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# COLLEGE MALES' EXPERIENCES WITH GROUP EXERCISE

A Thesis Presented to the Graduate School of Clemson University

In Partial Fulfillment of the Requirements for the Degree Master of Science Parks, Recreation and Tourism Management

> by Demar E. Jackson May 2018

Accepted by: Dr. Mariela Fernandez, Committee Chair Dr. Denise Anderson Dr. Karen Kemper

# ABSTRACT

Although a comparable number of men use gyms as frequently as women, data indicates that they are less likely to participate in group exercise classes. Although researchers have examined the relationship between gender and group exercise class participation, few studies have explored the linkage in the context of college campuses, specifically how some male participants are still wanting and able to use these services. The purpose of this research project was to examine why and how college men use group exercises classes. Guided by the theory of planned behavior (TPB), the study's research objectives examined: (1) the exercise trends among college male group exercise participants and college male non-participants; (2) the perceived constraints to group exercise classes among college male participants and non-participants; and (3) the perceived motivations to use group exercise classes among male participants. To address the research objectives, the project relied on a cross-sectional design. Qualitative data were collected by interviewing 20 male students enrolled in a large southeastern university. Of this sample, half were college men who participate in group exercise, while the other half were college men who do not participate in group exercise. Data analysis entailed identifying recurring themes in the data. Friends, social stigma, lack of time, and lack of interest were recurring themes related to perceived constraints. In contrast, consistency and goals were major themes that were found for perceived motivation. The findings within this research study can help create more inclusive spaces and programs within facilities. This can be done by planning programs with males in mind using strategic marketing and more intentional group exercise formats.

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# DEDICATION

This thesis is dedicated to my parents Veronica and Keith for always showing endless support and encouragement. Your ability to remain in my corner during these last two years was paramount to my progression of recognizing my own motivation, as well as constantly looking at the bigger picture. I appreciate you both.

To all my fellow graduate assistants (Amy, Jennifer, Katelyn, Rachel and Tara), we made it! Going through these last two years would not have been the same without you. From constant laughs to constant stress, we relied on each other through it all.

To my supervisors Patricia and Jenny, this was a roller coaster of a season, but thank you both for bringing me in, being there for me, and providing me with some much-needed *Wellness Walks* to get coffee. You both have major footprints within my academic and professional life, and I hope you both understand the significance and value you are to me which I am forever grateful for.

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# **CHAPTER ONE**

#### Introduction

Physical activity is vital to adults' overall health and wellbeing. Despite its importance, research indicate that only about 20% of American adults actually meet the physical activity guidelines set forth by the Centers of Disease Control and Prevention (2015). These guidelines suggest that an adult should engage in at least 150 minutes of moderate intensity or 75 minutes in vigorous activity per week. To increase physical activity rates, researchers have continued to investigate the factors constraining people from engaging in physical activity. Common reasons why people do not exercise include lack of disposable funds, limited time, or living in a residential area with limited opportunities for physical activity due to safety concerns or lack of infrastructure (e.g., Mullahy & Roberts, 2010; Patay, Patton, Parker, Fahey, & Sinclair, 2015; Stanis, Schneider, Chavez, & Shinew, 2009).

Another constraint reported has been a lack of motivation (Dolan, 2008). In reaction to lack of motivation, group exercises classes, such as Pilates, yoga, and boot camp, have become popular (Dolan, 2008). These classes are "performed by a group of individuals led by an instructor" (Dolan, 2008, para. 2). According to Harvard Health Publications (2016), being in a class setting may offer a psychological boost, as the combination of music, fellow exercisers, and the instructor can provide motivation to keep going. In addition to their motivational attributes, group exercise classes provide the individual with instruction to learn proper form, which can prevent future injuries.

Additional benefits experienced by group exercise participants include maintaining overall strength, flexibility, and balance (Harvard Health Publications, 2016).

Despite the benefits of the group exercise format, the majority of participants tend to be female (Spiegel, 2014). The lack of male participants within these classes may mean men are missing a potential means of physical activity that is safe, effective, motivational, and adds variety to their workouts (Dolan, 2008; Thompson, 2008). Although studies have discussed the association of gender with group exercises classes, few have explained why these trends may occur, and why some men choose to not use these services. It may be due to men preferring to use their time for other modes of physical activity or may consider group exercise classes to be for women, especially given that most participants are women (Spiegel, 2014).

# Overview of Study

College campuses are a setting where differences in group exercise participation are noticed among males and females. The college-aged population deserves attention given the notable health risks facing these students. For example, sedentary behaviors have been observed among college-aged individuals because of insufficient sleep and academic stressors (Shangguan, Keating, Liu, Zhou & Leitner, 2017). Insufficient sleep, sedentary behavior, and stress can all lead to a variety of cardiovascular diseases (Akerstedt & Perski, 2011). A way to prevent such health risks is through physical activity. Many college students are provided with university recreation centers as a way to encourage physical activity. Such facilities may offer cardio and free weight

equipment, swimming pools, informal recreation (e.g., basketball courts), and group fitness classes.

Despite the various exercise formats, college men appear to be using group exercise classes in fewer numbers compared to women. According to the National Association of Sports Medicine (NASM), males tend to not participate due to the lack of gender neutral class descriptions, lack of men in advertisements, programming, and equipment space (Vogel, 2017). This trend may be due to college men having previously been separated from women during physical activity prior to entering college, as in middle and high school athletic classes. It could also be explained by men considering group exercise classes to be for women, especially given that the majority of participants are women. Some men may lack a group of male friends who are willing and able to attend the classes. Others may face scheduling challenges making it hard to attend the group exercise courses. Despite the possible explanations, few studies have empirically examined the issue in-depth.

## Statement of Purpose

The purpose of this research project was to examine *why* and *how* college men use group exercises classes. In this study, group fitness classes describe aerobic rhythmic, performance-based fitness classes that utilize group choreography in performing exercises lead by a certified instructor. These classes include indoor cycling, Pilates, power yoga, boot camp, barre, and other similar formats. The study's research objective examined: (1) the exercise trends among college male group exercise participants and college male non-participants; (2) the perceived constraints to group exercise classes

among college male participants and non-participants; and (3) the perceived motivations to use group exercise classes among male participants. The study was guided by the theory of planned behavior (TPB).

#### Importance of Study

Individuals who are physically active experience a myriad of benefits. These individuals are less likely to have coronary heart disease, high blood pressure, type 2 diabetes, metabolic syndrome, colon and breast cancer, and depression (Physical Activity and Adults, 2017, para. 8). Physically-active individuals also exhibit an increased "level of cardiorespiratory and muscular fitness," and "they are more likely to achieve weight maintenance and have a healthier body mass and composition" (Physical Activity and Adults, 2017, para. 8). These benefits reflect the reasons why medical professionals, practitioners, and researchers advocate for increased physical activity among the general population. For college students, physical activity is important given the many stressors they experience during their academic studies.

The potential findings from this study can also aid practitioners in developing new ideas to attract more college male participants to group exercise classes. Some research states that motivation is essential for increasing physical activity and exercise among college students (Kim, Cardinal & Yun, 2015). Student motivation can be targeted through three areas: autonomy, competence, and relatedness. Autonomy and competence can be facilitated by providing students with multiple and simultaneous physical activity tasks, helping students develop physical activity skills and modifying the competition environment. Lastly, relatedness is accomplished through employing instructional

strategies that support relationships with peers (Kim et al., 2015). Study findings may shed light on areas related to autonomy, competence, or relatedness that can be improved in order to attract more college male participants.

Another way to attract more college male participants would be to market with men in mind. Research discusses the importance of utilizing strategic marketing material (e.g., Ford & Torok, 2008), such as having promotional material feature the group members being targeted. Strategic marketing may include, using language or jargon that may appeal to males more than females. Increasing the accessibility and rewarding active behaviors may build consistency in participation in areas such as group exercise (Buckworth & Nigg, 2004). Establishing a program to incentivize male participation can help image congruency among other men. Using either a monetary reward such as a gift card once a milestone is reached, or participating in a contest for the program would reward active behaviors and build consistency (Fennell, Gerhart, Seo, Hauge, Glickman, 2016). Lastly, creating programs targeted at residence halls, Greek organizations, or sport teams (Harring, Montgomery, & Hardin, 2010) will increase group exercise participation among college students. Forthcoming findings may uncover other strategies that can be used to target college male participants in using group exercise participation.

# Chapter Summary

Health concerns and risks are associated with physical inactivity. Sedentary behaviors are evident among college-aged individuals because of insufficient sleep and academic stressors, which can result to a variety of cardiovascular diseases. A way to help prevent such health risks is through physical activity, and university recreation

centers serve to promote physical activity among college students. Such facilities offer cardio and free weight equipment, swimming pools, informal recreation (i.e., basketball courts), and group fitness classes. Even though instructor-led group fitness classes require little to no prior knowledge to participate, men and women are not equally represented in this space. In comparison to men, women are more likely to attend these classes. Examining why and how some college men still want to use group exercises classes may help researchers and practitioners increase men's attendance rates. Accordingly, Chapter II will discuss some of the literature pertinent to this study, and Chapter III will discuss the method used to answer the research questions. Chapter IV will report the findings from the interviews conducted to address the research objectives. Lastly, Chapter V will conclude with suggestions for practitioners and researchers moving forward.

# **CHAPTER TWO**

#### Literature Review

The purpose of this literature review is to provide a foundation of information that may help address the research objectives. Within this literature review, a brief history of group exercise will help establish the historical and cultural contexts of this exercise format. Following the history of group exercise, a review of literature discussing the association between and gender and exercise in university settings will be provided. Lastly, the theory of planned behavior (TPB) served as the theoretical framework for this study, and attention will be devoted to TPB research discussing gender and psychological issues within group exercise.

## The History of Group Exercise

Aerobic activity. The development of aerobic activities provided a platform for group exercises to occur. Physician Kenneth Cooper, also known as, "The Father of Aerobics," introduced the term "aerobics" (Kuhfal, 2008). The word, "aerobic," comes from the Greek phrase, "with air" (Kuhfal, 2008). Aerobic activity refers to exercises that promote cardiovascular fitness by elevating the heart rate for an extended length of time, which increases the flow of oxygenated blood throughout the body (Aerobic, 2010). The term "aerobic" usually refers to vigorous exercise, which may involve dance steps that include music. Other forms of aerobic exercise include running, cycling, and swimming (Hirsch, 2002).

**Origin of group exercise**. Group exercise began with Jacki Sorenson, a lifelong dancer, who was directly involved with Dr. Kenneth Cooper's early work on aerobic

capacity. In 1969, aerobic dance was introduced by Sorenson, when she developed an exercise program for U.S. Air Force wives on closed-circuit television (Kennedy-Armbruster & Yoke, 2014). In addition to the exercise program, Sorenson also engaged in Dr. Cooper's 12-minute running test which assessed a person's cardiovascular fitness. Despite not being a runner, Sorenson scored well on the test; Dr. Cooper attributed Sorenson's cardiovascular fitness to the dancing. Following the years of Dr. Cooper's research, aerobic dance fitness programs became internationally popular due to its health benefits (Kennedy-Ambruster & Yoke, 2009).

In the 1980s, aerobic dance fitness provided an outlet for many people, especially women, to exercise in a group. The aerobic dance movement brought international dance to the forefront. Although the enthusiasm for this type of aerobic activity seemed to grow, it soon began to diminish once the injury rate spiked. Injuries to the shins, feet, and knees were the most common with high-impact aerobics. Consequently, low-impact aerobic dance exercises were developed to decrease the risk of injuries (Kennedy-Armbruster & Yoke, 2009). In 1983, the Aerobics and Fitness Association of America (AFAA) created the first standards and guidelines for group exercise.

In the 1990s, step aerobics, a low-impact aerobic activity was developed to maximize space as well as prevent injuries. The step movement of the 1990s led to the development of other aerobic exercise formats such as water exercise, stationary indoor cycling, and trekking. Because these types of formats, which did not include dancing, surfaced, the term "aerobic dance" was replaced by "group exercise," to better describe the wide scope of activities (Kennedy-Ambruster & Yoke, 2009). According to the

International Health, Racquet, and Sportsclub Association (IHRSA), this type of exercise is common among 44% of health club consumers (approximately 21.2 million Americans) (IHRSA, 2009). Group exercise classes are considered open to both genders and people of all ages (Schroeder, 2008). College students would benefit from participation due to the benefits of an active lifestyle.

#### **University Students and Exercise Behaviors**

It is encouraged to be active to lead a healthier life. According to federal guidelines, adults aged 18 and older should participate in at least 150 minutes of moderate-intensity exercise per week. These exercise recommendations can be met through 30-60 minutes of moderate-intensity exercise per day (five days per week) or 20-60 minutes of vigorous-intensity exercise (three days a week) (Buchner, 2014; Physical Activity Guidelines, 2008). Even with these recommendations, unfortunately, research has shown that there is a decrease in physical activity among people aged 18-29 who have some college education; studies also report that individuals' body weight increases when they attend a university.

Nationally, a high proportion of college students' physical activity levels remain below recommended standards. Regarding physical activity and exercise in general, 22.4% of 18-34-year olds do not engage in exercise (Huang, Harris, Lee, & Nazir, 2003). Physical activity can help ease the effects of stress experienced by this population. Some of the stressors that students face are academics (Agolla & Ongori, 2009), family (Aherne, 2001), romantic relationships (Darling McWey, Howard, & Olmstead, 2007), peers (Allen & Lawless, 2003), high expectations of self and others (Deutsch &

Schmertz, 2011), lack of time (Gonzalez, Hooper, Lee and Lin, 2010), lack of sleep (Gold & Friedman, 2000), and being in a different country (Pitts, 2009). Campus recreation centers serve to encourage physical activity among college students, and students have multiple exercise offerings, including group exercise classes (Sharp & Barney, 2016).

**College students and campus recreation centers.** Researchers have continued to investigate the factors constraining people from engaging in physical activity. Common barriers include lack of time, social influence, lack of energy, lack of motivation, fear of injury, lack of skill, lack of resources, weather conditions, travel, and family obligations (Patay et al., 2015). Additionally, negative beliefs surrounding time, cost, effort, and expected outcomes, as well as procedural knowledge to carry out healthy behaviors, would need to be addressed to facilitate healthy behaviors (Ross & Melzer, 2015). For college students, some of these constraints are eased by university recreation centers which are conducive to physical activity given that the center has sufficient programs, services, facilities, and equipment (Haines, 2010).

Researchers have examined college students' reasons for using or not using their campus recreation center (Omar-Fauzee, Yusof, & Zizzi, 2009). The three main reasons for using campus' recreation center included the following: wellness, facilities and socialization. For *wellness*, participants reported items such as wanting to be healthy, less stressed, and in-shape. Secondly, study participants mentioned that having good *facilities* encouraged participation, particularly when a "variety of facilities" and "good quality and

clean" facilities were available. Lastly, within *socialization*, participants reported that "meeting new people" and "having fun" were important (Omar-Fauzee et al., 2009).

In contrast, four major themes explained why students did not use their campus' recreation center (Omar-Fauzee et al., 2009). The reasons included the following: inconvenience, personal inadequacy, non-accessibility, and lack of interest. These dimensions were based on their feelings towards the facility and participants' own self-efficacy. For instance, the participants mentioned the following as affecting their nonparticipation: overcrowding, the inability to focus, lack of confidence, feeling out of shape, unsuitable location, transportation problems, and lack of motivation.

In another study, the researchers found that most of the users of a campus recreation center were freshmen and sophomore males who lived on campus and were part of a fraternity (Miller, Noland, Rayens, & Staten, 2008). The researchers concluded that the males were inclined to engage in an activity because they were within a group (i.e., fraternity). Similarly, according to Nelson, Kocos, Lytle, and Perry (2009), support groups to maintain physical activity levels were important to college students. The authors further reported that students acknowledged that they were intimidated to use their campus' recreation center because they were new to them and did not know how to use the equipment. If the students had self-efficacy and looked forward to utilizing the recreation center, then they were able to overcome these perceived constraints. On the contrary, if they had negative feelings with the facility, then some of them preferred to not utilize the facility based on their perception, barriers, or inconveniences.

Consequently, understanding why college students visit and do not visit campus recreation centers may help to identify the initial constraints predicting whether college students want to visit the group exercise classes within university recreation centers. By removing these constraints, researchers and practitioners may further attract more college students to their exercise offerings. However, given that more women visit group exercise classes than men, this literature review further examines the impacts of gender on exercise and how activities associated with feminine traits are avoided by some men.

#### **Exercise among Women and Men**

Public health reports indicate that physical activity has been affected by an individual's gender. Men engage in more physical activity than women across all age groups (Tenenbaum, Gershon, Eklund, & Robert, 2014). Women and men may exercise in the same fitness center, but they do exhibit different trends in exercise participation. For instance, aerobics classes are predominantly women's spaces, whereas men predominantly utilize the free weights area (Chrisler & McCreary, 2010). Several factors may explain this discrepancy and include gender role socialization, stereotyped expectations of others, and sociocultural norms (Chrisler & McCreary, 2010).

Gender stigma. Social stereotypes affecting physical activity may dictate what is appropriate and not appropriate for men and women. Most of this literature focuses on sport. As children are introduced to sports, their experiences are based on gender roles and expectations (Hargreaves, 1994; Nilges, 1998). For example, figure skating is considered acceptable for females, while ice hockey is acceptable for males. Individuals who cross these boundaries are considered deviants (Hargreaves,

1994; Krane, 2001). The construction of sports as "appropriate" or "inappropriate" replicates gender-typed toys: rough-and-tumble symbols for boys, domestically oriented symbols for girls. For example, to avoid the aggressive, rough image of ice hockey, Canadian girls are encouraged to play ringette, a feminine, girls-only version of hockey. American girls who want to play baseball are encouraged to play softball (Krane 2001). The primary component of these sports is that they are offered primarily for girls and women ensuring they could not be considered masculine (Krane 2001). Metheny (1965) also discussed that sports in which girls and boys were encouraged to participate possessed qualities that were congruent with both feminine and masculine personality traits (Schmalz & Kerstetter, 2006). Feminine sports such as ballet were aesthetically pleasing and lacking aggression, whereas masculine sports such as football, were generally aggressive and competitive (Schmalz & Kerstetter, 2006).

Riemer and Visio (2003) revisited Metheny's study, and they found that certain sports continued to be perceived as gender specific in today's society. For instance, football and wrestling continued to be considered male sports, while aerobics and gymnastics continued to be considered female sports. Other sports, such as basketball, golf, soccer and tennis, are considered neutral, because they require less contact. The perceptions regarding appropriate sports for women seemed to expand to include more originally-perceived masculine type sports, however, none of the feminine sports (i.e., gymnastics, dance, ballet) were perceived as appropriate for boys. A sport may also be considered to be masculine if it functions in society to reinforce a sense of identity and solidarity with men as separate from women.

Sports or physical activity that involves contact are perceived as masculine in society. Football is one example of a sport that traditionally has served this function in the U.S. society, largely because football has been recognized as an activity appropriate for males and inappropriate for females (Postow, 1980). Many modern sports have evolved to foster the socialization of males in line with "the particular ideal of masculine gender identity embodied in the masculine attitudinal mode" (Postow, 1980, p. 53). Sports that include aggressiveness and competitiveness fit this model. Athleticism is often strongly linked to and interpreted as muscularity, physical strength, and power, and, therefore, often equated with masculinity (Dyer, 1982). Also, sport tends to be regarded as masculine when the definition of athletic excellence for that sport includes capacities such as absolute strength and speed, capacities for which men have a statistical advantage over women (Postow, 1980).

Schmalz and Kerstetter (2006) found that ultimately participation in masculine activities by girls and women is more socially accepted than participation in feminine activities by boys and men. For men, any indication of femininity, or straying from masculine norms would potentially raise questions about their masculinity and sexuality. It is unclear yet whether college men categorize group exercise classes as exhibiting feminine or masculine qualities and how this may impact participation in these offerings.

Men and women's motivation towards exercise. Engagement in physical exercise differs between men and women. Women tend to exhibit lower levels of physical exercise performance, and their motivation to exercise differs from men (Al-Kubaisy, Mohamad, Ismail, Abdulah, & Mokhtar, 2015). The reasons that females tend

to exercise are as follows: to control their weight, obtain weight-loss benefit, decrease the risk of arthritis, decrease the risk of depression, decrease the risk of cancer, to feel happier, and to feel more relaxed. The reasons that males tend to exercise are as follows: to improve quality of life, feel better about appearance, boost confidence and self-esteem, have strong muscles and bones, more energy for daily chores, better sleep, effect on sex life, and connect with family or friends in a social setting (Al-Kubaisy et al., 2015). It is unclear how group exercise classes are marketed, and whether these classes target men's motivations to exercise.

## Theoretical Framework

This study was guided by the Theory of Planned Behavior (TPB) (Ajzen, 1985). The TPB originated from Ajzen and Fishbein's Theory of Reasoned Action (TRA). In the TRA model, individuals' attributes and social influence influenced their intention to engage in a specific behavior; this could later lead to individuals actually engaging in the behavior. The theory was modified because it lacked the element of perceived behavioral control, or the perception that one has the skills and resources needed to complete a behavior (Biddle & Mutrie, 2008). Perceived behavioral control was included, which transformed TRA into TPB. In the new TPB model, three constructs (i.e., individual's attitudes, perceived control of a behavior, and social influence) impact individuals' intentions to engage in a specific behavior, which may lead to actually doing the behavior (see Figure 2.1).

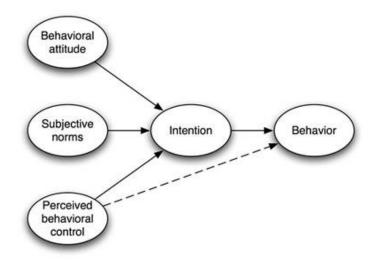


Figure 2.1: Theory of Planned Behavior Framework (Ajzen, 1985)

In the model, individuals' attitude toward the behavior involves their beliefs about a behavior and evaluation of outcomes. Beliefs about a behavior relate to the relative benefits or harms and ease or difficulty of the behavior. Evaluation of outcomes refers to the result from engaging in the behavior which could be beneficial or harmful and could align or not align with personal goals. As a result, beliefs and evaluation of outcomes form the individual's attitude about a behavior. In terms of exercise, if an individual believes that exercise leads to a particular outcome, such as a healthy body, they will likely have a positive attitude toward exercise. Next, the same individual examines possible outcomes of engaging in exercise and the importance of these outcomes to the individual. If the individual believes and values that exercise will reduce the risk of cardiovascular disease, they will likely have a favorable attitude toward exercise. These favorable attitudes translate to good intentions toward engaging in exercise, which may lead to actual exercise. Further, in the model, subjective norms involve beliefs of people who are meaningful to the individual and the motivation to follow these meaningful people. For example, if one's peers believe exercise is important, then the individual creates a subjective norm that exercise is important. This is that individual's perception of what others believe based on one's interpretation. Also important is the individual's motivation or desire to follow the exercise behavior of friends. Together, these elements lead to intention to engage in exercise, which may also lead to actual exercise.

Lastly, control variables and power over control variables are the components of perceived behavioral control. Control variables are the perceived factors, both personal and environmental, that can facilitate or inhibit engaging in a behavior, such as location of fitness facilities, work schedule, and family responsibilities. Power over these variables, which has been compared to Bandura's concept of self-efficacy, is the perceived ability to overcome the control variables (Biddle & Mutrie, 2008). For example, if an individual feels he has a very busy work schedule that does not allow time for exercise, he may feel a lack of control over the situation. However, if a gym opens up across the street from his office, the individual can exercise during the lunch hour. Thus, the individual feels a sense of control in the situation.

It is important to note the dotted line between perceived behavioral control and behavior in the TPB model. Ajzen hypothesized that perceived behavioral control can predict behavior directly when perceived control relates closely to actual control. For instance, even though an individual might have an increased sense of control over exercise, he still has a busy work schedule and may not be able to exercise during the

lunch hour. However, if the individual brings work to the fitness facility, then the person will surpass intention and actually engage in the behavior. This is because his control over the situation closely related to his actual control (Herrmann, 2012).

In previous studies, researchers have applied the TPB to the prediction of a wide range of social health behaviors, including exercise (Hagger, Chatzisarantis, & Biddle, 2002). In their meta-analysis, Hagger et al. reported significant average correlations between the attitude, subjective norm, and perceived behavioral control constructs. Together these variables explained 45% of the variances in exercise intentions. Both intention and perceived behavioral control were found to have significant average correlations with exercise behavior, explaining 27% of the variance in exercise behavior (Norman & Conner, 2005). Ultimately within that study, two issues were noted. First, the TPB is better able to explain exercise intentions than behavior. Secondly, despite the reporting of significant average correlations between intention and behavior in recent meta-analyses, it is clear that there is considerable heterogeneity in the strength of this relationship (Norman & Conner, 2005).

## **Chapter Summary**

In summation, group exercise classes have been offered as a way to encourage physical activity and build a social support. A population who may benefit from these classes are college students, who are at risk for negative health outcomes. Yet, even at this level, more women appear to be visiting group exercises classes than males. Various reasons may explain this. A major reason may be the association of feminine or masculine traits with specific sports as discussed in the literature. This may also be

affecting group exercise classes. Motivation towards exercise may also differ between males and females; which may impact the marketing of group exercise classes toward the different genders. Finally, constraints to university recreation centers may further limit students' ability to visit group exercise classes.

# **CHAPTER THREE**

#### Method

In order to examine *why* and *how* college men use group exercises classes, this study used a qualitative, cross-sectional design. The study's research objective addressed: (1) exercise trends among college male participants and non-participants of group exercise classes; (2) perceived constraints to group exercises classes among college male participants and non-participants; and (3) perceived motivations to use group exercise classes among male participants.

### Study Site

In order to gain in-depth insight into this research question, this study focused on a large public southeastern university with a student population of approximately 23,400 (undergraduate and graduate students). Of these 23,400 students, 53% are female, and 47% are male. The undergraduate population is approximately 18,000 students which makes up about 77% of the student body. Of the student body, 78% are white. Additionally, 89% of the student population are full-time students. The students have a recreation center that is paid by their student fees, which is a part of their annual costs. The square footage of the recreation center is 250,000 square feet, where over 11,000 square feet is dedicated towards fitness and cardio equipment. This facility offers two group fitness studios that feature a wide variety of fitness classes. There are 19 different group fitness formats that are offered as follows: Aqua Aerobics, Barre, Body Pump, Boxalates (Kickboxing and Pilates), Circuit Training, Core, Cycling, Cycle + Core, Dance Fitness, HIIT, Hip Hop Choreography, Kettlebell, Kickboxing, Power Yoga, Strength Work, Total Body Fusion, Yoga, and Zumba. A total of 72 group exercise classes are offered per week.

# Data Collection Procedures

**Participants.** Before beginning the study, approval was received from the university's Institutional Review Board (IRB). Recruitment targeted male students. In order to qualify for participation, the individuals needed to identify as male, be between the ages of 18 through 25, and be enrolled in the university full-time. Additionally, two groups were utilized in this study: 10 males who attend group fitness classes (male participants) and 10 males who did not attend group fitness classes (male non-participants). To be considered a participant within group fitness classes, a minimum of five classes had to be attended within the fall 2017 semester. To be considered a non-participant within group fitness classes, the student could have only attended a maximum of one class during the fall 2017 semester. Males who reported attending two to four classes in the semester were considered irregular participants and their data was omitted due to their inconsistent exercise behavior.

In order to recruit eligible male participants, flyers were posted in the studios where the group exercise classes took place. Additionally, at the beginning and end of some of the group exercise classes, announcements were made inviting college men group exercise participants to the study. Through flyers and word-of-mouth, interested participants were instructed to contact the researcher via email.

In order to select the college male non-participants, the sampling frame consisted of the members of the campus recreation center. With IRB permission and the

administrators, flyers were posted in various areas of the recreation center (e.g., male restrooms, weight room), and also word-of-mouth was utilized.

**Interviews.** Individuals interested in participating agreed to a semi-structured individual interview. A semi-structured interview method was used because it is suitable for studying people's perceptions, opinions, or emotionally sensitive issues (Barriball & While, 1994). Additionally, through this method, it was possible to focus on the issues that were meaningful for the participant, allowing diverse perceptions (Cridland, Jones, Caputi, & Magee, 2015). Before the interview began, individuals were read a consent form, and asked for permission to record the interview. After agreeing to the interview, and giving consent to have it recorded, the interview began. The interview protocol included rapport building question and questions about their exercise patterns including, formats, times, and reasons why they exercise (Table 3.1).

The type of group exercise classes that are available were important to consider because a limited number of desirable classes may inhibit participant. Additionally, information pertaining to men's preferred time to exercise was also collected because a limited number of classes offered during men's preferred time to exercise could hinder participation. Lastly, the instructor teaching a given format could be a reason why males do not attend classes. They may prefer a certain type of instructor (i.e., gender, personality, style of teaching, etc.), who they may perceive to meet their needs, yet the preferred instructor does not teach when they are available.

Participants were also asked about what keeps them motivated to exercise, the exercises they preferred, and why they preferred them (Table 3.1). The list of exercises mentioned will help identify if the participants gravitate towards masculine versus feminine activities. Finally, study participants were probed about their experiences with group exercise classes (Table 3.1).

*Table 3.1.* Interview Questions: Group Exercise Participants and Non-participants

	Interview Questions: Group Exericse Participants & Non-participants
	Questions
1	What is your classification (Year/Participation identity)?
2	What is your age?
3	How important is your overall health and well-being to you?
4	What are your views on physical activity?
5	Did you participate in athletic classes during middle and/or high school?
6	How often do you exercise?
7	Can you tell me some of the reasons why you exericse?
8	What do you typically do when you exericse?
9	Can you tell me more about why you picked these types of exercises?
10	How do you feel when you exercise?
11	How do you feel when you don't exercise?
12	What makes it easier for you to keep exercising?
13	What makes it hard for you to keep exericsing?
14	What do your friends do when they exercise?
15	What do your friends think about group fitness classes?
16	Do you participate in group fitness classes outside of the university setting?
17	Have you visited group exercise/fitness classes in the past? (For non-participants)
18	What keeps you from attending these classes? (For non-participants)
19	Why do you think others may not attend group exericse/fitness classes? (For non-participants)
20	Which group exercise/fitness classes do you visit? (For participants)
21	Why do you pick these classes (For participants)
22	Did you experience any challenges when you first started participating in these classes? (For participants)
23	If so, how did you deal with these challenges? (For participants)
24	Why do you think others may not attend group exericse/fitness classes? (For participants)
25	Do you attend these classes with anyone? (For participants)
26	If so, who do you attend these classes with? (For participants)
27	Any other relevant information? (For both)

Interviews lasted 22 minutes on average. The shortest interview lasted 16 minutes and the longest lasted 28 minutes. These individual interviews were in a quiet, yet public area for the participant to feel comfortable and to gain a level of trust. Staying engaged, asking open-ended questions, using professional body language, and not leading the participants to their answers were necessary when interviewing the participants one-onone. Their responses were kept confidential. This meant that the interview responses only were shared with research team members and ensured that the information that was included in the report did not identify respondents (Boyce & Neale, 2006). When the data were reported (chapter IV), pseudonyms were utilized to maintain subject confidentiality in the results.

### Data Analysis Procedures

Interviews were recorded with the permission of participants. After the initial digital recordings of the interviews, the recordings were transcribed by the researcher and a research assistant. Thematic analysis was chosen to analyze the data as it was a flexible method that allowed themes to emerge from the data based on own understanding (Ely, Vinz, Downing, & Anzul, 1997). This analysis helped emphasize pinpointing, examining, and recording themes from within the data. The data were analyzed by familiarization, which then codes were generated, created, reviewed, defined, and then reported (Braun & Clarke, 2006). The resulting themes were inductively identified (Barriball & While, 1994). The transcripts were compared to the researcher's notes from the interview. These notes described how the participant responded, context, body language, and quotes (Mulhall, 2003).

#### Trustworthiness of Data

Trustworthiness relates to the authenticity of the qualitative methods being used (Patton, 2002). Researchers should seek an unbiased and full description of the data by exploring multiple perspectives in a situation (Patton, 2002). Lincoln and Guba (1985) have established criteria for data trustworthiness, which includes credibility (i.e., internal validity), transferability (i.e., external validity), dependability (i.e., reliability), and confirmability (i.e., objectivity).

**Credibility.** To establish credibility, the member checking method was used. This method consists of taking data and interpretations back to the participants in the study so that they can confirm the accuracy of the information and narrative account (Creswell & Miller, 2000).

There are several procedures that can be used to facilitate this process includes, assembling focus groups and reviewing raw data with participants. For this study, raw data were reviewed with the participants. Following the individual interviews, the participants were sent the voice recording of the interview as well as the interview notes. They were given the opportunity to approve or add their feedback to the themes and categories initially created. Throughout this process, the participants were asked if the themes and categories made sense, and if they were accurate which followed the literature (Creswell & Miller, 2000). A total of 12 participants responded back to the researcher's follow-up. There were no modifications and the data was confirmed.

**Transferability.** Trustworthiness also includes the aspect of transferability, which refers to the extent to which the findings can be transferred to other settings or groups

(Polit & Hungler, 1999). Context is important for this study, and the study site section in Chapter III thoroughly explains the population in depth to provide further information among gender and the possible association with group exercise classes.

**Dependability.** According to Bitsch (2005), dependability refers to "the stability of findings over time" (p. 86). To establish dependability, the code-recode strategy was utilized. This method involves the researcher coding the same data twice, allowing time between each coding. Then the results of the two codings are compared to see if there are any differences (Anny, 214). This technique helped gain deeper understanding of the data patterns which improved the results.

**Confirmability.** Lastly, to establish objectivity within the results of this study, there were a few methods to consider. According to Shenton (2004), possible methods included an audit trail and recognition of shortcomings in study's methods and the potential effects (pg. 73). Admitting recognition of shortcomings was how confirmability was reached. The researcher acknowledged to the study participants that he engaged in group exercise classes for numerous years and taught these types of classes as well.

#### Chapter Summary

In summation, this study examined how and why college men decide to use group fitness classes using a qualitative design, which will address the research objectives. The study was at a large southeastern university's recreation center that offered a variety of formats and times weekly. The 20 participants identified as either a participant or a nonparticipant within group fitness classes. Then a semi-structured individual interview followed for each participant within the study. Thematic analysis was used to analyze the

data as it was a flexible method that allowed themes to emerge from the data. This analysis helped to emphasize pinpointing, examining, and recording themes from within the data.

## **CHAPTER FOUR**

#### Findings

The purpose of this research project was to examine *why* and *how* college men use group exercises classes. Findings revealed five themes regarding exercise trends among college male group exercise participants and non-participants; these themes are resistance training, cardiovascular training, sports, intramurals, and group fitness. Further, four major themes (i.e., friends, social stigma, time and lack of interest), arose regarding the perceived constraints to group exercise classes among the participants and non-participants. Lastly, the two themes of consistency and goals, addressed the motivations to use group exercise classes among participants.

Of the total number of subjects, the average age was 21 years old, with 18 being undergraduate students (90%) and 2 being graduate students (10%). The classification year of the undergraduate subjects were 2 freshmen (11%), 5 sophomores (28%), 8 juniors (44%), and 3 seniors (17%). Of the two graduate students who participated, both were 2<sup>nd</sup> year master students. Lastly, of the 20 subjects, 16 were White (80%), 2 were Black (10%), and 2 were Hispanic (10%) (see Table 4.1).

Table 4.1	
Study Participant Information	

	Subjects					
	Pseudonyms	Identify As	Age	Year	Ethnicity	
1	Aaron	Participant	20	Junior	White	
2	Bill	Participant	21	Junior	White	
3	Evan	Participant	24	2nd-year Master	Hispanic	
4	Gary	Participant	24	Junior	Black	
5	Kirk	Participant	21	Junior	White	
6	Michael	Participant	21	Junior	White	
7	Rob	Participant	20	Sophomore	White	
8	Sean	Participant	20	Junior	White	
9	Tim	Participant	25	2nd-year Master	White	
10	Tony	Participant	18	Freshman	White	
11	Brock	Non-participant	18	Freshman	Black	
12	Cam	Non-participant	20	Sophomore	White	
13	Chad	Non-participant	20	Sophomore	White	
14	Chip	Non-participant	21	Junior	White	
15	Jim	Non-participant	22	Junior	White	
16	Justin	Non-participant	20	Sophomore	White	
17	Larry	Non-participant	21	Senior	Hispanic	
18	Mark	Non-participant	19	Sophomore	White	
19	Mel	Non-participant	22	Senior	White	
20	Will	Non-participant	24	Senior	White	

# Pre-College

To gain perspective regarding exercise behavior and exercise trends within male group exercise participants and non-participants, their physical activity prior to attending a university was considered. Out of the 20 subjects, 16 of them (7 group exercise participants and 9 non-participants) reported participation within physical education classes during middle and high school (grades 6-12). Beyond physical education classes, all the subjects stated that they participated in sports throughout these years, notably during high school. Sports, resistance training and Zumba were the common themes mentioned by the participants.

**Sports in high school.** In high school participants competed in: soccer, football, basketball, baseball, wrestling, track, cross country, swimming, rowing, lacrosse, and ultimate frisbee. Multiple subjects participated within multiple sports, with the most popular sport being football (8 subjects participated), and the least being rowing (1 subject participated). When asked about why football was a preference, the responses were relatively consistent. Michael, a 21-year-old junior group exercise participant stated, "I've always liked the sport growing up. From watching it on TV to playing for my school, it's what everyone liked to do in my hometown." Jim, a 22-year-old senior group exercise non-participant, who also participated in football during high school added, "Football was like an energy boost. It got my blood pumping. I've been watching it as a kid, and being able to play it with my friends just made it more fun." Football seemed to also bring people together and instill character within the subjects who participated within this sport. Gary, a group exercise participant stated, "I liked playing football because it taught me how to hold myself accountable and I was able to make some lasting friendships back when I played." Lastly, Will, a 24-year-old senior who does not participate in group exercise, added a notable reason as to why he enjoyed the sport, "Football for me was my release. If I was ever upset, I could blow off steam in a healthy way when I played either in practice or in games. I loved the contact that is inherently within the sport."

From football, the most common sport that was mentioned, to the least which was rowing, a different perspective was captured. Mark, a group exercise non-participant explained why he enjoyed rowing in high school. "I liked the idea of playing a sport that involved water. I tried rowing because it looked interesting and I knew people who were already on the team," and when asked how the sport made him feel, he added, "It felt great! I met more people that I'm still friends with today, and it was a great sport to clear your mind." Regardless of the sport that was played, ultimately, the experience had similar effects on the subjects.

**Resistance Training in high school.** A portion of the subjects started lifting weights (resistance training) while in high school. There were 6 subjects (3 group exercise participants and 3 non-participants) who mentioned resistance training as either a class they participated in during high school or engaged in during their free time. According to the subjects who participated for a class, the general reason was to train in this way during the off-season for their respective sports. Bill, a 21-year-old junior group exercise participant stated, "When I was in the off-season of lacrosse, I was taking a resistance training class. Similarly, Aaron added, "I used to take a resistance training class for credit instead of PE because I found this to be more useful for my sport." Besides taking this as a class credit in high school, some of the subjects lifted weight on their spare time. Kirk emphasized, "I really used to enjoy resistance training with my friends outside of school, we all kind of got into it around the same time." Additionally, Jim had similar interests, "I started lifting weights during high school because my friends and I were competitive and liked to push each other. It was nice being able to get stronger

and see results at a young age." The exercise behaviors exhibited within this spectrum appears to be driven by usefulness and a social aspect.

**Zumba in high school.** Out of the 20 subjects, one subject participated within group exercise classes prior to college. Mel, who does not currently attend group fitness class stated, "When I was a senior in high school, I took a Zumba class every week because I was involved in cultural awareness club." He then explained why he was involved in the club and how he perceived the experience, "I was in the cultural awareness club because it appealed to me and I knew it would look great for college applications. I had a fun time being involved in this type of way, and up until that point I haven't tried Zumba, so it was a nice change of pace."

#### Exercise Trends

Within this section, notable exercise trends were distinguished among the 20 subjects in this research study. This captured what both the 10 participants and 10 nonparticipants prefer to utilize for various modes of exercise and why they decide to engage in a particular exercise behavior. Additionally, the categories of participants and nonparticipants were not mutually exclusive since both categories participated in other sports. Resistance training, cardiovascular training, sports, cross training and group exercise were themes that were mentioned by the participants. Of these themes, subthemes were noted in sports, cross training and group exercise. The sports sub-themes that were mentioned by participants were intramurals and the competitive environment. The participants who mentioned cross training, also mentioned the performance aspect that cross training yields which is noted as an additional sub-theme. Lastly, group

exercise has sub-themes which includes, variety, low-impact formats, and convenience which gives more insight into common reasons why the participants engage.

**Resistance Training.** A total of 13 subjects (6 group exercise participants and 7 non-participants) mentioned that they engage in resistance training frequently throughout each week. Chad, a 20-year-old sophomore non-participant said, "I like to resistance train to gain overall strength." In addition, Larry stated, "When I resistance train, I try to focus on getting more toned and losing weight."

A couple of subjects who resistance trained and are not participants of group exercise developed a routine based around their schedules. "I like to resistance train because I do not have to worry about timing, it's more so about when I'm free. I like the luxury of knowing I can exercise when I want to," was expressed by Mel. Mark also added, "Resistance training works best for me because I know exactly what I would want to work out, and I have a set plan." Ultimately the preference of type of exercise seems to be a viable factor into sticking with this mode versus others.

**Cardiovascular training.** Slightly below the number of subjects who engage in resistance training, a total of 12 subjects (5 group exercise participants and 7 non-participants) reported engaging in cardiovascular training (cardio). There was overlap in the subjects who regularly engaged in both resistance training and cardio. Justin, a student who does resistance training and cardio, stated, "I really enjoy all modes of physical activity, and I'm active each day. I hold a priority of getting cardio in over some of the other types of exercise because I enjoy going for longer runs." Cardio was expressed as something that was a bit more enjoyable, yet can be accomplished

anywhere. "Cardio can be done anywhere, and it's very easy to stay active especially if you enjoy moving. Additionally, if you like to play sports, cardio can be done there as well, whether you're playing pickup games or simply on the treadmill," which was said by Evan who engages in cardio exercises frequently.

**Sports.** A form of exercise that was specifically mentioned was their engagement with sports in an open recreation setting. A total of 6 subjects (2 group exercise participants and 4 non-participants) stated that they currently participate in sports, which included basketball, soccer, ultimate frisbee, racquetball and touch football. Basketball was the most mentioned sport. Justin acknowledged why he prefers basketball in addition to his routine, "If I decide not to lift weights, I typically enjoy playing sports, preferably basketball for a few hours within the facility. Basketball is just very convenient to play and takes little time to coordinate."

*Intramurals.* In the university setting, intramurals have become a major draw to students, especially ones who were formally student-athletes prior to attending college. All of the subjects were a part of an athletic team in high school (within Pre-College section). Of the 20 subjects within this study, 15 of them (7 group exercise participants and 8 non-participants) mentioned they also play intramurals as a form of exercise. This was the most popular form of exercise that was mentioned. Brock, a 19-year-old freshman stated, "My friends and I made a team and played intramural football and basketball with each other." He then added, "Playing intramurals was a good way for us to connect and catch up during our busy weeks." Reconnecting with friends at a common

time made intramurals more enjoyable. Jim stated, "Everyone's busy, playing intramurals was a way that we can all see each other without having to setup any additional time."

*Competitive environment.* Regardless of the aspect of seeing their friends, the personal motivation behind wanting to participate within intramurals stemmed from their competitiveness. Aaron explained, "I am a very competitive person, and if I'm able to play a sport that I like for a championship, I find it very exciting," similarly, Mark added, "I consider myself to be a competitive person, and intramurals is something that I can channel that inner competitiveness towards."

In addition to participating in intramurals, some subjects enjoyed other sports like racquetball to channel that inner competitor. Michael stated, "I enjoy playing racquetball because it feels as if it's a different type of workout. It's just you and someone else normally being competitive." Sports appear to create a competitive environment which the subjects seem to enjoy the most.

**Cross Training.** The previous types of exercise yield many different benefits, and for the subjects who cross train (engaging in a combination of different fitness formats), they mentioned the importance of keeping a balance. Aaron, who participated in group exercises said, "Many guys who come to the gym to workout typically just lift heavy weights and leave. In order for them to see the best results, they have to try to mix it up with cardio, flexibility, and other things like that." There are different modes of exercise that appear to be underutilized when an individual wants to become active. Another participant of group exercise classes, Sean, explains why this may be important, "The reason why I like to resistance train in addition to yoga, is I'm able to stay balanced and

be around different types of people." Even though the social aspect is there, it's primarily about staying balanced.

*Performance.* Alongside being balanced, cross training also boosts your performance when engaging in other activities. Gary stated, "I like to play sports on the days that I don't lift weights or take exercise classes, it helps me build up my stamina," similarly Sean added, "I enjoy doing Yoga because it helps with my performance when I'm playing sports like basketball or ultimate frisbee on my down time." In addition, Brock who does not participate within group exercise noted, "I train for half marathons, so I like to work on my cardio as well as use resistance training for my lower body."

**Group Exercise.** Out of the 20 subjects, 10 originally identified with participating in group exercise classes. These participants either prefer this mode of exercise as their primary preference, or it may be secondary preferences to resistance training, cardio, or sports. Regardless, they are active participants within group exercise and choose this function because of its variety which will be discussed later. The exercise classes that these 10 subjects participate in include, cycling, Yoga, circuit training, HIIT (High intensity interval training), core, barre, and a Body Pump class. The most popular classes were cycling, circuit training, and Yoga, which at least 5 out of the 10 subjects engage in normally.

*Variety.* One of the biggest draws to why these subjects enjoy group exercise is due to its variety. Bill said, "I love the different types of classes that are offered throughout the day. I try to get out to a few different types of classes when I have time." In addition to the different types of classes, participants are able to find formats that work

for them. Evan explained why he prefers cycling and circuit training, "I enjoy these two classes because they complement each other well. I am able to get my cardio in with one class, and then the next class is focusing on strength and endurance." Some subjects also preferred lower impact formats for an array of reasons.

*Lower impact formats.* An alternative perspective on why cycling is preferred for Tim, a 25-year-old graduate student, was, "Since I have a previous back injury, I am able to still exercise at a relatively high level and remain engaged in a cycling class." Similarly, Aaron added, "The reason why I chose to do cycling and Yoga is because I have had surgery on my knee, and it's not as high impact." In contrast, outside of previous injuries, some prefer a lower impact format because it's more relaxing than other formats. Rob, a 20-year-old sophomore stated, "I like to attend Yoga weekly because it helps me clear my mind and it's more peaceful overall. I tend to worry less when I leave the class, which is a plus."

Subjects mentioned that they gain more physical and mental strength when participating in Yoga. Sean, who normally attends Yoga classes stated, "It helps me build overall strength, flexibility, along with balance that I don't get with other types of classes."

*Convenience.* Lastly, the participants liked how often classes are offered in each week. Tony said, "I feel like the schedule for group exercise classes mesh well with my academic schedule, and it makes it easier to attend classes I like." Additionally, the participants enjoyed attending classes because the workouts are planned for them. Rob added, "It's nice not having to worry about what you want to work out that day. It's

convenient to go to a class and have everything already planned." Similarly, Evan said, "I try to go to the circuit training classes a few times a week because the instructors mix it up and I'm not working the same thing every time. They make it easier to go in, turn off your mind, and work hard."

### Perceived Constraints

This section outlines the common themes from all the subjects within the study, with regard to constraint to participating in group exercise. These common themes are what deters non-participants from participating and what makes it challenging for participants to continue to engage in the behavior. Social stigma, friends, time and lack of interest were noted as common themes from the participants.

**Social stigma.** Social stigma was recognized by each of the subjects within this study. Sean, a current group exercise participant brought up a notable thought in which he stated, "Social stigma holds people back from doing what they want to do." Aaron, who participates within group exercise explained that, "Guys tend to not want to try out a group fitness class because they think of their appearance more than the results." Chad, who does not participate within group exercise also added, "I personally perceive that group exercise is only spinning and Pilates, and it's more for middle aged women." In addition, Mel stated, "Guys feel more out of place in a group exercise environment." It appears guys may feel out of place because they do not see other males participating. Mel, a non-participant to group exercise explained, "Group exercise tends to have mostly girls participating, and guys feel more welcomed working out in the free weight area."

Will, who currently does not attend exercises classes said, "It's the identity and representation behind the classes. Like, does this class sound more masculine, or does it sound more feminine? Can I see myself doing this class? Are there even other guys within this class with me?"

Some subjects did not want to appear less masculine to others, which was a common reason why they do not participate in group exercise classes. Brock noted, "I view some of the classes within group exercise to be very feminine. I would not want to be perceived that way, and that adds to why I'm not interested in that activity."

**Friends.** A total of 7 subjects (5 group exercise participants and 2 nonparticipants) out of 20 mentioned that their friends participate and are receptive towards group exercise. Rob stated, "My friends are at times more excited than myself to attend these exercise classes," similarly Bill added, "I tend to try and get a group of us to go out to cycling and they enjoy it. We make a routine out of it."

Inversely, of the 20 subjects, 13 (5 group exercise participants and 8 nonparticipants) mentioned that their friends do not participate and were not receptive towards group exercise. Tim who participates in group exercise said, "My friends typically thinks of group exercise to be more of a feminine activity." Activities that the subjects' friends already participate in which were mentioned included rock climbing, hiking, resistance training, cardio, intramurals, sports, and group exercise. Chip stated, "My friends tend to work out on their own by either resistance training or cardio. If we're doing anything as a group, it would be something that is intramural based." Additionally, he added, "My friends don't find exercise classes to be as challenging."

**Time.** Given that everyone was a student, time served as a constraint. A total of 7 subjects mentioned that they do not have time to participate within group exercise classes. Chad mentioned, "The group exercise classes are all either too early, during my academic classes, or later at night to where I have to get other things done." Other subjects mentioned how they already have a routine, and do not have time for other forms of exercise. Mel stated, "I already have a workout routine that I stick to and I don't have extra time to add in another workout like a group exercise classes are the first to decline for me because of the lack of time I have for everything." A few subjects mentioned that with school being a priority, usually exercising in general tends to decrease in their daily lives.

Lack of interest. Lack of interest was mentioned by 3 of the 10 subjects who identified as non-participants. Cam acknowledged, "I never really been interested in trying out a group exercise class. I would rather do other workouts with my time." Having a lack of interest was also the perception that the subjects had about their friends, like Jim who stated, "My friends and I all have no interest in group exercise classes, and we typically have a lot in common."

### Perceived Motivation

In this final section, the common themes that the 10 subjects who participate in group exercise classes were outlined. The two common themes were consistency and goals. Consistency was noted to maintain optimal health, and goals were mentioned to ultimately understand the intention behind their behaviors. Goals also had sub-themes

which includes, the purpose of group exercise, previous injuries and challenged by others.

**Consistency.** Staying on a schedule is what typically keeps the majority of the participants motivated. Evan stated, "For me, sticking to a routine makes everything easier. It motivates me to be productive throughout the day." Once the subjects seem to develop a routine, their perception towards the task reflected this. Sean, who has been active within group exercise classes for over two years noted, "Yoga helps me in all facets of my life. I've been doing this regularly for a while now, and I am able to invite others and gain their interest in it as well."

**Goals.** Goals and results were mentioned by each of the subjects who attend group exercise classes. Many subjects were working towards a physical result. For example, Sean stated, "I started doing Yoga because I knew it would be relaxing. After some time, I became interested in doing a handstand. After going to Yoga over a year consistently, I was able to do a handstand and more, it just took a ton of practice." Also working towards a goal for performance measures was mentioned as well. Gary acknowledged, "I started doing HIIT because I heard it was a great full body workout. When I started I was only able to do about 8 burpees in 30 seconds, now I can do about 12 in that same time." He was able to see results which motivated him to attend more classes. Gary then added, "After I saw that I got stronger in one area, I tried new formats to see what else I can get better in. It was great being able to compete against myself and seeing the results that came with it."

*Purpose of group exercise.* Each one of the subjects who participates within group exercise mentioned the bigger picture and the purpose to this type of exercise. "In order to overcome what people, think and get the most out of your workout, you have to know what you're trying to get out of it. Each class has its own purpose," was mentioned by Aaron, who has been participating in group exercise for over a year. Michael added, "I attend a variety of group fitness classes, and each one serves a different role for me. I'm able to get more out of my workouts because I know each class is focusing on specific muscles." Participating in classes seemed to be for an intentional reason which ultimately was to support a goal or to fulfill the need to stay active after injury.

*Previous injuries.* A couple of the subjects had faced previous injuries that allowed them to attend a select number of classes. Tim stated, "Because of my back, I mainly choose cycling classes. I am able to enjoy this type of exercise and still be comfortable because it's something that doesn't stress my injuries." Being able to participate in a group exercise class after an injury is key when choosing to engage in the activity. "The reason why I chose to do cycling and Yoga is because I have had surgery on my knee, and it's not as high impact," stated Aaron. Being more intentional with working out seemed to be beneficial for those who have had previous injuries. Group exercise classes are tailored for modifications if necessary to be sure that everyone can participate. Inversely, classes can provide progressions to challenge the subject's physical activity further.

*Being challenged by others.* Group fitness classes are modifiable for novice as well as for the advanced individual. Some subjects are motivated to achieve their goals

through being challenged by another person. Michael said, "Body Pump and HIIT classes are great. It's all about the instructor and how they challenge me to be better each and every time I go." He also added, "My goal is to just feel the burn every time I go because I know that I'm getting stronger. The instructor knows this, so they sometimes do a little extra of a particular workout." Another way to challenge the subjects was to participate in a format outside of their routine.

For classes that are not as common for the subjects to participate in as the others, like barre, being pushed by a person who they value helps. Kirk stated, "I typically go to a variety of classes, however, if I go to a barre class, I'm going with my girlfriend. She pushes me to go with her, and it's still a great workout."

## Chapter Summary

In summation, the findings revealed that each of the subjects participated in sports during high school, whereas a fraction participated in resistance training and Zumba during that time. While in college, their exercise trends became more refined to what they enjoyed and decided to participate in. These exercise trends included resistance training, cardiovascular training, sports, cross training, and group exercise. In regard to group exercise, each of the subjects acknowledged perceived constraints that may deter their intention to engaging in that activity such as social stigma, friends, time and lack of interest. In contrast, the 10 subjects who attended group exercise classes acknowledged their perceived motivations to participating in that activity. Overall, motivations stemmed from feeling productive and achieving goals.

## **CHAPTER FIVE**

#### **Discussion and Conclusion**

The purpose of this research project was to examine *why* and *how* college men use group exercise classes. According to the findings, college men use these classes to stay on a productive schedule and to accomplish physical and mental goals. These goals appeared to be achieved through understanding the intent of their behavior (i.e., increased overall wellness, performance driven) and how it services them (i.e., modifiable exercises, externally motivated).

This study also examined the differences in exercise trends between college male group exercise participants and college male non-participants. All of the participants within this study mentioned that they were engaged in sports growing up from an early age (Hargreaves, 1994; Nilges, 1998), also the types of sports that they were involved in as they got older, reflected masculinity (Schamlz & Kerstetter, 2006). As they got into college, the subjects continued to participate in majority of these sports whether that was leisurely or within intramurals. It appeared that there was not a substantial difference in participating in masculine type of sports between the two groups (group exercise participants and non-participants).

Regarding the perceived constraints to group exercises classes, the primary constraint in participating in group exercise classes stemmed from gender stigma and social perception. Regardless of whether subjects were influenced by their friends or from society, the subjects who were considered non-participants did not engage in this activity due to others perception of the activity. Even if classes such as HIIT or circuit

training seemed masculine, they did not choose to participate. While HIIT and circuit training, are high-intensity classes and are at times competitive (Postow, 1980); due to the overall stigma of the group exercise setting, the interest in these were lost.

Of all the subjects who were group exercise participants, they all engaged in masculine perceived classes, with the exceptions of Yoga and barre. Yoga and barre are both considered to be women dominant formats (Eklund & Eklund, 2015). A barre class stems from ballet and is considered to be a feminine activity (Riemer & Visio, 2003). The subject who attended barre classes did so with and for his significant other. Therefore, there appeared to be a social factor influencing his participation.

Further, this study mirrors other leisure constraints studies on activities where participants were likely to mention time as a constraint (Gonzalez et al., 2010; Mullahy & Roberts, 2010). In this case, time was mentioned as a constraint by a majority of the group exercise participants, and they were also likely to report time being a reason why others didn't participate as well. This component of time stems from perceived behavioral control which is found in the theory of planned behavior (Biddle & Mutrie, 2008). Each of these subject's exercises regularly, however, due to their personal preference, they feel a lack of time in attending a class. They simply do not make time for an exercise class and that is by choice, not by lack of perceived control.

Regarding the perceived motivations to use group exercise classes, it was hypothesized that, an increased level of social support served as a primary factor driving group exercise participation. However, study findings indicate that intrinsic motivation enabled sustained participation. Some subjects stated that they participate in this activity

alone or that their friends do not attend classes with them. Personal goals and results are perceived as motivation to continue within this activity. This finding is in accordance with studies which acknowledged a maintained level of participation in this activity due to goal achievement (Middelkamp, Rooijen, Wolfhagen, & Steenbergen, 2016; Shrigley & Dawson, 2004). In contrast, literature also argues that people are motivated to participate in a given activity and not goal achievement if their friends engage in the behavior (Firestone, Yi, Bartley, & Eisenhower, 2015; Latimer & Martin Ginis, 2005).

Additionally, men who participated in group exercise classes discussed the positive health benefits associated with this type of activity. To feel better, improve mental health, improve sleep, increase energy, strengthen muscles, and socialize with others were all mentioned by the participants within this study. The benefits of physical activity, in general, have been discussed at great length in the academic literature (Al-Kubaisy et al., 2015; Gomez-Cabrera, Martinez-Bello, Sanchis-Gomar, Vina, 2012; Hille, Stroth, Spitzer & Reinhardt, 2006).

#### Theory of Planned Behavior

The constructs of the theory of planned behavior (TPB) are subjective norms (friends), behavioral attitude, and perceived behavioral control. Within subjective norms, normative belief (society) is derived. Each of these concepts drives intention, which ultimately drives the behavior. The subjective norms and normative belief refers to people approving or disapproving of the behavior. Behavioral attitude refers to the motivational factors that influences a given behavior. The stronger the individual feels about a certain action, the more likely they are to do that action. Lastly, of the constructs,

perceived behavioral control refers to the individual's perception of the difficulty of performing the behavior along with the self-efficacy to complete the task.

This theory was utilized to help explore and identify how the participants were influenced to engage or not engage in the behavior. Research shows that subjective norms plays a vital role in the intention of engaging in group exercise (Firestone et al., 2015). Many of the subjects who do not engage in group exercise also has friends who are not receptive to the behavior. According to the findings, this can be due to its feminine connotation, lack of image congruency, and overall social reception to the activity. Even though subjective norms appeared to be detrimental to intention, perceived behavioral control usurps intention in regard to behavior. Of the 10 subjects who identified as group exercise participants, self-efficacy of the activity and perception of beliefs are what lead to the behavior. The findings of this study were supported due to the perceived behavioral control leading directly to behavior.

#### **Practical Implications**

With the findings from this study, university settings will be able to develop new ideas to attract more college male participants to group exercise classes. These ideas may include revamping marketing materials, offering programs and services that relate to males, and utilizing incentives. To boost group exercise participation rates, marketing materials should have men in mind by featuring more males in promotional advertisements, using language or jargon that is gender neutral, and utilizing darker colors (Ford & Torok, 2008). This will allow men to visualize themselves engaging in the behavior to provide a welcoming experience.

Programs that can be offered to facilitate more male participation should reflect more high-intensity type of formats in the university setting. These programs can also be incentivized by rewarding positive active behaviors with perks or gift cards from the university. Using either a monetary reward such as a gift card once a milestone is reached, or participating in a contest for the program would reward active behaviors and build consistency (Fennell, et al., 2016). Once consistency is established, this will be able to draw more men to be active participants in the future (Fennell et al., 2016).

Lastly, services that can be offered can coincide with established health centers, athletic training, physical therapy or recreational therapy clinics. This can serve as a more educational role in the university setting and be paired with the benefits of group exercise classes, particularly lower-impact formats (e.g., Yoga, cycling). These practitioners may see clients who are student-athletes, sport club athletes, or students who participate in intramurals. The physician or trainer can encourage attending these lower-impact formats to build muscle strength, endurance, power, balance, and flexibility during rehabilitation sessions to improve performance.

### **Study Limitations**

Limitations involved having the study focus on only one recreation center at one university. It is unclear whether other universities around the country face similar group exercise patterns or whether other universities actually have more balanced participation among men and women. Another limitation that arose is this study is only hearing from males who have taken a minimum of five classes in the semester (participants) and who have taken a maximum of one class in the semester (non-participants). Because this study

did not collect data from males who were identified as irregular participants, it was unclear whether their experiences were similar or different than the other two groups. Their experiences were not taken into account given time constraints to conduct this study.

#### Future Research

The limitations presented within this study open possible future research within the topics of regional, political, and sexuality differences, as well as women's reactions to possible changes of group exercise classes. Additional research should include irregular participants. This study focused on two groups and reported data on the findings from their perspectives. Adding in a third perspective of men who engage in the behavior on an inconsistent basis can provide new data that was may be beneficial to this study as well.

Along with new data from other types of participants, focusing on the negotiation strategies that are used by group exercise participants can be beneficial to future research. Negotiation strategies can provide data as to how men overcome perceived challenges. Also, examining exercise experiences that men bring into college from high school, and why some try out group exercise classes and others do not. This will help better understand what factors play in the deviation of exercise behaviors. Lastly, other research may want to study if famous athletes discussing their participation in group exercise has an influence on men participation.

### Conclusion

To fully understand men's group exercise attendance, psychological and sociological connections through the literature need to be considered and analyzed. A

psychological focus will examine on the intrinsic motivations towards the behavior, whereas the sociological aspect will look at the network surrounding the individual and how that effects that same behavior. Both perspectives can impact the other accordingly. According to the literature review, men engage in more physical activity than women across all age groups, yet all age groups see a lack of male participation in group exercise which can offer a variation of benefits. Ultimately this comes down to social stigma and intrinsic motivation. Intrinsic motivation leads to behavioral intention which provides a better understanding of the other factors in the theory of planned behavior.

## References

- Aerobics. (2010). *Columbia Electronic Encyclopedia*, 6<sup>th</sup> Ed, 1. Retrieved from EBSCOhost.
- Agolla, J. E., & Ongori, H. (2009). An assessment of academic stress among undergraduate students: The case of University of Botswana. *Educational Research and Reviews*, 4, 63-70.
- Akersterdt, T., & Perksi, A. (2011). Sleep, stress, and heart disease. *Stress and Cardiovascular Disease*, 257-272.
- Aherne, D. (2001). Understanding stress: A qualitative approach. *Irish Journal of Psychology*, 22, 176-187.
- Ajzen, I. (1985). From intentions to actions: A theory of planned behavior. In J. Kuhl & J. Beckman (Eds.), *Action-control: From cognition to behavior*. (pp.11-39).
- Al-Kubaisy, W., Mohamad, I., Abdullah, N., & Mokhtar, M. (2015). Motivation to physical exercise: Is It diverse with different sociodemographic characteristics particularly the gender? *European Scientific Journal*.
- Allan, J., & Lawless, N. (2003). Stress caused by on-line collaboration in E-learning: A developing model. *Education and Training*, 45, 564-572.
- Anney, V. (2014). Ensuring the quality of the findings of qualitative research: Looking at trustworthiness criteria. *Journal of Emerging Trends in Educational Research and Policy Studies*, 5(2), 272-281.
- Barriball, K. L., & While, A. (1994). Collecting data using a semi-structured interview; a discussion paper. *Journal of Advanced Nursing*, 19(2), 328-335.
- Biddle, S., & Mutrie, N. (2008). *Psychology of Physical Activity* (2<sup>nd</sup> Ed.). New York, NY: Routledge.
- Bitsch, V. (2005). Qualitative research: A grounded theory example and evaluation criteria. *Journal of Agribusiness*, 23(1), 75-91.
- Boyce, C., & Neale, P. (2006). Conducting in-depth interviews: A guide for designing and conducting in-depth interviews for evaluation input. *Pathfinder International*.
- Braun, V., Clarke, V. (2006). Using thematic analysis in psychology. *Qualitative Research in Psychology*, *3*(2), 87.

- Buchner, D. (2014). The development and content of the 2008 physical activity guidelines for Americans. *Journal of Physical Education, Recreation & Dance,* 85, 7.
- Buckworth, J., & Nigg, C. (2004). Physical activity, exercise, and sedentary behavior in college students. *Journal of American College Health*, 53(1), 28-34.
- Chrisler, J. C., McCreary, D. R. (2010). Handbook of gender research in psychology: Volume 2: Gender research in social and applied psychology. *Social Science*, 567.
- Creswell, J. W., & Miller, D. L. (2000). Determining validity in qualitative inquiry. *Theory into Practice*, *39*(3), 124-130.
- Cridland, E. K., Jones, S. C., Caputi, P., & Magee, C. A. (2015). Qualitative research with families living with autism spectrum disorder: Recommendations for conducting semi structured interviews. *Journal of Intellectual & Developmental Disability*.
- Darling, C. A., McWey, L. M., Howard, S. N., & Olmstead, S. B. (2007). College student stress: The influence of interpersonal relationships on sense of coherence. *Stress* and Health, 23, 215-229.
- Deutsch, M. L., & Schmertz, B. (2011). "Starting from ground zero": Constraints and experiences of adult women returning to college. *The Review of Higher Education*, *34*, 477-504.
- Dolan, S. (2008). Benefits of group exercise. *American College of Sports Medicine Fit* Society, 4.
- Dyer, R. (1982). Don't look now. Screen, 23, 61-73.
- Eklund, L., & Eklund, M. (2015). Doing or undergoing gender? An exploratory study of gender, activities, and well-being among people with mental-illness attending day centers in Sweden. *Sage Journals*, 5(3).
- Ely, M., Vinz, R., Downing, M., & Anzul, M. (1997). On writing qualitative research: Living by words. Routledge/Falmer.
- Fennell, C., Gerhart, H., Seo, Y., Hauge, K., & Glickman, E. L. (2016). Combined incentives versus no-incentive exercise programs on objectively measured physical activity and health-related variables. *Physiology & Behavior*, 163, 245-250.

- Firestone, M. J., Yi, S. S., Bartley, K. F., & Eisenhower, D. L. (2015). Perceptions and the role of group exercise among New York adults, 2010-2011: An examination of interpersonal factors and leisure-time physical activity. *Preventive Medicine*, 72, 50-55.
- Ford, A., & Torok, D. (2008). Motivational signage increases physical activity on a college campus. *Journal of American College Health*, 57, 2.
- Gold, M. A., & Friedman, S. B. (2000). Cadet basic training: An ethnographic study of stress and coping. *Military Medicine*, *163*, 147-152.
- Gonzalez, T., Hooper, H. H., Lee, A. S., & Lin. J. (2010). A study of correlations among yoga enhancement design and cognition of college student learning and practitioner success. *International Journal of Organizational Innovation*, 2, 271-286.
- Happer, M. S., Chatziarantis, N. L. D., & Biddle, S. J. H. (2002). A meta-analytic review of Theories of Reasoned Action and Planned Behavior in physical activity: Predictive validity and the contribution of additional variables. *Journal of Sport Exercise Psychology*, 24, 3-32.
- Haines, D. J. (2010). The campus recreation assessment model. *Recreational Sports Journal*, 34(2), 130-137.
- Hargreaves, J. (1994). Sporting females: Critical issues in the history and sociology of women's sport. *Taylor & Francis Group*, 1.
- Harring, H, Montgomery, K., & Hardin, J. (2010). Perceptions of body weight, weight management strategies, and depressive symptoms among U.S. college students. *Journal of American College Health*, 59, 43-50.
- Herrmann, L. (2012). Fitness and fitting in: An exploratory study of gender and exercise. University of Illinois at Urbana-Champaign.
- Hirsch, E., Kett, J., & Trefil, J. (2002). Aerobics. *The New Dictionary of Cultural Literacy: What Every American Needs to Know* (3<sup>rd</sup> Ed.). Boston: Houghton Mifflin.
- Huang, T., Harris, K., Lee, R., & Nazir, N. (2003). Assessing overweight, obesity, diet, and physical activity in college students. *Journal of American College Health*, 52, 83-6.
- Kennedy-Armbruster, C., & Yoke, M. (2009). *Methods of group exercise instruction*, 2<sup>nd</sup> *Edition*. Champaign, IL: Human Kinetics.

- Kennedy-Armbruster, C., & Yoke, M. (2014). *Methods of group exercise instruction*, 3<sup>rd</sup> *Edition*. Champaign, IL: Human Kinetics.
- Kim, M., Cardinal, B., & Yun, J. (2015). Enhancing student motivation in college and university physical activity courses: using instructional alignment practices. *Journal of Physical Education, Recreation & Dance, 86*(9), 33-38.
- Krane, V. (2001). We can be athletic and feminine, but do we want to? Challenging hegemonic femininity in women's sport. *National Association for Physical Education in Higher Education*, 53, 115-133.
- Kufahl, P. (2008). Cooper's CALLING. Fitness Business Pro, 24(9), 62-69.
- Latimer, A. E., & Martin Ginis, K. A. (2005). The importance of subjective normas for people who care what others think of them. *Psychology & Health*, 20(1), 53-62.
- Lincoln, Y. S., & Guba, E. G. (1985). *Naturalistic inquiry*. Newbury Park, CA: Sage Publications.
- Metheny, E. (1965). *Connotations of movement in sport and dance*. Dubuque, IA: William C. Brown.
- Middelkamp, J., Rooijen, M., Wolfhagen, P., & Steenbergen, B. (2016). The effects of two self-regulation interventions to increase self-efficacy and group exercise behavior in fitness clubs. *Journal of Sports Science and Medicine*, 15(20, 358-364.
- Miller, K. H., Noland, M., Rayens, M. K., & Staten, R. (2008). Characteristics of users and nonusers of a campus recreation center. *Recreational Sports*, *32*, 87-96
- Mulhall, A. (2003). In the field: Notes on observation in qualitative research. *Journal of Advanced Nursing*, *41*(3), 306-313.
- Mullahy, J., & Robert, S. A. (2010). No time to lose: Time constraints and physical activity in the production of health. *Review of Economics of the Household*, 8(4), 409-432.
- Nelson, M., Kocos, R., Lytle, L., & Perry, C. (2009). Understanding the perceived determinants of weight-related behavior in late adolescence: A qualitative analysis among college youth. *Journal of Nutrition Education and Behavior*, 41, 287-291.
- Nilges, L. M. (1998). I thought only Fairy Tales had supernatural power: A radical feminist analysis of Title IX in Physical Education. *Journal of Teaching in Physical Education*. 17(2).

- Norman, P., & Conner, M. (2005). The theory of planned behavior and exercise: Evidence for the mediating and moderating roles of planning on intentionbehavior relationships. *Journal of Sport and Exercise Psychology*, 27, 488-504.
- Omar-Fauzee, M. S., Yusof, A., & Zizzi, S. (2009). College students' attitude towards the utilization of the sports recreation center (SRC). *European Journal of Social Sciences*, *7*, 27-41.
- Patay, M. E., Patton, K., Parker, M., Fahey, K., & Sinclair, C. (2015). Understanding motivators and barriers to physical activity. *The Physical Educator*, 72(3), 496-517.
- Patton, M. Q. (2002). *Qualitative research and evaluation methods* (3<sup>rd</sup> Ed). Thousand Oaks, CA: Sage Publications, Inc.
- Physical Activity and Adults. (2017). World Health Organization.
- Physical Activity Guidelines. (2008). Centers for Disease Control and Prevention.
- Pitts, M. J. (2009). Identity and the rile of expectations, stress, and talk in short-term student sojourner adjustment: An application of the integrative theory of communication and cross-cultural adaptation. *International Journal of Intercultural Relations, 33*, 450-462.
- Polit, D. F., & Hungler, B. P. (1999). Nursing research: Principles and methods, 6<sup>th</sup> Ed. 717.
- Postow, B. C. (1980). Women and masculine sports. *Journal of the Philosophy of Sport*. 7, 51-58.
- Riemer, B. A., & Visio, M. E. (2003). Gender typing of sports: An investigation of Metheny's classification. *Research Quarterly for Exercise and Sports*, 74, 193-204.
- Ross, A. M., & Melzer, T. (2015). Beliefs as barriers to healthy eating and physical activity. *Australian Journal of Psychology*, 68(4).
- Schmalz, D. L., & Kerstetter, D. L. (2006). Journal of Leisure Research, 38(4), 536-557.
- Schroeder, J. (2008). Evolution of group exercise: Where have we been and where are we headed. *American College of Sports Medicine Fit Society*, p. 1.
- Shangguan, R., Keating, X. D., Liu, J., Zhou, K., & Leitner, J. (2017). Conceptual physical education course and college freshmen's physical activity patterns. *College Student Journal*, 51(2), 249.

- Sharp, E., & Barney, D. (2016). Required and non-required college physical activity classes effect on college students' stress. *American Journal of Health Studies*, 31(2). 74-81.
- Shenton, A. K. (2004). Strategies for ensuring trustworthiness in qualitative research projects. *Education for Information*, 22, 63-75.
- Shrigley, T. L., & Dawson, K. A. (2004). Understanding the role of behavior and cognitions in a group exercise setting. *Journal of Sports Science & Medicine*, 3, 56-61.
- Spiegel, B. (2014). Why are there more women in group exercise? *International Health, Racquet & Sportsclub Association.*
- Stanis, S. A. W., Schneider, I. E., Chavez, D. J., & Shinew, K. J. (2009). Visitor constraints to physical activity in park and recreation areas: Differences by race and ethnicity. *Journal of Park & Recreation Administration*, 27(3).
- Tenenbaum, G., & Eklund, R. C. (2014). Gender in sport and exercise. *Encyclopedia of Sport and Exercise Psychology*, *306*.
- The perks of group fitness classes. (2016, 09). *Harvard Health Publications. Harvard Heart Letter*.
- Thompson, D. (2008). Benefits of group exercise. American College of Sports Medicine Fit Society, 1.
- Vina, J., Sanchis-Gomar, F., Martinez-Bello, V., & Gomez-Cabrera, M. (2012). Exercise acts as a drug; The pharmacological benefits of exercise. *British Journal of Pharmacology*, 167, 1-12.
- Vogel, A. (2017). How to attract more men to group exercise. Accessed from, http://blog.nasm.org/group-fitness/attract-men-to-group-exercise.