- The participants will complete the survey, questionnaire, and interviews through self-reporting. The responses will be used to indicate perceptions and motivations of college students' participation in C/UIPAP courses.
- Self-selection, participants selected the courses, in which they enrolled

Definition of Terms

College-age students include young adults from age 19 to 24 years of age enrolled in a college or university

Young adults are individuals between the 19-24

Physical activity involves any bodily movement of the skeletal muscles that results in expended energy. While engaging in physical activity adults can explore their environment, gain body awareness, control weight, build lean muscle and reduce fat (CDC, 1999; NASPE, 2002). Physical activity involves includes movements ranging along a continuum scale of intensity from sedentary to vigorous.

Sedentary indicates an individual's physical inactivity (i.e., laying, sitting, especially for extended periods of time) (NASPE, 2002).

Moderate to vigorous physical activity vary from movements of the body that are easily maintained and increase heart rate to movements that result in fatigue over a short period of time and elevate heart rate and breathing levels higher than those

observed for moderate activity (CDC, 2011; NASPE, 2002). Activities that are considered moderate to vigorous intensity include walking fast, running, swimming laps, and cycling. Young adults are recommended to engage in a total of 75-150 minutes of moderate to vigorous physical activity a week to obtain health benefits (CDC, 2011).

TARGET is an acronym standing for Task, Authority, Recognition, Grouping, Evaluation, and Time. *Task* indicates the type of task and task options available within a learning environment; *Authority* refers to the distribution of authority and student autonomy within the learning environment; *Recognition* refers to the formal and informal feedback, recognition, and rewards that are given within a learning environment; *Grouping* refers to the grouping structure that emerges within a learning environment; *Evaluation* refers to the implementation of a system for evaluating student progress; and *Time* refers to the time constraints placed on learning. These structures were proposed by Epstein (1988,1989) and theorized Ames (1992a, 1992b), where these environmental factors and instructional cues help practitioners in organizing their instruction in terms of performance- and mastery- oriented climate and assists researchers in identifying important cues and factors that influences one's achievement goal state.

High Autonomy refers to situations emphasizing individualized-driven learning. In such environments, the teacher facilitates the learning process (Ames & Archer, 1988; Ames, 1992a; 1992b; 1992c).

Mastery-oriented climate (MC), also referred to as master motivational, is a high autonomy-learning environment that emphasizes learning and skill mastery

based on exerting maximal effort and self-referenced criteria for determining success. During this study, the mastery-oriented climate condition incorporated such an emphasis as it relates to physical activity instruction courses (Ames & Archer, 1988; Ames, 1992a; 1992b; 1992c).

Low-autonomy learning environments involve teacher directed learning with limited student involvement in the learning process (Ames & Archer, 1988; Ames, 1992a; 1992b; 1992c).

Performance- oriented climate (PC) also referred to as teacher centered and low-autonomy, is a low autonomy-learning environment that emphasizes competition (i.e. winning) and focus on normative- and other-referenced criteria for judging one's success (Ames & Archer, 1988; Ames, 1992a; 1992b; 1992c).

Participation to take or have a part and share in an event or action (Connell & Wellborn, 1991; Skinner & Belmont, 1993; Wellborn, 1991)

Engagement refers to the intensity and emotional quality of students' involvement during learning (Connell & Wellborn, 1991; Skinner & Belmont, 1993; Wellborn, 1991)

Intrinsic Motivation Refers to behaviors performed out of interest and enjoyment Implies that engaging in activities is because of pleasure and satisfaction derived from learning, exploring, and understanding new things (Deci & Ryan 2000).

Extrinsic Motivation refers to behaviors carried out to attain contingent outcomes (Deci & Ryan 2000).

- *External regulation*- when some one acts or performs to attain a positive end state or avoid a negative end state

- *Introjected regulation*- the first stage of the internalized process, where individuals take prompts from the environment and bring them inside themselves
    - Start to internalize reasons for their behavior. This person acts out of obligation to avoid shame and pressure
- *Identified regulation*
    - Reasons to engage in activity are internalized and the activity is judged valuable by the person
    - Performs activity with sense of choice and identification with the activity

Amotivtion is the absence of motivation (Deci & Ryan 2000).

Chapter 2: Literature Review

The purpose of this following study is to explore the relationship between college students' motivations to enroll in College/University Instructional Physical Activity Programs courses (C/UIPAPs), their perceptions of the instructor's autonomy supportive approach, and examine college students' motivations to participate and engage in the physical activity courses. The rationale of this study is grounded within the framework of the self-determination theory (Deci & Ryan, 1985). The following sections will detail the constructs of the self-determination theory and motivation in physical education settings. In addition, the current literature review examining the motivational climate of C/UIPAP's and College students' motivations and perceptions in relation to their participation and engagement in physical activity is described.

Self-Determination Theory

The Self-Determination Theory (SDT) is a concept, which sense that individuals' actions are done freely and are initiated internally as a result of three essential qualities. SDT is used to understand individuals' choices in participating and engaging in physical activities. The three essential qualities include perceived locus of causality, internal perceived locus of causality, and perceived choice (Deci & Ryan, 1985). Perceived locus of causality ranges from internal to external, and deals with an individual's beliefs, in which their behavior is initiated and regulated by their personal circumstances based on environmental circumstances. Internal perceived locus of causality reflects an individual's self-determination. An individual's

perception of choice stems from having the opportunity to make decisions, the ability to be flexible, and the opportunity to choose what they want and need to do. In physical education settings individuals' perceived locus of causality ranges from internal to external. An example if internal locus of causality is participation in physical activity for the simple joy of being active, without receiving any external reward or recognition. An individual whose perceived locus of causality fall within the external range would be engaging in physical activity and expecting an outcome from an external source, such as weight loss or improved body image. SDT takes on the assumption that individuals possess an active tendency toward psychological growth and integration (Deci & Ryan, 2002). It is believed that individuals have an instinctive desire to exercise and express their interests. Individuals also tend to naturally seek challenges that will help them in discovering new perceptions and internalize that new information in to their daily lives. They provide the basis for grouping facets of the environment as being supportive versus antagonistic toward individuals discovering new aspects of themselves and of their environment. Perceived choice involves the individual believing that they are in control of the environment of conditions, in which they are involved. Those who believe they have chosen to participate in a particular endeavor are possibly more intrinsically motivated to be engaged and master the activity. According to Deci & Ryan (2002) there are three specific needs for competence, relatedness and autonomy. The need for competence refers to an individual feeling effective in their ongoing interactions with their social environment, as well as experiencing opportunities to express themselves. When an individual feels competent, it leads to individuals seeking

challenges though activity in an attempt to maintain and/or enhance those skills that have been acquired. Competence also allows individuals to feel confident that they have the capability to accomplish tasks. It is widely accepted that increased levels of perceived competence are related to higher levels of self-determination and intrinsic motivation (Ferrer-Caja & Weiss, 2000; Goudas & Biddle, 1994; Harter & Connell, 1984; Li, Lee, & Solmon, 2005; Ntoumanis, 2001; Standage, Duda, & Ntoumanis, 2003). Much research has yielded evidence that in physical activity settings the individuals perception of the physical competence has a major effect on their performance, motivation, behavior, and cognition (Weiss & Ebbeck, 1996).

Current research has also shown that individuals who have higher levels of perceived competence are more likely to be active during their physical activity classes (Parish & Treasure, 2003). The need for relatedness refers to individuals feeling connected to their peers and other individuals in their environment. Individuals need to care for and be card for by others to have a sense of belonging with others within their community (Ntoumanis, 2001). Weinburg & Gould (1999) conducted research on participation motives in sport and on numerous occasions identified the need for students to make friends with other students as one of the major motivations to participate in sports or sport related activities. Lastly, the need for autonomy refers to the perception that an individual is in control and the source of their own behavior. Individuals take the effort to have a say over their actions and feel like those actions were initiated from themselves (Ntoumanis, 2001; Vallerand, 1997). According to Deci &Ryan (2002) autonomous people experience their behavior as an expression of self. Even when their behaviors and action are

influenced by an outside source, autonomous individuals agree with those outside influences and feel as if they have taken initiative and value. Autonomy is also defined as " a sense of feeling free from pressures and to have the possibility to make choices among several courses of action (Guay, Vallerand, & Blanchard, 2000). Goudas & Biddle (1995) believe that autonomy has a stronger effect on intrinsic motivation than perceived competence. The experience that individuals have when given the opportunity to experience an autonomous supportive climate has been associated with higher levels of intrinsic motivation and identified regulation.

Motivation

The Self-Determination Theory further explains the levels of motivation that individuals experience when they have to behave or take action toward a certain task or situation. The Hierarchical Model of Intrinsic and Extrinsic motivation provides a way to represent individual's motivations, as well as the structure, determinants, and consequences of those different representations (Deci & Ryan, 2000; Deci & Ryan, 2002; Vallerand, 1997). Intrinsic motivation, extrinsic motivation, and amotivation are three important constructs that explain the complexities of human behavior, the capacity to represent the aspects of the human experience, and the importance of consequences that these constructs generate. Intrinsic motivation refers to behaviors performed out of interest and enjoyment. Intrinsic motivation (IM) to know Implies that engaging in activities is because of pleasure and satisfaction derived from learning, exploring, and understanding new things (Deci & Ryan, 2002) Intrinsically motivated behaviors are those that are involved in task and activities for their own sake and for the desires and gratification that comes from performing them (Deci,

1971, 1975; Deci & Ryan, 1985, 2002; Vallerand & Bissonnette, 1992). On the other hand, extrinsic motivation refers to behaviors carried out to accomplish conditional outcomes (Vallerand & Rattelle, 2002).

Extrinsic motivation concerns a variety of behaviors where the goals of the individual actions go beyond their inherent. In physical activity and education setting students who are extrinsically motivated are less likely to perceive themselves as competent compared to those who are intrinsically motivated (Kavussanu & Roberts, 1996). External motivation (EM) has a range of how individual regulate their motivation and self-determination. External regulation indicates that an individual acts or performs to attain a positive end state or avoid a negative end state (Vallerand & Rattelle, 2002). In other words external regulation occurs when behavior is measured through rewards or constraints (Vallerand & Bissonnette, 1992). For example college students may participate in physical activities because they feel urged to do so by their peers and in this case the college student would be participating in physical activity due to the external pressure they feel from their peer. The motivation is extrinsic due to the fact that the reason for participation is reliant outside of the individual itself and is not chosen by the individual or self-determined.

External regulation can also be driven by the promise of reward. For example, college students who work hard in their C/UIPAP course are doing so in order to receive an "A." In this case the students motivation is extrinsic and not self-determined and the prompting factor is the passing grade (Deci & Ryan, 1985; Vallerand & Bissonnette, 1992). The introjected regulation is the first stage of the internalized process, where individuals take prompts from the environment and bring

them inside themselves. Individuals start to internalize reasons for their behavior and therefore, the source of control is inside of the individual. Individuals' beliefs and controls are internalized and are experienced as pressure and tension toward a specific goal. These individuals then act out of obligation to avoid shame and pressure (Vallerand & Bissonnette, 1992). Identified regulation occurs when an individual values the behavior and perceives that they have chosen that behavior themselves. The individual's reasons to engage in activity are internalized and the person judges the activity valuable. Behavior is internally regulated, however it is also self-determined. For example, an individual on a swim team decides to incorporate more intense drill into their work out to improve their speed and time. The activity is extrinsically motivated because it is not performed for itself, but as a way to improve their speed and time. However it is self-determined because they are not persuaded into increasing the intensity of their work out but doing it because it is beneficial to them.

In addition to intrinsic motivation and extrinsic motivation, Deci and Ryan (1985a) have a third construct, amotivation that contributes to the complexities of human behavior. Individuals who are amotivated actually lack motivation and perceive that there is minimal possibility that their actions could yield positive outcomes. There are not extrinsic or intrinsic rewards for participating in the activity, therefore participation in the activity will eventually stop.

There are also levels of generality concerning the consequences and determinants of intrinsic and extrinsic motivation, which are the global level, contextual level, and the situational level (Deci &Ryan, 2000). An individual who is

seen as having a global (general) motivation orientation has an overall intrinsically motivated, extrinsically motivated, or amotivated personality regarding their environment. The contextual level can determine an individual's type of motivation regarding the setting that they are in, such as an educational setting, sport setting, or in an relationship. The situational level refers to an individual's motivation to participate and engage in a task at a specific time. This study will focus on the situational level of generality, investigating how college students are motivated in their physical activity courses.

Autonomy Supportive Climate in Educational Settings

The climate that the student perceives while enrolled in a class is an important variable in the physical education content. The C/UIPAPs courses offered to college students are designed to educate and enhance their motor skills, by offering more skill specific courses. Ames and colleagues conducted the vast majority of the foundation of the research work related to motivational climate (Ames and Archer, 1988; Ames, 1992a, 1992b). Student motivation to learn in the classroom is an ongoing issue in schools of all levels. In order for individuals to achieve a goal or be successful at tasks they are involved in, there has to be a goal set and a person has to have a certain level of motivation to reach that goal and become successful. Students on all levels are faced with that challenge of meeting those goals and accomplishments and their motivations may stem from different places, intrinsically or extrinsically. Many studies have examined children's and adolescent's motivation to actively engage and participate in educational activities. These studies examined the students' learning

strategies, motivational processes, and goals toward academic achievement. Elliot and Dweck (1988) examined the learning goals of the students, which were set up by observing learned helplessness, a mastery-oriented pattern that the students displayed. Elliot and Dweck (1988) purposed that individuals pursue two major goals in achievement situations, which are performance goals and learning goals. Performance goals pertain to the individuals who seek to maintain positive judgments by seeking approval and validation for their ability. Learner goals pertain to individuals who want to increase their knowledge and ability or master new tasks. These achievement goals focus on the achievement behavior, incorporating patterns and beliefs that represent different ways of responding to achievement (Ames, 1992). They found that those students, who have a mastery-oriented response to the task, do not focus on failure attributions, but exhibit solution-oriented self-instructions, maintaining or increasing a positive effect and improved performance. Individuals with mastery goals are focused on developing new skills, attempting to understand their work, improving their overall level of competence (Ames & Archer, 1988; Ames, 1992a, 1992b; Elliot & Dweck, 1988). Their research has suggested that students who are motivated and those who are not motivated to participate in the required tasks have different goals in achievement situations with non-motivated students seeking to document their abilities and those who are motivated, seeking to increase their ability (Elliot & Dweck, 1988). The research revealed that in physical education settings, students who are not sufficiently skilled and who are amotivated during a task, such as fundamental motor skills (FMS) or sports might be focused on how other individuals view them. This can cause them to be reluctant to engage in those

activities for fears of disapproval. However, those students who were intrinsically motivated, whether skilled or unskilled, would be more likely to engage in classroom activities.

Also, intrinsically motivated students will likely want to engage in learning and mastering a task in classroom activities when faced with the unfamiliar. During this study, Elliot and Dweck compared different profiles of students' perceptions of establishing their goals in the classroom. They found there was a degree to which the classroom climate emphasized mastery, rather than performance, which was predictive of how the students approached learning. In essence, the students were intrinsically motivated and concerned with actually learning and mastering the tasks for their betterment of themselves. It is important for young children to gain a sense of mastery-goal orientation when it comes to learning any new skill, so they will be open to learning more information on a constant basis, never settling for the status quo continuing on until adulthood.

Physical Education Settings and Motivational Climate

Ames and Archer (1988) investigated how specific motivation patterns were related to the importance of mastery and performance goals in an actual classroom setting. Ames and Archer (1988) wanted to know if mastery and performance goal constructs cause students to have different perceptions of their classroom experiences, if the students' perceptions reflected their task choices, attitudes and beliefs about success or failure, and if students' perceptions of classroom goals related to their selection and use of effective learning strategies. Their findings indicated that mastery

and performance goals provided a meaningful way of differentiating students' perceptions of classroom learning environments. The students' perceived competence, perceived autonomy, and perceived relatedness has the possibility to influence how they perceive the classroom climate. When students identified their class a mastery goal oriented, they were more likely to use effective learning strategies prefer challenging tasks and believe that with effort along cam success. For example the, the perceived climate of a physical activity class is a major variable in how students are motivated and perform. According to Ames, the cognitive components of motivation can also enhance the quality of the task students engage in themselves. When individuals are mastery-oriented their focus is on learning new skills and improving their own skills and competence.

The themes found in the literature can be applied to students developing motivation to participate and learn new motor skill in physical education classes. Bryan and Solmon (2007) examined ways to design physical education classroom environments that would actively encourage students to increase the physical activity levels. They believe that there is a positive relationship among students' perceptions of a mastery climate, the levels of self-determination, and the students' attitudes. Their findings gave insight into the factors that lead to students' active engagement. Their results supported the idea of mastery climate and the structuring of the environment to promote student engagement in physical education. Domangue and Johnson (2007) also found that autonomy supportive climates promoted higher levels of self-determination, which improved individuals' engagement in physical activity.

The goal of physical educators if to encourage the students to become physically active throughout their lives and the skill that they learn should be applied in everyday life. Autonomy refers to the freedom and choice that a person has to achieve a level that they desire. The availability of choice in activities and behaviors in classrooms can be positively related to perception of autonomy. It is important that students in physical education classes, just as in general education classes, have some input into how they want to learn in the classroom. Recent research has stated that students are more motivated to participate in activities that they feel comfortable performing and activities in which they know they are competent.

Competence refers to how well informed a person is about a subject and whether or not they feel comfortable and confident that they know they are knowledgeable. It was found that when students felt competent, they perceived that their physical education teacher's stressed improvement based on their personal achievements rather than being compared to their peers. The findings support Ames (1992) study showing that when teachers evaluate individual criteria and reward students' performance, students feel less threatened, allowing the evaluation process to become more controllable. Students who feel they are competent and have prior experience in the related task, they are likely to find the activities interesting and fun, and would possibly participate in physical activities with the continued development of their motor skills. Students with high-perceived competence are less likely to be externally motivated, and those who perceive that they lack physical competence may find physical education to be unimportant and engage in it only because it is a required or from fear of punishment. The teacher's perception of the student's level of

competence is important in determining the climate of the classroom and has the possibility of shaping the students perception of their own competence. For example, according to Ntoumanis (1996) study found that physical education teachers in Britain have to follow a very prescriptive curriculum that does not provide opportunities for students to initiate or obtain leadership roles in the classroom. It was also stated that there is a possibility that teachers are not well trained or feel comfortable experimenting with different teaching styles. This could be a concern for classrooms of all types, where the teachers do not feel comfortable experimenting with different teaching strategies and the student's attitudes and potential for learning diminishes, resulting in them becoming less motivated.

The students Social-relatedness refers to how a person can connect their knowledge and competence to peers and surroundings. Situations in physical education classes where students have an opportunity to work together and assist each other can make them feel closer to one another a develop friendships (Ntoumanis, 2001). Ntoumanis (2001), found moderate to strong paths connecting the three social factors of cooperation, improvement, and choice, as well, as the three psychological mediators of relatedness, competence, and autonomy. Physical education classes provide a great opportunity for students to gain friends and relationships that can encourage them to engage in the activity more freely. Especially, if the classroom is focused on mastering the task instead of determining and rewarding the students who are noticeably more competent in the motor skills than others. The students who are less competent do not feel ashamed to engage in those activities (Parish & Treasure, 2011).

The self-determination theory and the mastery and performance based climates affect the student's overall motivation level. When students are intrinsically motivated to engage in physical activities in their physical education classes, they tend to want to master skills and will not be overly concerned with the performance of other students. Autonomy supportive climates may foster a way of thinking that is necessary to sustain involvement in learning the skills and will increase the likelihood that the students would engage in those activities in the future (Gao, et al., 2011; Gu et al., 2011; Bryan & Solmon, 2007; Domangue, et al., 2007). Those students who may be extrinsically motivated can be motivated by outwardly rewards, such as appearance and a grade given by their teachers. In the case of participating in physical education classes that students may not be concerned with gaining knowledge or mastering the skills so they can use them in the future, but they may be more likely to participate in physical education for the social benefits. Some students may see extrinsic rewards as controlling or coercive, as a result diminishing feelings of self-determination and intrinsic motivation (Ferrer-Caja & Weiss, 2000). If the students feel that their success is determined by how they perform rather than their effort then that is where their motivation will stem from.

Motivation to Participate in Physical Activity Courses in College

Many of the studies that focus on student's motivation to actively engage in classroom physical activities pertain to elementary and secondary school children. However, there are very few research studies pertaining to college students' motivation to enroll, participate and engage in C/UIPAPs. Many of the studies

investigated college students' motivations to participant in sports related physical activity and exercise (Kilpatrick, Herbert, & Bartholomew, 2010, Calfas, et al., 1994). Many college students are not engaged in regular physical activity, which is contributing to the overall obesity epidemic and continuing to put the students at risk for health problems. College and university students face many barriers and challenges in adjusting from being under structured parental influence to being on their own and responsible for their own physical activity. There is also evidence that levels of physical activity declines from high school to college and that physical activity patterns among college populations are typically insufficient to have major improvements on health and fitness (Kilpatrick, Hebert, & Bartholomew, 2005). Many young adults who enroll in a college or university have to learn how to balance their studies, social life, as well as their health. It is believed that the concern for health becomes less of a priority and students become less engaged in regular physical activity (Calfas, et al., 1994). According to the US Department of Health Services (2011), 80% of adults and adolescence do not meet the guidelines for both aerobic and muscle-strengthening activities.

In a recent study, Irwin (2007) utilized the Physical Activity Guidelines for Health in a longitudinal study to determine if college students met the requirements of the guidelines for at least a month to acquire health benefits. The results indicated that the level of physical activity among university students was disconcerting indicating that only 35% of the university students in the study maintained physical activity for one month at the level necessary develops health benefits. The findings are perplexing because Irwin discovered that researchers in previous studies found that

physical activity levels were higher when using the PAGH assessment. However, the prevalence of physical activity that the author found may be difficult to compare because other researchers investigated the assessment through cross –sectional designs. From the results it is clear that a majority of the university student population are not meeting the physical activity requirements needed to gain health benefits and are at risks for developing health problems due to lack of physical activity. It is an alarming issue that more and more college students are living sedentary lifestyles.

Kilpatrick et al., (2010) examined college students' motivation for physical activity, comparing men and women's motives for participating in sports and exercise. Their results indicated that both men and women possessed intrinsic motives; enjoyment and challenge for sport related physical activities and had extrinsic motives for exercise, focusing on appearance, stress, and weight management. This could be true for college students' motivations to enroll and participate in C/UIPAPs. Many classes that are offered are team sport related, as well as focused on exercise and fitness; therefore their motivations could likely model Kilpatrick et al., (2010) results. Keating et al., (2005) conducted a Meta-analysis of college students' physical activity behaviors, reviewing the research on college students' physical activity in an effort to develop research on this topic. It is stated that understanding the determinants of college students' behavior in important in changing their behaviors of not engaging in physical activities.

The instructors of the physical education classes and recreation classes should make an effort to become aware of the students perceptions. This can be related to the self-determination theory and instructional strategies that are applied to physical

education classes that are taught in elementary and secondary schools. In the physical education classes there should be some sense of autonomy, where the students are able to decide and have choice in how they learn (Gu, Solmor, & Zhang, 2011). They also want to feel competent in the skills that they have to perform in the physical education classes. Some of the college students may not have been competent in their physical motor abilities when they were younger and have carried that lack of skills over into adulthood. The physical education teachers and classroom curriculum should be able to accommodate those students who may not be as skilled. This relates with their motivation to participate in class. If they perceive that class to be task-involved rather than ego-involved they will be more likely to be motivated to engage in physical activity. The social-relatedness is a major factor in why college students may enroll and participate in the physical education classes. Gaining friends and peers who have the same experiences as them can allow them to comfortably engage in physical activities, even outside of the classroom. Many students may engage in physical activities on their own and feel more comfortable exercising with a friend, which is a motivating factor. This may be true, especially for freshmen that are new to the surrounding and are adjusting to a new environment.

According to Bray & Kwan (2006) the transition to university life can be a difficult one for some students and balancing the new responsibilities may end the student neglecting their regular physical activity. In a longitudinal study, it was found that first-year students' physical activity decreased significantly compared to the physical activity levels of the students when they were high school students. Students who engage in physical activity also have the potential to maintain their

psychological well-being and lower their risk for health problems, such as stress and cardiovascular disease In the results of the Bray and Kwan, those students who participated in vigorous physical activity during their first transitional year of university study had more positive psychological well-being and fewer illnesses that those who were not sufficiently active. This study suggests that those students who maintain a physically active lifestyle can minimize their chances for health problems.

In 2003 Leenders et al. conducted a study to determine the demographic characteristics of students enrolled in college/ university physical activity courses, students primary reasons for enrolling in the physical activity courses, and the health behaviors of the students enrolled in the courses. The results of the students' responses to the questionnaires indicated that male and female students enrolled in the physical activity courses to primarily to learn new activities and improve on their motors skills. About 20 percent of the students specified that they enrolled to have fun and a small percentage of them enrolled to lose weight. Leenders et al, (2003) believed that the course offerings (e.g. basketball and tae kwon doe, weight lifting and aerobics) contributed to the enrollment of those students who wanted to lose weight. It was also found that 1 in 3 participants did not engage in physical activity outside of the course. They concluded that the students enrolling in these courses are more active than the general population of undergraduate students (Russell, 2008).

This current study aims to examine the relationship between the college students' motivations to enroll in college/university instructional physical activity courses, their perception of the instructors' autonomy support, and their perceptions of the overall instructional climate. Obtaining demographics of the students who are

choosing to enroll in the C/UIPAPs, tracking their motivation periodically throughout the semester, and interviewing them will allow for a well-rounded study. This study aims to gain further insight into college students' motivations towards engaging in physical activity. It is my hope that the findings from this study contribute to the field of physical education by painting a clearer path to understanding what college students' motivations and perceptions are towards regular participation and engagement in physical activity.

Chapter 3: Methods

The purpose of this grounded theory experiment was to investigate and describe the motivations of college students' decision to enroll in College and University Instructional Physical Activity Courses, their perceptions of the instructional climate, as well as their perception of their instructor. Grounded theory can be a great asset for exploring concerns of college student motivation in classroom settings. The central methodology involves a comparison of the Achievement Goal Theory and Self-Determination Theory, as it helps explain how college students can be motivated to participate and engage in C/UIPAP courses.

It is my desire to understand college students' motivation to enroll, participate and actively engage in the course and how the instructional climate affects their motivation to be physically active. Methods in collecting data consisted of a mixed methods approach, which involves collecting data both quantitatively and qualitatively. The mixed method approach provides strengths that may offset the weaknesses of both qualitative and quantitative data collection in this study (Creswell, 2008). It was believed using the mixed method approach could help answer the research questions that neither qualitative nor quantitative approach could do on their own. Traditional qualitative data collection involve using natural environment as the source of data, utilizing purposeful sampling, identifying the researcher as the principle instrument of data collection, and articulating the data in ways other than numbers. Quantitative data collection involves collecting and analyzing scores and randomized samples, which are hypothesized and formulated before the data is collected (Fraenkel & Wlllaen, 1994). The research findings and

analysis sought to give clarifications and suggestions that would help to provide, maintain, and/or develop effective instructional climates and strategies that would encourage college students to participate and engage in physical activity instruction courses (Creswell, 2003; Creswell & Clark, 2008)

Epistemological Stance

It is necessary to acknowledge my experience as it relates to the qualitative data collection during this study. As a physical educator, I have the responsibility to establish the climate in the classroom that will be conducive to students' learning and interest in the content. I am learning that there are many techniques to motivating all students to be engaged in the classroom content. One major goal I have as an educator is to motivate students to master skills and enjoy learning the content. I have also been an undergraduate student, enrolled in physical activity courses, and with motivation ranging from intrinsic to extrinsic. I am curious to know what motivates and encourages college students to be actively involved in their physical activity courses once they have enrolled. I have provided a coding guide, which describes how the decisions were made about coding the interview and focus group responses. Please refer to Appendix K for the Coding Guide. This provided a data within the text, which allowed for the interpretation and analytical judgment of my choices within the context of AGT and SDT, and made arguments in relation to the data presented in this study.

Pilot Study

Prior to this study, I conducted a pilot study that was similar to the present study. College students who enrolled were recruited to participate in interviews and focus groups to examine their motivation toward participation in their physical activity course. The courses consisted of walking, jogging, circuit training, and weight lifting. The interview and focus group questions the participants' perceptions of their instructors' qualifications, autonomy support, and relatedness. The questions also pertained to the participants' perceptions of the motivational climate of the classroom. The responses indicated that the participants desired to be challenge by their instructor and to set goals that could be met throughout the semester. These findings led me to purse a larger study incorporating questionnaires that would support the qualitative data.

Grounded Theory

Glaser and Strauss (1967) were two sociologists that suggested as a result of the limited number of traditional theories within their field and believed that it was time to develop a generation of new theories. These new theories could be grounded in the data and expanded throughout the use of methodology in analysis of the data. Although Glaser and Strauss (1967) traditional qualitative data collection does not call for the creation of hypothesis to determine if the existing theory is useful for understanding the data, the mixed method approach I have chosen for this study calls for hypotheses. There will, however, be an expectation to pay attention to theory that

emerges from the data, which may contain content that is relevant and best able to explain the data.

Design of Study

Participants

The participants in this study were approximately 217 college-aged students between the ages of 19- and 25- years (n = 44 males, n = 173 females) attending an accredited university in the southeastern region of the United States and who are enrolled in the C/UIPAP courses. Specifically, participants were recruited from the cardio and fitness courses (i.e. Aerobic Dance, Circuit Training, Jogging, Walking, and Aquatics). See Appendix A for more detailed schedule of the C/UIPAP courses. The C/UIPAPs courses ranged in duration of class time, which is from 50 minutes to 1 hour and 15 minutes. The C/UIPAPs were limited to 35 students per section. Each C/UIPAP course is instructed by trained Graduate Teaching Assistants (GTAs) who are hired by the Department of Kinesiology.

Sampling and recruitment

The entire population of college students (n=400) enrolled in the cardio and fitness C/UIPAP courses were recruited to participate in completing the online survey and pre- and post- questionnaires. The instructors of the C/UIPAP courses were asked permission to include their students as possible participants. If the instructors requested, they were given a copy of the IRB approved information letter and consent forms for information purposes. The researcher also visited the classes, with the

permission of the C/UIPAP course instructor, and explained the purpose and procedures of the study to the students to inform participants. Those students who chose to participate were required to take an informational form and complete a consent form. The students were also informed that they would be asked to complete a consent form in person.

The semi-structure interviews and focus groups involved more decisive recruitment and sampling. In an effort to collect enlightening and insightful data, interviews and focus groups were conducted for the importance of obtaining participants responses that were purposeful, understanding of why the college students enrolled, participated, and engaged in the C/UIPAP courses. According to Merriam (2002), "purposeful sampling is based on the assumption that the investigator wants to discover, understand, and gain insight and therefore must select a sample from which the most can be learned." These techniques identified deeper knowledge of how the participants are motivated to participate and engage in the C/UIPAP courses, how the participants perceive the classroom climate, and how the participants perceive their teachers.

The focus group approach was chosen to take advantage of the commonalities and interactions that the participants have regarding their motivation, and perceptions amongst each other. The focus group approach can potentially allow for participants, who may be hesitant, the opportunity to provide valuable information. Focus groups were also conducted to maximize time allotted to gather data (Creswell, 2007). The participants were randomly selected and recruited to participate in the one-on-one interview and focus groups as a result of their consent and completion of the online

survey and pre-questionnaire. After the participants' responses were analyzed, determining their demographics (male, female, classification, etc.), initial perceptions of the instructional climate and motivation to participate and engage in the physical activity course, recruitment was determined by the participants' willingness to continue participation in the interviews and focus groups. Once the participants were selected, an informational letter was sent via the university email system. The email also included a link to an Internet based scheduling tool including various dates and times that the participants could choose from participate in the semi-structured interviews and focus groups. The participants were asked to respond to the email and link providing three times of availability, within one week of receiving the email. The process of recruiting participants for the semi-structured interviews and focus groups was done two weeks prior to conducting the interviews.

The overall criterions for participation in this study are as follows:

1. The students were full-time undergraduate students enrolled in at least one Physical Activity Instructional Course within the Kinesiology Department of Auburn University.
2. Participants were traditional college-age students, which is 19 years old – 25 years old.

Measures

The survey, distributed both through an Internet survey-building program and on paper, consisted of questions pertaining to demographics (age, race/ethnicity, gender, classification, course, etc.) and initial motivations (what is your reason for enrolling in this course?) for course enrollment. See Appendix G to review the online survey.

The pre- and post- questionnaires were used to measure (a) the participants' motivations to participate and engage in the physical activity courses (b) perceptions of their instructor's support of autonomy, and (c) the participants perceptions of the instructional climate during participation and engagement in the physical activity course. The questionnaires were also distributed online through the website, www.qualtrics.com.

The Learning Climate Questionnaire (LCQ; Williams & Deci, 1996) was used to measure the participants' perceptions of the instructor. This questionnaire assesses the level of autonomy provided by the instructor. The short form LQC questionnaire contains 6-items, where responses on a 7-point Likert Scale, ranging from 1- "strongly disagree" to 7- "strongly agree". This questionnaire is typically used in specific learning settings, which in this case are the C/UIPAP courses. The wordings of the 6-items were adapted to relate to the physical activity setting. The scores are calculated by averaging the individual score items. Questions 13 and 8 scores are reverse scored (strongly agree to strongly disagree and strongly disagree to strongly agree). The higher average scores of the LCQ indicated a higher level of perceived autonomy support. The lower score suggest a lower level of perceived autonomy support. Please refer to Appendix H to review the LQC questionnaire.

The Learning and Performance Orientations in Physical Education Classes Questionnaire (LAPOPECQ)(Papaioannou, 1992) was used to measure the students' perceptions of the motivational climate. This questionnaire consists of five scales, which contain 4-7 items per scale, and refers to perceptions of the classroom goal structure and the students' perceptions of the classroom environment. The scales assessed the participants' learning orientation; teacher initiated learning orientation, participants' competitive orientation, participants' worries about mistakes, and participants' outcome orientation without effort. Responses to the 27-item questionnaire are on a five-point Likert scale ranging from 1(strongly disagree) to 5 (strongly agree) followed by the stem "During my Cardio or Fitness course." The LAPOPECQ scores are calculated by averaging the individual score items. The lower average scores of the LAPOPECQ indicated a higher level of performance-orientation. The higher score suggest a lower level of mastery-orientation. See Appendix I to review the LAPOPECQ questionnaire.

The semi-structured interviews and focus groups were conducted to gain further understanding of the participant's motivations to engage in their instructional physical activity course and perception of their instructional climate and instructor. Interviewing will allow the researcher to better engage in the meaning-making process, digging deeper into the participants feeling and thoughts concerning their motivation levels in their physical activity course. Qualitative research can bring a great amount of understanding to the idea of how to enhance participants' motivation in physical activity by actually gathering the participants' words and feeling regarding engaging in physical activity and physical education (Kvale & Brinkmann,

2009). In most cases, the new traditional college student is in a new world that includes new found freedom and responsibilities and many may be asking themselves," "how can I balance these new responsibilities and maintain my health and stay physically fit?" It is important to find out information that cannot directly be observed or analyzed through quantitative measures, such as the participants' feelings, thoughts, and intentions. Interviewing allows the researcher to collect data in a more naturalistic manner. The interviews should shed light on the participants' general background and how it relates to engagement in physical education. The best practices for conducting quality one-on-one interviews are that the interviewer or researcher is knowledgeable, structured, sensitive, steering, clear, gentle, remembering, and interpreting. To conduct a quality interview one has to be knowledgeable and obtain a level of connoisseurship in the area of physical education (Eisner, 1998). The semi-structure interviews and focus groups conducted included questions that focused on the participants' experiences in participating in physical education and physical activities, how those experiences influenced their perception of instructional physical activity courses, their perceptions of instructional physical activity course, and their motivations to participate and engage in their physical activity courses (See Appendix K for interview questions).

Procedures

After receiving human subjects approval from the Institutional Review Board for Research Involving Human Subjects at Auburn University and prior to the start of data collection, all college students (approximately 400) who were enrolled in the

cardio and fitness instructional physical activity courses (approximately 11) were recruited to participate in this study. This study examined students' motivations to enroll in C/UIPAP courses, the participants' motivations to participate and actively engage in the course, and the participants' perceptions of their instructors' autonomy support and the participants' perception of the instructional climate. All students enrolled in walking, jogging, aerobic dance, circuit training, swim fitness, and water aerobics were recruited to participate in the study. Ten sections of cardio and fitness classes were offered during the 2013 spring semester. The first measure conducted to assess all the participants' demographics and motivation to enroll in the courses was the online survey. The second measure distributed to all participants will be the online pre- and post- questionnaire, including scales from the LCQ and LAPOPECQ, The questionnaire will consist of a total of 42-items.

Interview Plan

The third measure conducted involved one-on-one semi-structured interviews, consisting of interview questions pertaining to the participants' perceptions of the instructional climate, participants perceptions of their instructor's autonomy support, as well as motivations towards enrolling, participating, and engaging in their physical activity courses. Thirty participants, (2 participants to represent each course) were recruited to participate the one-on one semi structured interviews. The semi-structure interviews were conducted at the beginning and the end of the 2013 spring semester to assess if the students perceptions and motivation

change throughout their time enrolled in the semester. Typically, the duration of each semi-structured interviews lasted an average of 15-20 minutes.

The fourth measure involved the focus group interviews, consisting of group discussion type interviews with the researcher as the moderator. The focus group questions also pertained to the participants' enrollment, motivation and perceptions of the instructional climate and perceptions of their instructors autonomy support. The researchers recruited a total of 20 participants, which consisted of four focus groups. The focus groups were also conducted at the beginning and end of the Spring 2013 semester and the duration of the focus groups lasted an average of 30- 45 minutes. Please refer to Table 1. for Steps for Data Collection.

Table 1. Data Collection Steps

Steps	
1	Speak with C/UIPAP Instructors
2	1st day of class: Distribute Informed Consent forms
3	1st week distribute and collect surveys
4	3rd week distribute and collect pre-questionnaire
5	5th week conduct pre-interviews
6	7th week conduct pre- focus groups
7	10th week conduct post- interview
8	12th week conduct post- focus groups
9	13th week distribute and collect post-questionnaires

Schedule

1st Week. Prior to the first day of spring 2013 classes, instructors were contacted for permission to involve their class in the research study. In some instances the participants' were not able to schedule an interview or focus group and needed to participate in the interviews and focus groups during the scheduled course. The instructors were made aware of the observations and potential disruption of class when excusing those students who chose to participate in a focus group and/ or interview. Following, students enrolled in cardio and fitness physical activity instructional courses were greeted and issued a letter of invitation (Appendix A) and an informed consent form (Appendix B) to participate in this study via a university email, which is Auburn University's official form of communication. The email included instructions as to how to give consent and the website link to the online survey. The participants were asked to respond to the emails, indicating their agreement to participate. The participants were asked to give consent and complete the 10-minute online survey by the last day of the 1st week of the semester. The participants who consented to be a part of this study also consent to complete the pre- and post- questionnaires that were distributed via university email system during the duration of the semester.

2nd Week. After the submission of the surveys, the link to the pre-questionnaire was emailed to the participants on the first day of the second week of the spring semester. The emails included directions as to how they should complete the 10-minute online questionnaire. The participants were asked to complete the

online pre-questionnaire by the last day of the second week of the spring semester. Also, during the second week the online survey responses were analyzed, indicating the demographics of the participants.

3rd week. The responses to the pre-questionnaire were scored and analyzed and a random selection of the responses were reviewed to indicate what factors motivated the participants to enroll and which participants were more intrinsically motivated and more extrinsically motivated to enroll and engage in the C/UIPAP courses, as well as their perception of the course. During the third week of the 2013 spring semester, thirty participants were purposefully selected to participate in the pre- and post- one-on-one semi-structured interviews and pre and- post- focus group interviews during the study. The thirty participants scores on the questionnaires determined their selection in recruitment for the interviews and focus groups. The participants' scores indicated if they were more intrinsically or extrinsically motivated. There was an attempt to have an even amount of participants who were intrinsically motivated and extrinsically motivated, who would be selected to participate in the interviews and focus groups. Letters of invitation were distributed to the purposefully selected participants, via email and in class, informing them of this portion of the study and inviting them to participate. The letter included a schedule of the available times and dates (5th, 7th, 10, and 12th week of the semester) that the one-on-one semi-structured interviews and focus groups will be held and the participants were asked to provide 3 times (1 hour time slots) of availability to participate in the interviews and focus group. The participants were asked to respond within one week.

Those who chose to participate and provide their availability were notified of the scheduled one-on-one semi structured interview meeting times and place, which were held the fourth week of the semester. (See Appendix G for the semi-structured interview and focus group schedule).

5h and 10th Weeks. Interviews for the consented participants were scheduled and conducted on Monday, Tuesday, Wednesday, and Thursday during the hours of their schedule C/UIPAP course to accommodate the participants. At the start of each interview session, the participants were greeted and asked to sign the consent form to participate in the interview. The participants were informed of the study and, how the data collected would be utilized in the future, and of the equipment used during the interviews. The interviews were recorded using a digital audio recorder and note taking. The duration of the one-on-one interviews lasted 15-20 minutes.

7th and 12th week. Focus groups were conducted during the time of the day when most of the C/UIPAP courses are in session in order to accommodate the participants' each day at various times of the day. At the start of each focus group interview session, the participants were greeted and asked to sign the consent form to participate in the focus group interview. The participants were informed of the study, how the data collected would be utilized in the future, and of the equipment used during the focus group interviews. The focus group interviews were recorded using a digital audio recorder and note taking. The duration of the focus groups averaged 30-45 minutes.

6th and 13th weeks. On the first day of the 7th and 13th weeks the online link to the mid- and post-semester questionnaires was distributed to the participants, who consented to be involved in the study, via university email. The participants were asked to complete the questionnaire by the last day of the 6th and 13th weeks. The pre- and post- questionnaires were given during this time due to the fact that it would be near the mid-term session and the end of the term. The participants were asked to complete the questionnaire by the end of the 6th and 13th weeks and the responses to the questionnaires were then analyzed

Statistical Applications

The participant demographic data was collected through the online survey and used for descriptive purposes. The motivational baseline data was collected through the survey to reveal why the initial reasons as to why the participants enrolled in their C/UIPAP courses. Two Paired Sample T-test measures were conducted on the questionnaires responses to determine change in the participants' motivation toward participation and engagement in the C/UIPAP courses, the participants' perception of the instructional climate, and the participants' perception of their instructor using IBM SPSS Software. The results from the pre- and post- questionnaires responses were averaged and compared, giving an indication of participants change in motivation and perception over the course of the semester.

Qualitative Data Analysis

The analysis of the semi-structure interviews and focus group responses was ongoing during the study and transcriptions occurred the week immediately following the scheduled interviews, consisting of the digital audio and field notes. In an effort to make sure the researchers accurately interpreted the point of view of the participants in the transcriptions, coding and analysis, researchers established internal validity or trustworthiness and external validity. The researchers also conducted triangulation by using multiple sources of data collection, interviews and focus groups, as well as member checks to ensure that the participants' word and thoughts are accurately represented by the transcriptions. Data obtained from the interviews and focus groups were be analyzed using open coding categories, comparison between responses were analyzed using Atlas .ti 7 Qualitative Data Analysis and Research software. Group analysis of the interview and focus group transcriptions occurred to organize the transcription texts and condense the meanings of the interviewers responses that could be presented (Gilgun, 2005). The source of the initial codes come from the self-determination theory framework, including competence, relatedness, autonomy, and motivation. Establishing these codes prior to collecting data was seen as a natural progression to analyzing the interview and focus group transcripts. Glaser (1978) stated that "immaculate conceptions are not necessary," in that everyone's observations are influenced by our points of view, interpretations, and perceptions. Therefore, it is unlikely to observe and analyze situations without codes that have already been formulated (Gilgun, 2005).

Table 2. Codes

Codes
Structure Codes 1. Evidence of intrinsic motivations 2. Evidence of extrinsic motivations 3. Evidence to improve health and fitness 4. Evidence of goal setting Operating and Maintenance Mechanism Codes 5. Expressing interest in the physical activity course 6. Scheduling time engage in physical activity 7. Learning and mastering physical activity course content 8. Being influence by peers 9. Motivation to maintain or improve grade point average 10. Obligations to "real life" (family, friends, etc.) 11. Evidence of instructor concern 12. Evidence of instructor autonomy 13. Student perception of relatedness Emergent Code Categories 14. Humor 15. Eagerness to be challenged 16. Need for structure 17. Body image concerns

Reliability and Validity

Reliability indicates that the scores obtained with an instrument are consistent and measures what the instrument states what it is supposed to measure. As far as qualitative research is concerned, reliability is measured using a variety of methods for calculation (Kvale, 1996). There are two approaches used in this study to establish reliability, which include providing a detailed description of the coding choices, and different observers to check the reliability of the researcher. Internal Validity or Trustworthiness focuses on the question of well the research results match reality. External Validity is concerned with the extent to which research findings can be duplicated. (Merriam, 2009). Qualitative research in concerned with making sure that the data is relatable and makes sense. The results also need to be trustworthy and

consistent, instead of transferable to other research studies. Multiple realities have the possibility of existing in qualitative research. Qualitative researchers are more concerned with the results being dependable and consistent when obtained from the data collected (Lincoln & Guba, 1985). Multiple strategies were used in order to best represent those perspectives and ensure that validity and reliability occurred in the qualitative data: (a) triangulation, (b) member checks, and (c) researchers epistemological stance.

Triangulation

Triangulation is often thought of as being the use of multiple sources of data, multiple researchers or methods to confirm the evolving findings of a research study. Creswell (2013) states, "the convergence of sources of information, views of investigators, different theories, and different methodologies represent the triangulation of ideas to help support the development of themes". This study used multiple sources of data in the form of administrators and GTAs and multiple data collection methods in the form of focus groups, interviews, surveys, field notes and observations. The strength of a mixed methods approach is that convergent findings of multiple methods of investigation can often produce results that can be accepted with increased confidence than of any single method's findings could hope to gain (Creswell & Clark, 2008).

Member Checks

Member checks were conducted with the participants in the interviews in order to make sure that their perceptions and responses were accurately represented

through the transcriptions of the interviews and focus groups. Member checks allowed for the revealing of errors that may have been due to miscommunication or misinterpretation. It is also possible that by reading their interviews participants may reveal additional information (Merriam, 2009).The goal of member checks were to accurately represent the ideas and perceptions of the participant while decreasing the influence of the researcher and lessening the possibility that the participant's words were being taken out of context.

Chapter 4: Results

The purpose of this chapter is to explore and explain the perceptions and motivations of the college students who chose to enroll in the cardio and fitness physical activity courses. It was hypothesized that college students' motivation to engage in physical activity during the instructional physical activity course would change throughout the course of the semester and that their motivation to engage in instructional physical activity content would be in direct correlation to the participants' perception of the classroom climate and instructor autonomy support. A mixed methods approach was taken in in the process of collecting data for this study. The grounded theory research design was used as an approach to qualitative data collection and the quest to gain a deeper understanding of the students' perceptions and motivations toward their participation and engagement in the instructional physical activity courses was at the center of this study. The following research questions guided the study:

1. Why are college students motivated to enroll in College/University Instructional Physical Activity Program courses?
2. What motivates college students to participant and engage in College/University Instructional Physical Activity Program content during the semester?
3. What are the college students' perceptions of the instructional climate of the College/University Instructional Physical Activity Program courses during one semester?

4. What are the college students' perceptions of the instructor's autonomy support during one semester?
5. What is the relationship between instructional climate of instructional Physical activity courses and college students' motivation in the instructional physical activity courses during one semester?

Demographics of Participants

A total of 217 undergraduate college students, who were enrolled in cardio and fitness C/UIPAP courses participated in the first part of this study (*Freshmen=13.5%; Sophomore= 24.9%; Junior= 28.1%; Senior=31.3%; Other= 1.9%*). All participants attended one university in the southeastern region of the United States. The total amount of participants was 54% of the approximately 400 undergraduate students who were enrolled in the C/UIPAP cardio and fitness courses. All students were given the opportunity to be participants. Surveying the demographics of those students who participated in the study, 20.3% of the participants were male and 79.7% were female. The racial make-up consisted of 78.8% Caucasian, 12.4% African American, 7.4% Hispanic, 1% Asian, 1% Native American, and 1% other. The participants were college students at a university in the southeaster region of the United States and the demographics were not a reflection if the overall student body of the university. For example, the student body of comprised of 51% male and 49% female. Demographic information can be found in Table 3.

Table 3. Demographic Information for Participants.

	Demographic Variable	Percentage
Gender	Male	20.3%
	Female	79.7%
Race/Ethnicity	Caucasian/White	76.7%
	African American/ Black	12.4%
	Hispanic	7.4%
	Asian	.5%
	Native American	.5%
Classification	Freshmen	13.8%
	Sophomore	24.9%
	Junior	28.1%
	Senior	31.3%

During the second part of the study, 103 students who chose to participate in both the pre- and post- questionnaire (*Male= 19; Female=84*). The one-on-one semi-structured interviews and focus groups demographics included twenty pre- and twenty post one-on-one semi structured interviews (*Male= 6, Female=14*), as well as four pre- and post- focus groups with 4-5 participants in each group.

Presentation of Findings

The following sections present the results from the overall statistical analysis and themes that emerged from the analysis of the data, including demographic survey, pre-questionnaire, and post questionnaire results, as well as the themes that emerged from the pre- and post- one-on-one interviews and focus groups. First, the demographic survey consisted of questions pertaining to the participants' ethnicity, classification, identification of the participants' college/school affiliation, physical activity participation outside of course, primary reason for enrollment in the C/UIPAP course(s), and the potential motivations to participate and engage in physical activity after the course came to an end. Secondly, the study includes a pre- and post-questionnaire that consists of the Learning and Performance Orientations in Physical Education Classes Questionnaire (LAPOPECQ) and the Learning Climates Questionnaire (LCQ) (Please refer to Appendices I and J). The LAPOPECQ and LCQ examine how students perceive their class environment, including the perceived autonomy support of the instructor, giving some insight into how they will be motivated to participate and engage in the course. Lastly, pre- and post- one-on-one semi-structured interviews and focus groups were conducted with a random selection of participants who participated in the initial demographic survey. The pre one-on-one interviews and focus groups were conducted during the second week of the spring semester and the post one-on-one interviews and focus groups were conducted during the last two-week of the semester.

Motivations for Enrolling in the Physical Activity Courses

The demographic survey obtained a question pertaining to the participants' reasons for enrolling in the C/UIPAP fitness and cardio course, which were " what was the primary/ second most/ third most important reason for selecting the particular course you are taking?" According to the students' responses 58% of the participants indicated that their primary reason for enrolling is because they "wanted to improve fitness," 11.7% were "interested in the activity," 8.5% wanted to "improve GPA, 5.4% indicated that it "fit their academic schedule," and 3% "needed credit hours for financial aid." The second most important reason participants' registered for the physical activity course indicated that 26.5% enrolled due to "interest in the activity," 22.4% wanted "to improve fitness," 15% wanted to "improve GPA," and 13.5 % enrolled because the "class fit their academic schedule." The third most important reason participants registered in the course indicated that the courses fit 26% of the students schedules, 20.6% were "interest in the activity, 19.3% wanted to "improve their GPA," and 7.2% "wanted to improve fitness." A majority of the students enrolled in the class primarily for the improvement of their fitness, interest in the activity, and because of the flexibility of the schedule. A small percentage of the participants were motivated by possible improvements in their GPA, credit hours for financial aid, reputation of the program and instructor, and graduation requirement.

Participants were also asked to indicate the areas of fitness that were most beneficial to them. 78% of the participants considered Cardio Fitness most beneficial, followed by 38.6% Muscular Strength, 36.8% Muscular Endurance, 41.7% Flexibility, and 40% Body Composition. In terms of how the participants initially

valued their physical activity course, 56% deemed the course as adequate, with the possibility of learning new techniques and ideas. 34% of the participants felt the physical activity course would have a significant impact on them, with the possibility of changing their perception of physical activity and 2% believed that the physical activity course had no value. The participants were asked how enrolling in the physical activity courses would influence their physical activity levels in the future. 95% indicated that being enrolled in the course would give them reason to be more physically active and 5% indicated that the physical activity course would not change feelings toward physical activity.

The results from the demographic study answers the first research question, "Why are college students motivated to enroll in C/UIPAP courses?" They give a clear indication of what motivated the participants to enroll in the C/UIPAP cardio and fitness courses. A majority of the participants had the desire to improve their fitness and had an interest in the particular physical activity that was associated with the course(s) they chose to enroll in. Also, a majority of the participants also placed significant value on the C/UIPAP cardio and fitness course. This evidence can suggest that a majority of the participants have some intrinsic motivation to become more physical active and maintain a significant level of physical activity in their daily lives.

Motivations to Engage and Participate During the Semester

The second part of the study included the pre- and post- questionnaires, as well as the pre- and post- one-on-one interviews and questionnaires. The

questionnaires indicated what the participants' perceptions of the instructional climate and the instructor and indicated what the participants' motivations were during that time period during the semester. The LAPOPECQ examined the participants perception of the instructional climate of the course and the instructor, with questions in the areas of students' learning orientation, Teacher-Initiated Learning Orientation, Students' Competitive Orientation, Students' Worries About Mistakes, and Outcome Orientation without Effort. Please see Appendices for the LAPOPECQ. The participants' responses yielded significant results in the two areas, Students' Competitive Orientation (SCO) and Outcome Orientation with Effort (OOWE). The participants were asked to respond on a 5-point Likert Scale to the statements "During today's PE lesson…" and "In PE class over the past three days… with 1 being "strongly disagree" and 5 being "strongly agree." The results showed that participants responded to the statement, "During today's PE lesson the PE instructor looked completely satisfied with those students who managed to win little effort," with an average score of 2.85 for the pre-questionnaire and 2.37 for the post-questionnaire. The results for the statement, "In PE class over the past three days students felt most satisfied when they won with little effort," averaged a score of 2.77 for the pre-questionnaire and 2.48 for the post-questionnaire. The statement, "In PE class over the past three days, successful students were though to be those who scored the most points with little effort, which yielded an average score of 2.32 for the pre-questionnaire and 2.06 for the post-questionnaire. The last statement, "In PE class over the last three days successful students were thought to be those who performed skills better than their classmates," resulted in an average score of 2.39 for the pre-

questionnaire to 2.11 for post-questionnaire. The participants' views changed slightly during the semester, in regards to disagreement idea that lack of effort and high skill level leads to success. The average participant agreed that with the statements regarding student desire to learn "something new" and teacher-initiated learning orientation.

Table 4. Learning and Performance Orientations in Physical Education Classes Questionnaire Results

Questions	Pre-questionnaire (LAPOPECQ) Average Score	Post-questionnaire (LAPOPECQ) Average Score
Inst. looked completely satisfied with those students who managed to win little effort	2.85	2.37
Successful students were thought to be those who performed skills better than their classmates	2.39	2.11
Successful students were thought to be those who scored the most points with little effort	2.32	2.06
Students felt most satisfied when they won with little effort	2.77	2.48

Perceptions of the Instructional Climate and Instructor

The long form of the LCQ examined the general learning climate, including the participants perceived autonomy support of the C/UIPAP instructors through responses on a 7-point Likert scale (1- not true at all for me/ 7- very true for me). This scale was used to support the Self-Determination Theory (SDT) and the idea that people are proactive, with a natural tendency to learn and develop in their experiences

(Deci & Ryan, 2000; Ryan & Deci, 2000). The participants in the cardio and fitness courses displayed minor differences in their responses to the pre- and post- LCQ. The overall score of the participants increased over the course of the semester and this indicated that the participants' perceptions of the instructor autonomy support increased during the semester. The areas in which slight changes occurred with participants' perception of the instructors were pertaining to instructors' confidence in the students' ability to perform the physical activities, participants' trust of the instructor, instructor attentiveness, instructor autonomy support, and instructor concern for the student. These results support the hypothesis that college students' motivations to engage in physical activity in the instructional physical activity course content would change throughout the semester. Deci & Ryan (1980, 1985) suggested that individuals have a psychological need for competence and autonomy, which is supported by the participants' responses to the pre- and post- LCQ. This also gives an indication that the instructors are successful in establishing an instructional climate where their students feel they can trust their instructors and have some freedom to make choices that influence their motivation to be active in the physical activity course. It is more likely that the participants were more intrinsically motivated to participate and engage in the physical activity course content due to the fact that the climate was supportive of the participants autonomy and competence (Deci & Ryan, 1985,2000).

Table 5. Learning Climate Questionnaire Results

Questions	Pre-Questionnaire (LCQ) Average Score	Post-Questionnaire (LCQ) Average Score
I feel that my instructor provides me choices and opinions.	5	6
I feel that my instructor cares about me as a person	5	6
I don't feel very good about the way my instructor talks to me	1	2
My instructor tries to understand how I see things before suggesting a new way to do things	5	6

Table 6. Learning Climate Questionnaire Pre and Post-test

Pre-test/ Post- test	Std, Deviation (pre/post)	Sig
LCQ sum scores	14.7/12.2	.000
LCQ average scores	1.2/ .88	.001

The third part of the study involved a qualitative approach to data collection, which was obtained through pre- and post- semi-structured interviews and focus groups. This allowed further examination of the participants' perceptions and motivations to participate and engage in the course content, as well as their perceptions of the instructional climate. This qualitative approach was taken to get a deeper insight into what that participants' feelings were regarding their course and instructors. This qualitative data was obtained through field observations and questions were related to the participants' motivation and perception of instructional

climate. The themes are presented in the following order: a) potential increase in GPA, b) Prior Experience, c) Accountability, d) Scheduling, e) Instructor's Reputation, and f) Health and Benefits. In each section, quotes were used from those participants and the quantitative data derived from the survey and questionnaires supports these themes. All participants mentioned the desire to improve and/or maintain their fitness levels as a factor that encouraged them to enroll in the C/UIPAP. Findings revealed that the when the participants felt encouragement, a sense of autonomy, and spontaneity from their instructors, increased their motivation to engage in the physical course content. For more clarity, please refer to the appendices when necessary.

The qualitative data collection began with field observation in the cardio and fitness C/UIPAP courses (2 Walking, 2 Jogging, 3 Circuit Training, 1 Swim for Fitness Course, and 1 Water Aerobics Course). The qualitative part of the study revealed what motivated the participants to enroll in the C/UIPAP cardio and fitness courses. It also acknowledged that there were slight changes in the participants' motivations to participate and engage in the physical activity course content and their perceptions of the instructional climate.

Motivation to enroll in C/UIPAP course

During the pre- semi-structured interviews and pre- focus groups I asked the participants to think back to when they registered for their physical activity courses and to think about what motivated them to enroll in their particular instructional

physical activity course. The participants' responses indicated that they were motivated by potential increases in their grade point averages (GPA) and hours, prior experience, accountability, scheduling, instructor reputation, and health and fitness benefits. Participants' responses to the interview and focus group questions are below.

GPA and credit hours. The C/UIPAP courses are opportunities for many students to accumulate enough credit hours to be a full-time student for each semester. The physical activity courses are typically 2 credit hours that can contribute to their academic progressions. The students also believe that the C/UIPAP courses are an "easy" opportunity to earn A's, which will add to their overall grade point average. Below are responses that participants mentioned during the interviews and focus groups.

> "The time frame [of the course] was like the deterrent but I got credit hours for it to boost my GPA." Another participant stated, " I enrolled on the class because I did not have enough credit hours this semester."

> "It fit my schedule and I was able to take two P.E classes and I had one more left so I figured I'd try to…. It's a little easier to get an A in these classes, so I enrolled in P.E class"

Prior experience. Many of the participants were motivated to enroll in the C/UIPAP courses as a result of their previous experience and participation in the

same or related physical activity physical activity. There was a level of comfort and familiarity the participants felt toward the potential physical activity course content.

> *"*I used to be a swimmer in high school and I really wanted to get back in the pool my freshmen year and it never happened So I though they I would take the class and get GPA hours while doing something I really loved to do. I am already taking a ton of hours so I guess it was the fact that I really wanted to get back in the pool. And the fact that when I got back in the pool and I wasn't as god as I used to be was frustrating and I wanted to get back up to where I was."

> "I took golf one prior so I have enjoyed the physical activity classes and I saw a water aerobics class and I though why not? It was available, so I was like yay!"

> "This is actually the second time taking this class. I had it last spring and I did it with another teacher and I loved it and I actually lost 30 pounds."

Accountability. Many of the participants felt that they would not be participating and engaging in physical activity regularly if they were not enrolled in the C/UIPAP. The participants enjoyed the fact that there was a set time during the days and weeks that is set aside for them to engage in physical activity. Below are some participants' responses regarding their sense of accountability.

"I think the biggest motivation was that I came off active duty 3 years ago and I'm in the guard and I still have to keep up my PT testing and o have been failing my mile and a half run my 20-30 seconds each time and I have to pass in march so I took a class to help not only train me but keep me in better shape to pass it and to motivate me to do it."

"I need an exercise class because that is the only way I'm going to work out. I don't go to the gym."

Scheduling. Participants also indicated that they had extrinsic motivations for enrolling in the C/UIPAP course. Rather than enrolling in the instructional physical activity course for the enjoyment of learning and mastering new physical activity skills through participation and engagement, the participants enrolled due to extrinsic values, such as convenience of schedule.

"It [the physical activity classes] fit my schedule and I was able to take two P.E. classes and I had one more left so I figured I'd try to take it while my schedule fit."

"The times that they were offered were really convenient for me and have taken P.E.'s before and I didn't want to repeat teachers and I chose classes bases off of that. I chose circuit training and walking in succession because I can have an intense workout and then kind of a cool down, but still be having workouts that are consecutive."

Instructor reputation. The instructors of the C/UIPAP course are graduate teaching assistants in the department of kinesiology and typically teach courses throughout their time in graduate school. As a result, the instructors have time to develop a reputation and students have the opportunity to enroll in their classes multiple times. A number of participants mentioned their enrollment in past instructional physical activity courses or knew someone who had recommended the course.

> "It's hard and tough to stay active, but I knew she [the instructor] was going to be teaching it and I heard she was butts and guts and really good so I decided to enroll in the class."

> "My roommate is also taking this class and she had the instructor before and she said it was going to be a good class and that she liked him. She also said he was going to be motivational."

Health and Fitness Benefit. The participants had a desire to become more physically active and believed that the course would aid in their efforts. Their desire to get "in shape" motivated them to be engaged in the physical activity course content and kept them accountable towards their participation in the course.

> "I'm just trying to get back in shape, really and become a more physically active person"

"By taking this class, I can be at a higher level of physical activity. Being in this class blocks off specific time for me to be physically active."

Motivation to participate and engage in physical activity content

Participants were also asked questions pertaining to their motivation to participate and engage in the physical activity course content. The main themes that occurred through analysis of the participants' responses were motivation to participate and engage, perception of the instructor, perception of instructor autonomy support, perception of instructional climate, lack of motivation, and impact of participation in physical activities outside of the classroom. Below are the participants' responses to in the areas of the themes mentioned above.

Motivation to participate and engage. Many of the participants indicated that they were motivated to come to class and participate in the course content, were excited to be enrolled and to see what the course had to offer. Even at the start of the semester the participants believed that the course could be a fun and exciting way to get physically active.

"It motivates me for the week up coming week. Let's me realize that I really need to work out harder. So when I have to go to that hard level I can work out and not be struggling as much."

"It is fun because we are listening to music and we are working out and I have a friend in there and its fun that we are both working out and she is motivating me to work harder and back and forth and so it's fun. I really like it."

"I'm absolutely getting a workout from it because I'm starting to see results. I feel a lot better about myself. The fact that it is so simple to show up, do these things and then be done it's a feeling of accomplishment. I have actually gained a lot of endurance in the couple of weeks that school has been in session, I have found that a lot of the exercises in circuit training getting significantly easier. I really appreciate that because I have always wanted to motivate myself to get in shape but I always find some type of excuse, like 'oh I don't have time' but If I am designated to do this, this, and this, and its for a grade and I have to do it them my motivation is sky high"

Perception of instructional climate. Feedback and demonstration were important to the participants' motivation and perception of the instructional climate.

"He encourages us and motivates us through the class and say stuff like you're doing really good, keep it up" and I guess that's it… just some positive feedback to keep us motivated."

"I like how he will specifically point out, 'oh you're doing a good job', "Great job!", like he will go the extra step to for positive reinforcements to encourage us to keep going."

"It is nice to see the whole 'leading by example' thing. It is nice to see him running and if I start hurting he is coming around eventually."

Perception of instructors autonomy support. The participants indicated that some instructors made an effort to get to know them by first name, which allowed the participants to perceive that the instructors were invested in their learning. The instructors also gave the participants an opportunity to perceive that they have input in some aspects of the course, including music and workouts.

"He keeps emphasizing how it will build up every week. Like its hard this week but if you keep doing it every week it will get easier and you will get better. He made this comment the other day about how some of the girls were worried they were going to bulk up doing circuit training. And he was like "no, its only toning""

Lack of motivation. The largest concern that the participants' expressed when it came to being motivated to participating and engaging in the course content was the participants' schedule. Many participants gave examples other obligations that would supersede participating and engaging in the physical activity course content.

"Busy schedule, sometimes I just have a lot on my plate. You know I can make it to the gym for that hour. That's constantly a juggling act but that's all part of it."

"Having to go to class and get there. In the morning I just have such a hard time getting to my circuit training class. And another negative would be that I get all gross and sweaty and then I have to go take a shower… its just a hassle."

Impact of physical activity outside the classroom. When the participants started seeing the impact of being involved in the physical activity course content, their responses indicated that participation and engagement would encourage them to be physically active outside of the course.

"A few years ago I ran in a 10k race and I feel right now that I probably wouldn't be able to do that very well. I'm striving towards doing that this summer again. So, hopefully I can work towards that and get a good time again."

"I am getting stronger, so I feel like having this jump start that is required of me because I am enrolled in this class will push me to do it on my own, especially since I have seen so many results so quickly. Just the knowledge I am getting from these classes, I feel that its going to stick and I will have use for it in five years and will still be apart of my life In five years."

"I mainly I'm trying to us it as a routine setter to get used to running on a consistent basis during the week."

The post- semi structure interviews were conducted during the last two weeks of the spring semester and were the same questions pertaining to motivation to participate and engage perception of the instructor, perception of instructor autonomy support, perception of instructional climate, lack of motivation, and impact of participation in physical activities outside of the classroom. This was done to examine if the participants motivations changed in regards to their participation and engagement in the C/UIPAP courses, as well as the participants perceptions of their instructor and motivational climate. Below are quotes from the participants' post-semi structure interviews and focus groups.

Motivation to participate and engage. The participants motivation to participate and engage seemed to come from more of an intrinsic place, where it was genuine interest to be involved in the course content. There were more responses indicated enjoyment and fun pertaining to the participation and engagement. As a result of the participants' enjoyment in the content, they were able to see the health benefits of being engaged in the course content.

> "I think that the more that she acknowledges the students that have gotten physically better during the semester would keep everyone excited and motivated…that they are improving and getting stronger."
>
> "I started of the semester and I could do anything more than 30 seconds and I felt like a weakling. And I thought I was so out of shape and progressively with each week I have gotten stronger and stronger."

"He keeps us motivated to keep coming because its [Participation] 3 points per day. Its like 100 points for the entire class so I would say losing 3 points is pretty crucial, especially for those who have GPAs that they have to keep up."

Perception of instructional climate. As the courses progressed, participants' responses indicated that the instructional climate continued to be conducive to their motivation to learn, participate and engage in the course content.

"It is fun because we are listening to music and we are working out and I have a friend in there and its fun that we are both working out and she is motivating me to work harder and back and forth and so its fun."

"He cares enough to make sure everyone is doing it right. It seems like he is taking the time to train you personally. He walks around to make sure we are doing what we are supposed to be doing."

Perception of instructors autonomy support. As the semester progressed the participants indicated that instructors continued to be supportive of their input and suggestions to the course.

"He allows for us the apart of the class. He did have one of the students lead the stretches today, so that was pretty cool."

"She tells us to just leave your fears, worries, and concerns of looking stupid in front of everybody outside the door. She is just very expressive and she

wants us to b expressive by movement because she knows we will get a better workout. She just really makes it fun and she does not want us to worry about how we look. She really does make us feel comfortable."

Lack of motivation. The issues that contributed to the participants' lack of motivation continued to be the obligations that they had as undergraduate students, spouses, and parents. For others, participants' lack of motivations pertained to the environment and structural set up of the classroom.

My schedule may be a discouragement. I do have a 2 year old, so that is pretty difficult. I could also go workout immediately after class, so I don't know. I'm not a traditional student so it's a little different for me.

"I wish we were able to have more proper equipment so it would be easier to get to the other stations."

Impact of physical activity outside the classroom. As a result of the participants active involvement and learning the physical activity course content, motivated some of them to take what they learned in the classroom and engage in that activity outside of the classroom. Some of the participants indicated that they taught their friends and encouraged their friends to enroll in course in the future.

"I live with four roommates and they all love that I am taking this class and every Tuesday and Thursday there are open swim hours at the aquatic center and the four of us will come and I have gotten them to start willing laps. I am

happy that it is back in my life and I think maybe in the next five years if there is a pool around I would rather do that then go to the gym. That's just what works for me. I think it could definitely just keep me encouraged."

"So it can be something I do and not just something that I think about. That's what I'm trying to take away from this class. I can take these classes and I can use all this information that I have once I'm done with college."

The perceptions of the instructors autonomy support changed positively during the course of the semester. The participants indicated that they were comfortable with the instructors approach to the teaching the course**.** The pre- and post- semi structured interview and focus group responses support the results of the pre- and post-questionnaires in that the participants' changes in motivation to participate and engage in the C/UIPAP courses changed slightly over the course of one semester. The changes that occurred seemed to be in a positive manner and the motivation to be energetically involved in the physical activity course content increased as the semester progressed. The themes that occurred from the analysis of the students' responses also gave an indication of the participants' motivations and perceptions. The themes included a) potential increase in GPA, b) Prior Experience, c) Accountability, d) Scheduling, e) Instructor's Reputation, and f) Health and Benefits. There was some indication of themes during the pre- interviews and focus groups and they also appeared in the analysis of the post- interview and focus group responses, with some increase in motivation that was more intrinsic in nature. The

slightly positive adjustment in the students' motivations towards their involvement C/UIPAP courses can be related to their perceptions of the climate that the instructor establishes in their classroom and the level of autonomy given to the students.

Chapter 5: Discussion

The status of young Americans adults' health and physical fitness levels seems to be on a steady decline. Much of the adolescent population is overweight and obese, which likely leads to obesity as a young adult (Center of Disease Control, 2012). There is an environment in which young adults have the opportunity to participate and engage in various and affordable physical activities begin to increase their participation on physical activities. The area where much of the young adult population has greater opportunity and access to participate and engage in regular physical activity is on college/ university campuses. In many cases C/UIPAP courses are the last form of formal physical education that adults may encounter (Hensley, 2000; Leenders, Sherman, & Ward, 2003; Russell, 2011). The purpose of this study was to examine college student's perceptions of their classroom environment and their motivations to participate and engage in the physical activity course content. As a result of the findings, there are two factors that contribute to students' motivation to participate and engage in physical activity, 1) students perception of the motivational climate and 2) students level of competence, relatedness, and autonomy.

The Instructional Physical Activity Courses offered colleges and universities play an important role in the college students physical fitness, health and wellness, allowing them to develop and master motor and sport-related skills that would be valuable throughout adulthood. College-aged students benefit from the instructional physical activity courses by having opportunity to participate and engage in regular physical activity, potentially increasing their fitness levels (Morgan & Kingston, 2010; Morgan, 2007). College students also have the opportunity to learn and master

motor and sport-related skilled, such as running and swimming. Despite the obvious benefits of increased health and physical fitness, college-aged students' motivations to enroll in the C/UIPAP courses vary among students. Past studies have explored the motivational climate of the C/UIPAP course through intervention and integration of the TARGET Structures (Ames, 1992a, 1992b, 1992c). However, there was a still a questions of what motivates college students to actually enroll in the C/UIPAP course and what motivates college students to participate and engage after they have enrolled. Furthermore, there was curiosity regarding students' motivations to fully participate and engage in the course content throughout the period of one semester. Central to the discussion of the findings and the following implications and recommendations is the question, "why are college students motivated to enroll in the C/UIPAP courses and how does their perception of the motivational climate and instructor autonomy support effect their motivation to participate and engage in the physical activity course content?" Findings from this study indicated that college students' primary motivations to enroll in the C/UIPAP courses were to improve fitness levels, interest in the physical activity the course was offering, and to improve their grade point average. The findings also indicated that the participants' motivations could possibly become more intrinsic in nature through behaviors that can be found in the TARGET structures. Morgan and Kingston (2010) results indicated that college students' intrinsic motivations increased throughout the progress intervening college football modules and incorporating TARGET structures in the classroom. Further investigation through interviews and focus groups gave additional evidence that college students were enrolled due to their interest in

maintaining or improving their overall fitness, interest in the activity, and potential improvement in their grade point average (Kilpatrick, Herbert, & Bartholomew, 2005). The primary interest in why college students' motivation to enroll was the absence of university requirements for student enrollment in C/UIPAP courses. The college students have the options of completing their undergraduate requirements without being enrolled in any C/UIPAP course.

The following sections will relate the findings of the study to the current literature and guiding research questions. The implications of these findings will be discussed in light of the existing relevant literature. Particularly, three areas will be examined: a) college students' motivations to enroll in cardio and fitness C/UIPAP courses, b) college students' perceptions of the motivational/instructional climate, and c) college students' perceptions of instructors autonomy support. Followed by these sections will also be followed by recommendations and future areas of research.

The first research question asked why college students were motivated to enroll in College/ University Instructional Physical Activity Program courses. The participants provided insight into their thoughts and motivations, describing their intentions and expectations from enrolling the course. According to the participants, the primary reason for enrolling in a instructional physical activity course was to work on their physical fitness and health. Some students indicated a specific weight loss goal that needed to be met for a specific event or improvement in a specific area of fitness. Other participants express that they were motivated to enroll for improved fitness, but wanted to improve their fitness because they enjoyed being in good health. The instructional physical activity course was an opportunity for the

participants to be held accountable and experience various physical activities. The participants' desires improve their fitness and health was both intrinsic and extrinsic in nature. Many of the participants' indicated their motivations to enroll in the instructional physical activity course were interest in the activity and improvement of their GPA. Participants, who were motivated to enroll due to their interest in the physical activity course content, suggest that their motivation was intrinsic. Those participants who were motivated to enroll as a possibility to improve their GPAs were motivated extrinsically.

The Self-Determination Theory (SDT) indicates that those who are intrinsically motivated to participate and engage because the activity is inherently interesting enjoyable (Deci &Ryan, 2000). Those who are extrinsically motivated are driven to participate and engage, with the expectation of a reward or outcome. Physical Educators desire for their students to be intrinsically motivated to engage in various physical activities, however, as the results indicated, participants were extrinsically motivated to some degree. Through early research concerning student motivation, it was believed that if an individual was offered extrinsic rewards or offered an option that provided extrinsic rewards, their intrinsic motivation would be affected, meaning that either type of motivation would be independent from each other (Deci, 1971). Deci, Koestner, & Ryan (1999) results indicated that tangible rewards have the tendency to diminish intrinsic motivation and enhance performance relevant actions. Conversely, the SDT extrinsic and intrinsic motivation do not have to be independent of each other and that extrinsically motivated behavior can be autonomous (Ryan, Connell, & Deci, 1985). The SDT identifies four types of

extrinsic motivation, which I believe many of the participants indicated in their responses during this study. The four types of extrinsic motivation are external regulation, introjected regulation, identified regulation, and integrated regulation.

Externally regulated extrinsic motivation is the least autonomous, and involves an individual engaging in an activity to get a reward or avoid a punishment. Those participants who were enrolled to avoid a decline in their GPA made decisions and acted on the possibilities of external gain. This type of extrinsic motivation can have the most detrimental effect on an individual's intrinsic motivation. If those participants were not successful at raising their GPAs, it may have a negative effect on their experience in the instructional physical activity course. Introjected motivation is when the extrinsic motivation has been partially internalized and the behavior is regulated by anxiety and the avoidance of shame or guilt for failing. It is also regulated by rewards through ego or pride. Identified regulation involves an individual identifying with the value of the intended behavior. The participants who were motivated by the possibility of weight loss may have had displayed some form of autonomy and validated their actions to obtain the end result, loss of weight. Integrated regulation is the most autonomous form of extrinsic motivation, where individuals identify with the regulation and value of behavior, as well as an awareness of their core sense of self (Ryan &Deci, 2000; 2009). The participants who enrolled in the instructional physical activity courses to improve their health were driven by possible outcome of improved health, which is a external reward. These participants value the idea of being engaged in the instructional physical activity course content. None of the participants indicated a total lack of motivation towards the enrollment

the courses. The vast majority of participants enrolled in the instructional physical activity courses were extrinsically motivated through integrated regulation and external regulation.

Motivational Climate

The achievement goal theory was used to explain this section of the study. The climate plays an important role in the how the students participates and engage, as well as how they interact with their peers and instructor. If the students perceive an autonomy supportive climate, it has been found that they tend to be more intrinsically motivated to learn and master the content in the classroom (Ames and Archer, 1988; Ames, 1992a, 1992b). The next research question asks about college students' perceptions of the instructional climate of the C/UIPAP courses. The research conducted in elementary and secondary schools indicated that student motivation can be an ongoing issue in the classroom. The same issue occurs in the college level classes. In order for students to achieve a goal and be successful in course content there has to goals set for the students. During the interviews and focus groups the some participants indicated their desire for the instructor to set goals for the class. Participants also expressed an appreciation for the instructors' efforts to lead by example. In particular, participants in the jogging and circuit training classes stated that they felt the instructors motivated them by demonstrating the exercises and skills during class. One participant stated that they felt the C/UIPAP instructor motivated them like a personal trainer. The instructor seemed to intrigue the students through the support of the students' autonomy, interests, and acknowledgement. Several

participants' mentioned how it important is that their instructor knew their names and gave them constructive criticisms and feedback to help the learn the skills better in the course.

Instructor Autonomy Support

The fourth research question asked how the college students perceived their instructional climate of the classroom. Students need to feel that their instructor value their input and is open to allow student expression and freedom. Domangue and Johnson (2007) found that autonomy supportive climates promoted higher levels of self-determination and it helped to improve the students' engagement in physical activity. One participant mentioned that the instructor of the circuit-training course would ask for their opinions and input for the upcoming activities that would be integrated into the activities for the following week. The participant felt that they could indicate what specific areas they would want to improve on and that in turn motivated them to engage in the course content. Several participants enrolled in the aerobic dance course and circuit-training course enjoyed the fact that the instructor would allow them to choose the music selection that they would dance to in class. Studies have shown that music can be a great motivator in the area of participation in physical activities (Batt-Rawden & Tellnes, 2011). The participants believed the music selection aided in their motivation to engage in the physical activity course content.

The last research questioned if there was a relationship between the participants' perception of the instructional climate and their motivations to participate and engage in the physical activity course content. The quantitative measure of the pre- and post- questionnaire measured the participants' motivations, which were compared to the participants' responses to the pre- and post- interview and focus group questions. The findings indicated that there is a relationship between how and what the participants perceived the climate, including their relationship with their instructor, the instructors' support of student autonomy, peer relationships and the participants' motivations to participate and engage in the physical activity course content. The LCQ results indicated that the participants perceptions of the instructor autonomy support increase over the semester, specifically in the areas of instructors confidence in the participant's ability to perform the skills required for the course, participant trust in the instructor, and instructor concern, attentiveness, and autonomy support. The LAPOPECQ results, measuring the participants' motivation to participate and engage in the course, also increased over the course of the semester. Towards the end of the semester the participants were less motivated by the idea of winning or competing with their classmates, indicating that their motivation became more intrinsic and mastery oriented. The participants' responses also indicated that their motivations to participate and engage were becoming more intrinsic in nature. This indicated that they were focusing more on the enjoyment and benefits of the course rather than the grade they would receive.

Discussion of Findings in Light of Existing Literature

Students respond positively to classroom environments and climates that are conducive to their learning and perceived autonomy. Along with teachers in elementary and secondary physical education classrooms, college and university teachers want to be able to assess if their students are motivated to participate and engage in their classes. It is important to understand what students need and how they respond the to climate that has been set in the class. This is particularly important in the college and university physical activity courses, which cater to the young adult population. These courses are one of the last venues where young adults have access and opportunity to take an array of physical education courses, where they have the potential to master motor and sport-related skills that they can use throughout adulthood. Decline in adult physical activity levels calls for the exploration of what motivates young adults to be active and what their experiences and perceptions are of physical education.

The college and university setting is an ideal setting for examining the tendency for the young adult population to engage in various types of physical activity (Kilpatrick, Herbert, & Bartholomew, 2005; Russell, 2011). I sought to find out if the college and university physical activity course settings were conducive to young adults motivation to participate and engage in physical activity. Current studies examining students' physical activity levels and participation in physical activity used the Achievement Goal Theory and explored specific activities, such as football, and attempt to intervene the climate of the classroom. (Morgan & Kingston, 2009; Morgan, 2007; Chatzisarantis & Hagger. 2009). It was discovered that the

college students set out to achieve goals through mastery-orientation rather than performance-orientation when the instructors implemented the TARGET Structures. The examination of the general population of college students' motivation and perceptions toward involvement in physical activity courses has not been explored in depth. It is important to gather baseline data to see if there is a problem with college students' motivation before interventions take place. Answering the question, "what motivated you to enroll in this course?" and "what motivated you to participate and engage in the class?" is how we get a deeper insight into the participants' true feelings. Morgan (2007) conducted and intervention of the motivational climate of higher education physical activity courses and lectures in a football module. The TARGET structures, including Task, Authority, Recognition, Evaluation, Grouping, and Time, were observed between the control and intervention group. Questionnaires and focus groups were implemented to see the students' perceptions of the climate matched the reality of actual climate. In this study some of the participants responses to the LAPOPECQ, interviews and focus groups gave an idea of what TARGET behaviors would need improvement in the C/UIPAP courses. A majority of the participants were enrolled in the walking and jogging courses and expressed the desire to have more task goals established in the course. The interest in the course and motivation seemed to suffer as a result of the lack of task goals. The participants' responses indicated that there was sufficient recognition and evaluation that motivated them to participate and engage in the physical activity content. For example, participants mentioned group and individual feedback from the instructor. The participants also appreciated being recognized by name and the instructor's

expression of concern for their well being. During field observation and analyzing participants' responses there was evidence of grouping of students with mixed abilities to complete the physical activities during the course. Participants also mentioned their ability to choose their pace and progression to more advanced groups in the courses. During field observation, if the students were having difficulty learning a skill and needed more time to practice or were progressing faster than scheduled and were able to move quickly, the instructor adjusted to meet the students' needs. This allowed the participants to feel a sense of freedom in choosing how they wanted to progress in their health and fitness.

Some studies explored students' motivations and perceptions using the Self-Determination Theory, however they there are very few that focus on the college student population. Ntoumanis (2001) tested a sequence of motivational process among 14-16 year olds starting with the social factors, psychological mediators, types of motivation and consequences. Questionnaires were also used to measure social factors, psychological mediators, types of motivations and consequences. The results indicated that perceived competence was a major psychological mediator and that intrinsic motivation was related to positive consequences and external motivation was related to expected negative consequences. Although this study examined an older population, there were similar findings among the participant responses also indicated the relationship between their perceptions of competence and motivation. If the participants believed that they could successfully perform the course activities, they were likely to be highly motivated to participate and engage in the course content. Some participants enrolled in courses that required specified skill, such as swim for

fitness and circuit training, were not sure of their abilities at the beginning of the course, but as the semester progressed their perceived competence increased. The participants' motivations seemed to be intrinsic in nature when there was no worry of a negative consequence. For example, those participants who did not mention possible increase in their GPA indicated they were motivated to participate and engage in the course due to their interest and enjoyment in the physical activity course content. Those participants who did mention being motivated by a possible increase in GPA were concerned with the outcome of course. Participants' familiarity with the course content and with their peers motivated some participants to enroll and actively participate in the course content. The similarities relationship between the components of the Achievement Goal Theory and the Self-Determination Theory can give instructors and researchers ideas of how individuals are motivated and what behaviors to look for to measure level of motivation. Research has shown that when the TARGET structures are implemented, along with student perceived autonomy, competence, and relatedness, students are more intrinsically motivated to participate, engage, and master course content (Ferrer-Caja & Weiss, 2000; Koka & Hein, 2003; Ntoumanis, 2001; Hardin, Andrew, Koo, & Bemiller, 2009; Leenders, Sherman, &Ward, 2003; Xiang, Gao, & McBride, 2011).

Recommendations

The following recommendations are in response to the findings from this research study in light of the existing literature.

1. The C/UIPAPs should provide adequate training through pre-semester orientation to understand how to establish a motivational climate for the Graduate Teaching Assistants (GTAs), who instruct the cardio and fitness C/UIPAP courses.
2. Establish an in-depth evaluation process for GTAs, which will occur at various times during the semester. This can ensure that instructors are maintaining the motivation climate in the classroom and encouraging students to be motivated to engage and participate.
3. Continued qualitative research, interviewing students who have enrolled in the cardio and fitness C/UIPAP courses to gain insight into the students' perspectives and motivations.
4. Evaluation of the instructors approach to teaching and establishment of a climate that encourages student motivation.
5. Implement interventions within the cardio and fitness C/UIPAP courses to see if more improvement and technique is needed to increase students' motivation to participate and engage in the course content.

Implications for Further Research

Future areas of research should continue to focus on the issues and concerns regarding the steady decrease in adult's physical activity levels. The college and university campus is a prime setting where researchers can examine the young adult population. The motivation of all students to be engaged in the physically active content has been explored in the literature (Chatzisarantis & Hagger. 2009;

Ferrer-Caja & Weiss, 2000; Hastie, Rudisill, &Wadsworth, 2012; Koka & Hein, 2003; Ntoumanis, 2001; Morgan & Kingston, 2009; Morgan, 2007). However, more insight should be taken to explore college students' motivations to engage in the physical activity course content and perceptions of the motivational climate and instructor autonomy support. The impact of this research would benefit C/UIPAPs and related programs to increase intrinsic motivation of young adults to participate and engage in physical activity. This study did not involve measurement of the participants' actual physical activity output, through use of tools such as pedometers or accelerometers. This can be use in future research to gain further insight into how college student perceptions actually reflect their physical activity output. Research can also be expanded, focusing on the diversity of the college student population, including gender, race, and socio-economic background.

There is also need for further investigation into the training and orientation of GTAs who instruct the cardio and fitness C/UIPAP courses. It is important to start with the instructors who will be establishing the climate of the classroom. There needs to be a clear understanding of the instructors' responsibilities and expectations in teaching, motivating, and encouraging the students who enrolled in the C/UIPAP courses. Research focused in these areas should take into account 1) training and preparation of GTAs, 2) students interest in the course content, 3) establishment of classroom climate, and 4) encouragement of student to be intrinsically motivated. In addition, more studies that impellent intervention in cardio and fitness C/UIPAP courses to further examine if the C/UIPAP instructors are implementing the TARGET

structures into the courses, as well as examining students' perceptions of the autonomy support, the students' perceived competence, and relatedness.

References

Ames, C. (1992a). Achievement goals, motivational climate, and motivational process. In. G.C. Roberts (Ed.), *Motivation in Sport and Exercise* (pp. 161-176) Champaign, IL: Human Kinetics Publishers.

Ames, C. (1992b). Classrooms: Goals, structures, and student motivation. *Journal of Educational Psychology, 84*, (3), 261-271.

Ames, C. (1992c*). Achievement goals and the classroom motivational climate*. In J. Meece & D. Schunck (Eds.), Students Perceptions in the Classroom (pp.327-348). Hillsdale, NJ: Erlbaum.

Ames, C. & Archer, J. (1988). Achievement goals in the classroom: Students' learning strategies and motivation processes. *Journal of Educational Psychology, 80* (3), 260-267.

Bray, S. R, & Kwan, M. Y. W. (2006). Physical activity is associated with better health and psychological well-being during transition to university life. *Journal of American College Health, 55* (2), 77-82.

Carpenter, P. J., & Morgan, K. (2000). Motivational climate, personal goals perspectives and cognitive and affective responses in physical education classes. *European Journal of Physical Education, 4*, 31-44.

Clark, V. L. P. & Creswell, J. W. (2008) *The mixed method reader*. Thousand Oak, CA: Sage Productions, Inc.

Douglas K. A., & Collins, J. L. (1997). Results from the 1995 national college health risk behavior survey. *Journal of American College Health, 46* (2), 55-66.

Engstrom, D. (1999). Correlations between teacher behaviors and student evaluations in college level physical education activity courses. *The Physical Educator 52* (2).

Elliot, E. S. & Dweck, C. S. (1988). Goals: An approach to motivation and achievement. *Journal of Personality and Social Psychology, 54*, (1), 5-12.

Ferrer-Caja, E. & Weiss, M. R. (2000). Predictors intrinsic motivation among adolescent students on physical education. *Research Quarterly for Exercise and Sport, 71* (3), 267-279.

Fraenkel, J. & Wallen, N. (1995). *How to design and evaluate research in education* (2nd ed.). New York: McGraw-Hill.

Glaser, B. & Strauss, A. (1967). *The discovery of grounded theory.* Chicago: Aldine.

Goodway, J. D., Rudisill, M. E., Valentini, N. C., (1999). Incorporating a mastery climate into physical education: It's developmentally appropriate! *The Journal of Physical Education and Recreation, 70* (7) 28.

Hardin, R., Andrew, D. P. S., Koo, G., & Bemiller, J. (2009). Motivational factors for participating in basic instruction programs. *The Physical Educator*, 71-84.

Hensley, L. D. (2000). Current status of basic instruction programs in physical education at american colleges and universities. *The Journal of Physical Education, Recreation, and Dance, 71* (9) 30-36.

Irwin, J. D. (2007). The prevalence of physical activity maintenance in a sample of university students: A longitudinal study. *Journal of American College Health, 56* (1), 37-41.

Jenkins, J. & Lumpkin, A. (1993). Basic instruction programs: A brief history. *The Journal of Physical Education, Recreation and Dance, 64* (6) 32.

Keating, X. D., Guan, J., Piñero, J. C., & Bridges, D. M. (2005). A meta-analysis of college students' physical activity behaviors. *Journal of American College Health, 54* (2), 116-125.

Kilpatrick, M., Herbert, E., & Bartholomew, J. (2005). College students' motivation for physical activity: Differentiating men and women's motives for sport participation and exercise. *Journal of American College Health, 54* (2), 87-94.

Koak. A & Hein, V. (2003). Perceptions of teacher's feedback and learning environment as predictors of intrinsic motivation in physical education. *Journal of Psychology of Sport and Exercise, 4*, 333-346.

Leenders, N. Y. J. M., Sherman, W. M., & Ward, P. (2003). College physical activity courses: Why do students enroll, and what are their health behaviors? *Research Quarterly for Exercise and Sport, 74* (3), 313-318.

Merriam, S. B. (2009). *Qualitative research: A guide to design and implementation.* San Francisco, CA: Jossey- Bass.

Morgan, K. (2007). Promoting a mastery motivational climate in health education. *Hospitality, Leisure, Sport, and Tourism Network*, 1-20.

Morgan, K. & Kingston, K. (2010). Promoting a mastery motivational climate in a higher education sports class. *Journal of Hospitality, Leisure, Sport, and Tourism Education, 9, (1),* 73-84.

Morgan. K., Sproule, J., Weigand, D. & Carpenter, P. (2005). Development of a computer-based measure of teacher behaviours related to motivational climate in physical education. *Physical Education Sport Journal, 10*, 113-135.

National Association for Sport and Physical Education (2007). College/University physical activity instruction programs: A critical piece in the education of young adults. [Position Statement] Reston, VA.

Ntoumanis, N. (2001). A self-determination approach to the understanding of motivation in physical education. *British Journal of Education Psychology, 71,* 225-242.

Ntoumanis, N. & Biddle, S. J. H., (1999). A review of motivational climate in physical activity. *Journal of Sports Sciences, 17*, 643-665.

Papaioannou, A. (1994). Development of a questionnaire to measure achievement orientations in physical education. *Research Quarterly for Exercise and Sport, 65*, 11-20.

Papaioannou, A. (1998). The effect of task structure, perceived motivational climate and goal orientations on students' task involvement and anxiety. *Journal of Applied Sport Psychology, 11*, 51-71.

Peters, D., Jones, G., & Peters, J. (2007). Approaches to studying, academic achievement and autonomy, in higher education sports students. *Journal of Hospitality, Leisure, Sport, & Tourism Education, 6* (2), 16-28.

Russell, J. A. (2011) Graduate teaching-assistant development in college and university instructional physical activity programs. *The Journal of Physical Education, Recreation, and Dance, 82* (4), 22-26.

Savage, M. P (1998). University students' motivation for participation in a basic instruction program. College Student Journal, 32(1), 58-66.

Shen, B., McCaughtry, N., Martin, J., Fahlman, M. (2009). Effects of teacher autonomy support and students' autonomous motivation on learning in physical education. Research Quarterly for Exercise and Sport, *80* (1), 44-53

Solmon, M. A. (1996). Impact of Motivational climate on students' behaviors and perceptions in a physical education setting. *Journal of Education Psychology, 88* (4), 731-738

Stodden, D., Langendorfer, S., & Roberton, M. A. (2009). The association between motor skill competence and physical fitness in young adults. *Research Quarterly for Exercise and Sport, 80* (2), 223-229

US Department of Health and Human Services. (2011). Healthy People 2020. Retrieved from http://www.healthypeople.gov/2020/topicsobjectives2020/overview.aspx?topicid=33

Yoh, T. (2001) College student motivational attitudes toward participating in physical activity programs. The International Council for Health, Physical Education, Recreation, Sport, and Dance, 37 (3), 10-14.

Appendix A –Survey Information Letter

DEPARTMENT OF
KINESIOLOGY

AUBURN UNIVERSITY
COLLEGE OF EDUCATION

INFORMATION LETTER

for a Research Study entitled

"Examining the Motivational Climates of University Physical Activity Classes"

You are invited to participate in a research study to identify the (a) teaching and (b) motivational approaches that instructors of the Department of Kinesiology's Physical Activity and Wellness Program (PAWP) courses use to encourage their students to actively participate in the classes. The study is being conducted by Ms. Asherah Blount, Ms. Michelle Vaughn, and Mr. Desmond Delk, under the direction of Dr. Jared Russell, Associate Professor in the Auburn University Department of Kinesiology. You were selected as a possible participant because you are enrolled in at least one PAWP course and are age 19 or older.

What will be involved if you participate? Your participation is completely voluntary. If you decide to participate in this research study, you will be asked to participate in an online survey that will take approximately 10 minutes.

Are there any risks or discomforts? The risks associated with participating in this study are minimal. To minimize these risks, we will ensure that your responses are confidential and kept securely.

Are there any benefits to yourself or others? If you participate in this study, you can expect to possibly gain insight to what motivates you to actively engage in physical activity and how the environment of the classroom effects your motivation to participate in physical activities. We/I cannot promise you that you will receive any or all of the benefits described.

Will you receive compensation for participating? We thank you for your time, however no compensation will be offered for participating in this study.

Are there any costs? If you decide to participate, you will not require any cost.

2050 Memorial Coliseum, Auburn, AL 36849-5323; Telephone: 334-844-4483; Fax: 334-844-1467
www.auburn.edu

If you change your mind about participating, you can withdraw at any time by closing the window browser. If you choose to withdraw, your data can be withdrawn as long as it is identifiable. Once you've submitted anonymous data, it cannot be withdrawn since it will be unidentifiable. Your decision about whether or not to participate or to stop participating will not jeopardize your future relations with Auburn University, the Department of Kinesiology or College of Education.

Any data obtained in connection with this study will remain anonymous. We will protect your privacy and the data you provide using Qualtics.com, which has a protective policy regarding email and personal information. Information collected through your participation may be shared with the program coordinator/supervisor and the instructors of the physical activities and wellness program and presented at national and regional conferences.

If you have questions about this study, please contact Dr. Jared Russell at russej3@auburn.edu or Ms. Asherah Blount at anb0015@auburn.edu.

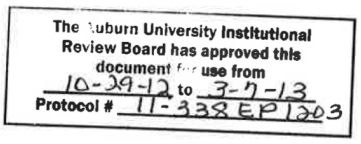
If you have questions about your rights as a research participant, you may contact the Auburn University Office of Human Subjects Research or the Institutional Review Board by phone (334) 844-5966 or e-mail at hsubjec@auburn.edu or IRBChair@auburn.edu.

HAVING READ THE INFORMATION ABOVE, YOU MUST DECIDE IF YOU WANT TO PARTICIPATE IN THIS RESEARCH PROJECT. IF YOU DECIDE TO PARTICIPATE, PLEASE CLICK ON THE LINK BELOW.

YOU MAY PRINT A COPY OF THIS LETTER TO KEEP.

_____

Investigator Date



_____

Co-Investigator Date

Appendix B- Survey Consent Form

of 1

Your privacy will be protected. Data will remain **confidential**. We will ask that participants keep what is said in the group confidential but we cannot guarantee that the information you provide will remain confidential with other participants. Information obtained through your participation may be shared with the program coordinator/supervisor and the instructors of the physical activities and wellness program (PAWP) and presented at national and regional conferences.

If you have questions about this study, *please ask them now or* contact Dr. Jared Russell at russej3@auburn.edu or Ms. Asherah Blount at anb0015@auburn.edu. A copy of this document will be given to you to keep.

If you have questions about your rights as a research participant, you may contact the Auburn University Office of Human Subjects Research or the Institutional Review Board by phone (334)-844-5966 or e-mail at hsubjec@auburn.edu or IRBChair@auburn.edu.

HAVING READ THE INFORMATION PROVIDED, YOU MUST DECIDE WHETHER OR NOT YOU WISH TO PARTICIPATE IN THIS RESEARCH STUDY. YOUR SIGNATURE INDICATES YOUR WILLINGNESS TO PARTICIPATE.

_____	_____
Participant's signature Date	Investigator obtaining consent Date
_____	_____
Printed Name	Printed Name
	_____
	Co-Investigator Date
	_____
	Printed Name

Participant's initials _____
of 2

2

Appendix C- Interview/Focus Group Information Letter

DEPARTMENT OF
KINESIOLOGY

AUBURN UNIVERSITY
COLLEGE OF EDUCATION

INFORMATION LETTER
for a Research Study entitled
"Examining the Motivational Climates of University Physical Activity Classes"

You are invited to participate in a research study to identify the (a) teaching and (b) motivational approaches that instructors of the Department of Kinesiology's Physical Activity and Wellness Program (PAWP) courses use to encourage their students to actively participate in the classes. The study is being conducted by Ms. Asherah Blount Mr. Desmond Delk, and Ms. Michelle Vaughn, under the direction of Dr. Jared Russell, Associate Professor in the Auburn University Department of Kinesiology. You were selected as a possible participant because you are enrolled in at least one PWAP course and are age 19 or older.

What will be involved if you participate? If you decide to participate in this research study, you will be asked to participate in a focus group/one-on-one interview that will be recorded with an audio and videotape. Your total time commitment will be approximately 1 to 2 hours.

Are there any risks or discomforts? The risks associated with participating in this study are minimal

Are there any benefits to yourself or others? If you participate in this study, you can expect to possibly gain insight into what motivates you to actively engage in physical activity and how the environment of the classroom affects your motivation to participate in physical activities. We/I cannot promise you that you will receive any or all of the benefits described.

Will you receive compensation for participating? We thank you for your time, however no compensation will be offered for participating in this study.

Are there any costs? There are no costs to you for participation.

If you change your mind about participating, you can withdraw at any time during the study. Your participation is completely voluntary. If you choose to withdraw, your data can be withdrawn as long as it is identifiable. Your decision about whether or not to participate or to stop participating will not jeopardize your future relations with Auburn University, the Department of Kinesiology or College of Education.

2050 Memorial Coliseum, Auburn, AL 36849-5323; Telephone: 334-844-4483; Fax: 334-844-1467
www.auburn.edu

of 1

Your privacy will be protected. Data will remain **confidential**. We will ask that participants keep what is said in the group confidential but we cannot guarantee that the information you provide will remain confidential with other participants. Information obtained through your participation may be shared with the program coordinator/supervisor and the instructors of the physical activities and wellness program (PAWP) and presented at national and regional conferences.

If you have questions about this study, *please ask them now or* contact Dr. Jared Russell at russej3@auburn.edu or Ms. Asherah Blount at anb0015@auburn.edu. A copy of this document will be given to you to keep.

If you have questions about your rights as a research participant, you may contact the Auburn University Office of Human Subjects Research or the Institutional Review Board by phone (334)-844-5966 or e-mail at hsubjec@auburn.edu or IRBChair@auburn.edu.

HAVING READ THE INFORMATION PROVIDED, YOU MUST DECIDE WHETHER OR NOT YOU WISH TO PARTICIPATE IN THIS RESEARCH STUDY. YOUR SIGNATURE INDICATES YOUR WILLINGNESS TO PARTICIPATE.

Participant's signature Date	Investigator obtaining consent Date
Printed Name	Printed Name
	Co-Investigator Date
	Printed Name

Participant's initials _____
of 2

2

Appendix D- Interviews Consent Form

DEPARTMENT OF KINESIOLOGY

AUBURN UNIVERSITY
COLLEGE OF EDUCATION

INFORMED CONSENT
for a Research Study entitled
"Examining the Motivational Climates of University Physical Activity Classes"

You are invited to participate in a research study to identify the (a) teaching and (b) motivational approaches that instructors of the Department of Kinesiology's Physical Activity and Wellness Program (PAWP) courses use to encourage their students to actively participate in the classes. The study is being conducted by Ms. Asherah Blount, Ms. Michelle Vaughn, and Mr. Desmond Delk under the direction of Dr. Jared Russell, Associate Professor in the Auburn University Department of Kinesiology. You were selected as a possible participant because you are enrolled in at least one PAWP course and are age 19 or older.

What will be involved if you participate? If you decide to participate in this research study, you will be asked to participate in a one-on-one interview that will be recorded using an audio and videotape. Your total time commitment will be approximately 1 to 2 hours.

Are there any risks or discomforts? The risks associated with participating in this study are minimal.

Are there any benefits to yourself or others? If you participate in this study, you can expect to possibly gain insight into what motivates you to actively engage in physical activity and how the environment of the classroom affects your motivation to participate in physical activities. We/I cannot promise you that you will receive any or all of the benefits described.

Will you receive compensation for participating? We thank you for your time, however no compensation will be offered for participating in this study.

Are there any costs? There are no costs to you for participation.

If you change your mind about participating, you can withdraw at any time during the study. Your participation is completely voluntary. If you choose to withdraw, your data can be withdrawn as long as it is identifiable. Your decision about whether or not to participate or to stop participating will not jeopardize your future relations with Auburn University, the Department of Kinesiology or College of Education.

Participant's initials _____
of 1

The Auburn University Institutional Review Board has approved this document for use from 10-29-12 to 3-7-13
Protocol # 11-338 EP 1203

2050 Memorial Coliseum, Auburn, AL 36849-5323; Telephone: 334-844-4483; Fax: 334-844-1467
www.auburn.edu

Your privacy will be protected. Data will remain **confidential**. We will ask that participants keep what is said in the group confidential but we cannot guarantee that the information you provide will remain confidential with other participants. Information obtained through your participation may be shared with the program coordinator/supervisor and the instructors of the physical activities and wellness program (PAWP) and presented at national and regional conferences.

If you have questions about this study, *please ask them now or* contact Dr. Jared Russell at russej3@auburn.edu or Ms. Asherah Blount at anb0015@auburn.edu. A copy of this document will be given to you to keep.

If you have questions about your rights as a research participant, you may contact the Auburn University Office of Human Subjects Research or the Institutional Review Board by phone (334)-844-5966 or e-mail at hsubjec@auburn.edu or IRBChair@auburn.edu.

HAVING READ THE INFORMATION PROVIDED, YOU MUST DECIDE WHETHER OR NOT YOU WISH TO PARTICIPATE IN THIS RESEARCH STUDY. YOUR SIGNATURE INDICATES YOUR WILLINGNESS TO PARTICIPATE.

Participant's signature Date	Investigator obtaining consent Date
Printed Name	Printed Name
	Co-Investigator Date
	Printed Name

The Auburn University Institutional Review Board has approved this document for use from 10-29-12 to 3-7-13 Protocol # 11-338 EP 1203

Appendix E- Focus Group Consent Form

DEPARTMENT OF
KINESIOLOGY

AUBURN UNIVERSITY
COLLEGE OF EDUCATION

INFORMED CONSENT
for a Research Study entitled
"Examining the Motivational Climates of University Physical Activity Classes"

You are invited to participate in a research study to identify the (a) teaching and (b) motivational approaches that instructors of the Department of Kinesiology's Physical Activity and Wellness Program (PAWP) courses use to encourage their students to actively participate in the classes. The study is being conducted by Ms. Asherah Blount, Ms. Michelle Vaughn, and Mr. Desmond Delk under the direction of Dr. Jared Russell, Associate Professor in the Auburn University Department of Kinesiology. You were selected as a possible participant because you are enrolled in at least one PAWP course and are age 19 or older.

What will be involved if you participate? If you decide to participate in this research study, you will be asked to participate in a focus group that will be recorded using an audio and videotape. Your total time commitment will be approximately 1 to 2 hours.

Are there any risks or discomforts? The risks associated with participating in this study are minimal.

Are there any benefits to yourself or others? If you participate in this study, you can expect to possibly gain insight into what motivates you to actively engage in physical activity and how the environment of the classroom affects your motivation to participate in physical activities. We/I cannot promise you that you will receive any or all of the benefits described.

Will you receive compensation for participating? We thank you for your time, however no compensation will be offered for participating in this study.

Are there any costs? There are no costs to you for participation.

If you change your mind about participating, you can withdraw at any time during the study. Your participation is completely voluntary. If you choose to withdraw, your data can be withdrawn as long as it is identifiable. Your decision about whether or not to participate or to stop participating will not jeopardize your future relations with Auburn University, the Department of Kinesiology or College of Education.

Participant's initials _____
of 1

Your privacy will be protected. Data will remain **confidential**. We will ask that participants keep what is said in the group confidential but we cannot guarantee that the information you provide will remain confidential with other participants. Information obtained through your participation may be shared with the program coordinator/supervisor and the instructors of the physical activities and wellness program (PAWP) and presented at national and regional conferences.

If you have questions about this study, *please ask them now or* contact Dr. Jared Russell at russej3@auburn.edu or Ms. Asherah Blount at anb0015@auburn.edu. A copy of this document will be given to you to keep.

If you have questions about your rights as a research participant, you may contact the Auburn University Office of Human Subjects Research or the Institutional Review Board by phone (334)-844-5966 or e-mail at hsubjec@auburn.edu or IRBChair@auburn.edu.

HAVING READ THE INFORMATION PROVIDED, YOU MUST DECIDE WHETHER OR NOT YOU WISH TO PARTICIPATE IN THIS RESEARCH STUDY. YOUR SIGNATURE INDICATES YOUR WILLINGNESS TO PARTICIPATE.

Participant's signature Date	Investigator obtaining consent Date
Printed Name	Printed Name
	Co-Investigator Date
	Printed Name

The Auburn University Institutional Review Board has approved this document for use from 10-29-12 to 3-7-13 Protocol # 11-338 EP 1203

Appendix F- Data Collection Schedule

January

- Wednesday, 9th- First day of classes: Speak with instructors and students in courses about study.
- Monday, 14th- Distribute consent form & demographic survey (online & hardcopy
- Thursday1, 17th- Wednesday, 23rd –Collect Surveys
- Monday, 28th Distribute Pre-Questionnaires
- Thursday, 31st – Monday, February 4th- Collect Pre-Questionnaires

February

- Monday, 11th- Friday, 15th- Conduct Pre- Interviews
- Monday, 18th- Friday, 22nd – Conduct Pre- Focus Groups
- Monday, 25th- March, 8th – Transcribe

March

- Monday, 18th- Friday, 22nd – Conduct Post- Interviews
- Monday, 25th- Friday, 29th – Conduct Post- Focus Groups

April

- Monday, 1st- Friday, 5th- Distribute Post- Questionnaires
- Monday, 7th – Tuesday, 30th- Analyze and Write

Appendix G – Survey

Motivation to Enroll in PWAP courses

1. (Select only one response) What is your gender?
    a. Male
    b. Female

2. What is your race/ ethnicity?
    a. White/Caucasian
    b. Black/African American
    c. Hispanic
    d. Asian
    e. Native American
    f. Other

3. (Select only one response) What is your classification?
    a. Freshmen
    b. Sophomore
    c. Junior
    d. Senior
    e. Graduate student
    f. Other

4. Please identify your respective College. (Select all responses that apply)
    a. College of Agriculture
    b. College of Architecture, Design, and Construction
    c. College of Business
    d. College of Education
    e. College of Engineering
    f. Graduate School
    g. College of Human Sciences
    h. College of Liberal Arts
    i. College of Veterinary Medicine
    j. College of Sciences and Mathematics
    k. School of Pharmacy
    l. School of Nursing
    m. School of Forestry and Wildlife Science

n. Other

5. What department of kinesiology PWAP courses are you currently taking (Select all responses that apply)

    a. Aerobic Dance
    b. Weight Training
    c. Weight Control
    d. Weight Training for Women
    e. Jogging
    f. Water Aerobics
    g. Walking
    h. Strength and Flexibility
    i. Circuit Training
    j. Swim Fitness
    k. Other

6. (Select only one response) What is your primary reason for enrolling in this course?

    a. Maintain fitness level
    b. Improve fitness level
    c. Graduation requirement
    d. Class fit my academic schedule
    e. Health and wellness benefits
    f. Socializing
    g. Improve body image
    h. Interested in the physical activity/skill
    i. Improve grade point average
    j. Other

7. (Select only one response) What is the second most important reason for enrolling in this course?

    a. Maintain fitness level
    b. Improve fitness level
    c. Graduation requirement
    d. Class fit my academic schedule
    e. Health and wellness benefits
    f. Socializing
    g. Improve body image
    h. Interested in the physical activity/skill
    i. Improve grade point average
    j. Other

8. What is your third most important reason for enrolling in this course?

    a. Maintain fitness level
    b. Improve fitness level
    c. Graduation requirement
    d. Class fit my academic schedule
    e. Health and wellness benefits
    f. Socializing
    g. Improve body image
    h. Interested in the physical activity/skill
    i. Improve grade point average
    j. Other

9. How familiar are you with traditional physical activity/ fitness terms such as aerobic, anaerobic, vigorous, moderate, cardio respiratory endurance, strength and conditioning, and such before you enrolled in this course?

    a. Yes, very familiar
    b. Familiar
    c. Not familiar

10. (Select only one response) Overall, what is the value of this course?

    a. No value (this course is a waste of time)
    b. Adequate (I learned some new ideas and techniques)
    c. Significant (this course has changes my perspective on physical activity)

11. What area of fitness is most beneficial to you?

    a. Cardiovascular Fitness
    b. Muscular Strength
    c. Muscular Endurance
    d. Flexibility
    e. Body Composition

12. What final grade do you believe you will receive in this course?

    a. A
    b. B
    c. C
    d. D
    e. F
    f. Not sure

13. What final grade do you think you will earn in this course?

    a. A
    b. B
    c. C
    d. D
    e. F
    f. Not sure

14. (Select only one response) Outside of class, how often do you participate in physical activity associated with this course?

    a. None
    b. 1-3 days/week
    c. 4-6 days/week
    d. 7 days/week
    e. Not applicable

15. (Select only one response) Outside of class, how often do participate in moderate to vigorous physical activity for a minimum of 30 minutes?

    a. None
    b. 1-3 days/week
    c. 4-6 days/week
    d. 7 days/week
    e. Not applicable

16. What physical activity do you participate in outside of class for recreation or fitness? (Select all that apply).

a. Aerobic Dance
b. Weight-Training
c. Wellness
d. Tennis
e. Kayaking
f. Angling
g. Aqua Bootcamp
h. Strength and Flexibility
i. Weight Control
j. Soccer

k. Volleyball
l. Jogging
m. Bowling
n. Water Aerobics
o. Scuba
p. Circuit Training
q. Cross Fit
r. Stress Reduction
s. Swimming
t.
u. Golf
v. Softball
w. Karate
x. Competitive Fishing
y. Basketball
z. Walking
aa. Yoga
bb. Other

17. (Select only one response) Will enrolling in this course give you a reason to be?

    cc. Less physically active

    dd. More physically active

    ee. Will not change your feelings towards physical activity

18. Would you be willing to participate in a follow-up interview and/or focus group regarding your experiences in this course?

    a. YES

    b. NO

    If YES, please your name and email address below:

    Name: _____

    Email Address: _____

Appendix H- The Learning Climate Questionnaire (LCQ)

The Learning Climate Questionnaire (LCQ)

The LCQ has a long form containing 15 items and a short form containing 6 of the items. The questionnaire is typically used with respect to specific learning settings, such as a particular class, at the college or graduate school level. Thus, the questions are sometimes adapted slightly, at least in the instructions, so the wording pertains to the particular situation being studied--an organic chemistry class, for example. In these cases, the questions pertain to the autonomy support of an individual instructor, preceptor, or professor. If, however, it is being used to assess a general learning climate in which each student has several instructors, the questions are stated with respect to the autonomy support of the faculty members in general. Below, you will find the 15-item version of the questionnaire, worded in terms of my instructor. If you would like to use the 6-item version, simply reconstitute the questionnaire using only items # 1, 2, 4, 7, 10, and 14**.**

Scoring: Scores on both the 15-item version and the 6-item version are calculated by averaging the individual item scores. However, for the long version, before averaging the item scores, you must first reverse the score of item 13 (i.e., subtract the score on item 13 from 8 and use the result as the item score for this item--for example, the score of 3, when reversed would become 5). Higher average scores represent a higher level of perceived autonomy suppo**rt.**

Learning Climate Questionnaire
This questionnaire contains items that are related to your experience with your instructor in this class. Instructors have different styles in dealing with students, and we would like to know more about how you have felt about your encounters with your instructor. Your responses are confidential. Please be honest and candid.

1. I feel that my instructor provides me choices and options.

1	2	3	4	5	6	7
strongly disagree			neutral			strongly agree

2. I feel understood by my instructor.

1	2	3	4	5	6	7
strongly disagree			neutral			strongly agree

OBJ

3. I am able to be open with my instructor during class.

1	2	3	4	5	6	7
strongly disagree			neutral			strongly agree

4. My instructor conveyed confidence in my ability to do well in the course.

1	2	3	4	5	6	7
strongly disagree			neutral			strongly agree

5. I feel that my instructor accepts me.

1	2	3	4	5	6	7
strongly disagree			neutral			strongly agree

6. My instructor made sure I really understood the goals of the course and what I need to do.

1	2	3	4	5	6	7
strongly disagree			neutral			strongly agree

7. My instructor encouraged me to ask questions.

1	2	3	4	5	6	7
strongly disagree			neutral			strongly agree

8. I feel a lot of trust in my instructor.

1	2	3	4	5	6	7
strongly disagree			neutral			strongly agree

8. My instructor answers my questions fully and carefully.

1	2	3	4	5	6	7
strongly disagree			neutral			strongly agree

9. My instructor listens to how I would like to do things.

1	2	3	4	5	6	7
strongly disagree			neutral			strongly agree

10. My instructor handles people's emotions very well.

1	2	3	4	5	6	7
strongly disagree			neutral			strongly agree

11. I feel that my instructor cares about me as a person.

1	2	3	4	5	6	7
strongly disagree			neutral			strongly agree

12. I don't feel very good about the way my instructor talks to me.

1	2	3	4	5	6	7
strongly disagree			neutral			strongly agree

13. My instructor tries to understand how I see things before suggesting a new way to do things.

1	2	3	4	5	6	7
strongly disagree			neutral			strongly agree

14. I feel able to share my feelings with my instructor.

1	2	3	4	5	6	7
strongly disagree			neutral			strongly agree

Appendix I - LAPOPECQ

Learning and Performance Orientations in Physical Education Classes Questionnaire (LAPOPECQ)

Directions: Read each item carefully. Please circle the number that best describes your PE class.

During my physical activity course…

	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree
1. During the lesson students tried to outperform each other.	1	2	3	4	5
2. The instructor was most satisfied when every student learned something new.	1	2	3	4	5
3. Students worried about failure in performing skills because it would lead to the disapproval of others.	1	2	3	4	5
4. The way the lesson was taught helped me learn how to exercise by myself.	1	2	3	4	5
5. It was very significant to win without trying hard.	1	2	3	4	5
6. The instructor looked completely satisfied when students were improving after trying hard.	1	2	3	4	5
7. Students tried to gain rewards by outperforming others.	1	2	3	4	5
8. The way the course was taught helped me learn how to use PE to improve my health.	1	2	3	4	5
9. Students worried about failure in performing skills because they would not look good in the eyes of the PA Instructor.	1	2	3	4	5
10. The Instructor insisted that students' mistakes were part of learning.	1	2	3	4	5
11. The Instructor looked completely satisfied with those students who managed to win with little effort.	1	2	3	4	5
12. I felt very satisfied when I learned something new.	1	2	3	4	5
13. Students felt most satisfied when they managed to outperform others.	1	2	3	4	5
14. The instructor made sure that I understood how to perform each new	1	2	3	4	5

skill before the class moved on to learning other skills.

In PA courses over the past three days…

	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree
15. Students worried about performing skills that they were not particularly good at.	1	2	3	4	5
16. I felt very satisfied when I learned new skills and games.	1	2	3	4	5
17. Students felt most satisfied when they won with little effort.	1	2	3	4	5
18. The PE teacher was completely satisfied when every student's skills were improving.	1	2	3	4	5
19. The most important thing was for students to demonstrate that he or she was better in sports than others.	1	2	3	4	5
20. I enjoyed trying my best to learn a skill.	1	2	3	4	5
21. Students felt very badly when they made mistakes while performing skills or playing games.	1	2	3	4	5
22. The PE teacher paid special attention to whether my skills were improving.	1	2	3	4	5
23. Successful students were thought to be those who scored the most points with little effort.	1	2	3	4	5
24. I learned something enjoyable.	1	2	3	4	5
25. Successful students were thought to be those who performed skills better than their classmates.	1	2	3	4	5
26. What I learned makes me want to practice more.	1	2	3	4	5
27. Students felt very badly when they couldn't perform a skill as well as others.	1	2	3	4	5

Appendix J – Interview Questions

1. What is your name, classification, major, and class that you are currently enrolled in?
2. Think back to when you were registering for classes. What motivated you to enroll physical education courses?
3. What happens in a typical class?
4. What does your instructor do to make you get the most out of coming? Do they do anything to motivate you?
5. Could you give some examples to tell me how your instructor motived you to work to the best of your ability?
    a. Do you feel that your instructor motivated the men and women equally? If yes or no, explain and give some examples?
6. What would you tell a friend who asked if they should take your instructor's class?
7. What is the best thing about class? What do you not look forward to?
8. What could the instructor do to make the class more useful for you?
9. What is the overall vibe in the class?
10. What things do you take from the class and work on (or do) outside of class time?
11. What are some factors that may discourage you from participating in physical activity outside of class?
12. If you could change one thing about the class what would it be?
13. Do you think this class will make a difference in your level of physical fitness in five years?
14. What suggestions would you give to the teachers to improve on their techniques to keep their students motivated?
15. Are there any more comments that you would like to share? Is there anything I should have asked you about to understand your class experience that I didn't?

Appendix K- Coding Guide

The purpose of the information in this guide is to explain a method for unitizing and coding the pre- and post interview and focus group responses of the participants. The coded message units will be used as data in a larger study of students' motivation and perception in physical activity classrooms.

Unitizing

The primary unit of analysis in the present study is the motivation of the students, including their perceived autonomy, competence, and relatedness towards participation and engagement in the physical activity course. This is the primary unit of analysis in testing both for structure and perspective of the motivational climate and student perspective. The responses may contain words, phrases, or sentences that may be coded separately.

The final decision of whether the units include one or several ideas is to determine "the mind of the speaker." That is, what were the motivations of the participants' and did it appear to have in mind as he/she responded to the interview and focus group questions. The following quote is an example of a response that would be coded "previous experience ":

> *"This is actually the second time taking this class. I had it last spring and I did it with another teacher and I loved it and I actually lost 30 pounds."*

Coding

GPA booster

This code was used when the participant mentioned that enrollment, participation, and/or engagement would benefit their grade point average.

"*The time frame [of the course] was like the deterrent but I got credit hours for it to boost my GPA."*

Credit hours

This code was used when participants mentioned their academic schedule and indicated that enrolling in the C/UIPAP course would allow them to have extra credit hours. This may have been for many reasons including, to be a full-time student, financial aid, and GPA.

" I enrolled on the class because I did not have enough credit hours this semester."

"It fit my schedule and I was able to take two P.E classes and I had one more left so I figured I'd try to…. It's a little easier to get an A in these classes, so I enrolled in P.E class"

Academic obligations

This code was used if participants mentioned scheduling and their obligations in their other courses and how they affected their participation in the C/UIPAP courses.

"The times that they were offered were really convenient for me and have taken P.E.'s before and I didn't want to repeat teachers and I chose classes bases off of that. I chose circuit training and walking in succession because I can have an intense workout and then kind of a cool down, but still be having workouts that are consecutive."

Socializing

This code was used when participants mentioned their peers as motivating factor to enrolling, participating, and engaging in the C/UIPAP course.

"My roommate is also taking this class and she had the instructor before and she said it was going to be a good class and that she liked him. She also said he was going to be motivational."

Prior experience

This code was used when participants indicated that the their enrollment, participation, and engagement was due to their previous experience in a C/UIPAP or related activity.

"I used to be a swimmer in high school and I really wanted to get back in the pool my freshmen year and it never happened So I though they I would take the class and get GPA hours while doing something I really loved to do. I am already taking a ton of hours so I guess it was the fact that I really wanted to get back in the pool. And the

fact that when I got back in the pool and I wasn't as god as I used to be was frustrating and I wanted to get back up to where I was."

Instructor reputation

Participants may have indicated that the instructors' reputation for teaching the class motivated them to enroll, participate, and engage in the C/UIPAP course.

"Its hard and tough to stay active, but I knew she [the instructor] was going to be teaching it and I heard she was butts and guts and really good so I decided to enroll in the class."

Physical activity outside of classroom

This code was used when participants indicated if they were involved in physical activities outside of the classroom and if their participation and engagement in the course influence them to engage in physical activity related to the C/UIPAP course content.

"I am getting stronger, so I feel like having this jump start that is required of me because I am enrolled in this class will push me to do it on my own, especially since I have seen so many results so quickly. Just the knowledge I am getting from these classes, I feel that its going to stick and I will have use for it in five years and will still be apart of my life In five years."

Body image/ Hygiene

If participants mentioned concern about their body and how they perceived their body's to look, this code was use. This code was also used when participants mentioned the hygiene as it pertains to being physically active.

"Having to go to class and get there. In the morning I just have such a hard time getting to my circuit training class. And another negative would be that I get all gross and sweaty and then I have to go take a shower… its just a hassle."

Input in the classroom/autonomy

This code was used if the participants mentioned their involvement and contribution in the course, as well as their instructor's willingness to support student autonomy.

"He allows for us the apart of the class. He did have one of the students lead the stretches today, so that was pretty cool."

Instructor concern

This code was used when participants indicated that their instructor expressed concern for the students and/or if the participants desired the instructors to express concern for the students.

"She tells us to just leave your fears, worries, and concerns of looking stupid in front of everybody outside the door. She is just very expressive and she wants us to b

expressive by movement because she knows we will get a better workout. She just really makes it fun and she does not want us to worry about how we look. She really does make us feel comfortable."