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# Perceptions of group exercise participants based on body type, appearance and attractiveness of the instructor

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Perceptions of Group Exercise Participants Based on Body Type, Appearance, and  
Attractiveness of the Instructor

by

Jennifer Mears

A thesis submitted in partial fulfillment  
of the requirements for the degree of  
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Perceptions of Group Exercise Participants Based on Body Type, Appearance,  
and Attractiveness of the Instructor

Jennifer Mears

ABSTRACT

Physical activity reduces the risk for disease, improves overall health, and quality of life. Group exercise classes are large contributors for meeting physical activity recommendations. Improving long-term adherence to group exercise classes is essential in order to receive health and fitness benefits. Many contributing factors affect adherence rates including the role of the instructor. The instructor has great influence over the decision to return to a group exercise class. It is important to find out what qualities and characteristics are preferred among those who take classes to increase long-term adherence.

Another important factor relating to adherence is body type, appearance and attractiveness of the instructor. These factors have been influential in other areas including performance enhancement consulting, counseling, teacher ratings, and willingness to accept health advice. However, little research has been done to determine if body type, appearance and attractiveness influence adherence to group exercise classes. Identifying if there are stereotypes associated with group exercise instructors will provide the opportunity to educate participants and improve the professional development of instructors.

The purpose of this study is to determine the relationship between participants' perceptions of group exercise leaders and adherence to group exercise classes. Business



cards will be distributed to participants after their exercise class, which will contain the web address to the survey. Participants will also have the opportunity to fill out a paper and pencil version of the survey if that is more convenient. The survey will be posted on surveymonkey.com. Flyers with the web address will also be posted around the facilities to promote the survey.

Results showed that participants did not prefer significant differences in fatness and muscularity of the instructor nor were they related to motivation, effort, attendance, willingness to accept health information from the instructor, or perceived attractiveness. However, perceived attractiveness was related to attendance.

Results also showed that participants preferred to be less fat and more muscular, similar to that of the current instructor body type, indicating that participants desired to have a physique similar to that of the instructor. Although, fatness and muscularity of the instructor were not associated with motivation or adherence to group exercise class, instructional quality was associated with these outcomes.

It was found that instructional quality is more important to participants of a group exercise class than body type. Instructional quality was associated with motivation, effort, attendance, and willingness to accept health information. This demonstrates the importance of professional development of instructors. Results from the current study support that body type of the instructor is associated less with different psychosocial outcomes than instructional quality.

## Chapter One

### Introduction

#### *Rationale*

Many contributing factors influence participation and adherence to exercise. Depending on the individual's motivation and preference, there are a variety of activities people choose to participate in ranging from individual sports, recreational sports, or group exercise classes. For some, a group exercise class is a major contributor for meeting the recommendations for daily physical activity. Reducing the risk for disease and promoting healthy lifestyles can be achieved through participation in exercise, including group exercise classes. Understanding what motivates people to return to a class may help improve adherence, which will ultimately have an effect on the overall health of the participants.

The main purpose of group exercise classes is to enhance health-related components of fitness, which include cardiorespiratory endurance, muscular strength and endurance, flexibility and body composition. Participation and adherence to group exercise classes is dependent upon a variety of factors. One in particular is the role of leadership. Although some research would show there is not a crucial relationship between exercise adherence and leadership, instructors have the responsibility to encourage participants to attend regular physical activity sessions (Carron, Hausenblas, & Mack, 1996). However, more recent research would support the notion that leadership is important relative to group exercise adherence (Estabrooks & Munroe, 2004).

Various characteristics and qualities make up effective group exercise leaders. Such qualities include the ability to motivate participants, incorporate proper technique and safe instruction, promote group cohesion, and provide a fun friendly atmosphere while challenging them to work hard. Appearance of the group exercise leader is another factor that may have an effect on exercise participation and adherence. The literature has shown that physical attractiveness has a significant impact on perceived intelligence, competence, knowledge and effectiveness as well as student evaluations (Goebel & Cashen, 1979; Jackson, Hunter, & Hodge, 1995; Lubker, Watson, Visek & Geer, 2005; Lewis & Walsh, 1978; Riniolo, Johnson, Sherman, & Misso, 2006). The literature also demonstrates differences in improvements of health-related knowledge when it is being delivered from overweight versus non-overweight individual (Dean, Adams & Comeau, 2005). It is more likely that people will adhere to healthy behaviors if the information comes from an individual who looks like they themselves practice those healthy behaviors. Body type and appearance effect perceptions of a variety of aspects. However, it is unclear whether they have any influence on exercise participation and adherence in group exercise settings.

*Purpose*

One purpose of this study is to rate and identify qualities and characteristics of instructors preferred by group exercise participants. Another purpose of this study is to assess the perceptions of participants towards their exercise leader based on body type, appearance, and attractiveness. This study is designed to identify the most preferred qualities and to determine if there is a preferred body type of the instructor.

### *Objectives*

The following objectives will be assessed in this study.

1. Determine if participants prefer certain qualities and/or characteristics of instructors.
2. Determine if there is a preferred body type of the exercise instructor.
3. Determine the relationship between preferred body type and exercise adherence.
4. Determine the relationship between appearance and adherence.
5. Determine if attractiveness has an impact on exercise participation and adherence.

### *Hypotheses*

The following hypotheses will be considered during this study.

1. Participants prefer instructors with low fat, high muscle body type.
2. Participants are more motivated by instructors with low fat, high muscle body type.
3. Participants more willingly accept health and fitness advice from instructors with low fat, high muscle.
4. Adherence rates are higher for classes taught by instructors with low fat, high muscle.
5. Perceived attractiveness has a positive correlation with regular attendance.

### *Limitations*

Limitations of this study include the access and/or familiarity with using computers in order to complete the survey. Self-reported information regarding amount of physical

activity including the degree of motivation and exertion also serve as limitations. People may over or underestimate the amount of activity they have completed within a certain period. It is often difficult to recall how much activity was performed. Similarly, participants' recollection of motivation or effort exerted within specific bouts of exercise could be affected by other factors.

### *Definitions*

Group exercise – intentional physical activity within a structured class among other participants

Adherence – maintaining an exercise regimen for a prolonged period of time (Lox, Martin Ginis & Petruzzello, 2006)

Appearance – the state, condition, manner, or style in which a person or object appears; outward look or aspect ([www.dictionary.com](http://www.dictionary.com))

Attractiveness - providing pleasure or delight, esp. in appearance or manner; pleasing; charming; alluring ([www.dictionary.com](http://www.dictionary.com))

Motivation – the degree of determination, drive or desire with which an individual approaches or avoids a behavior (Lox, Martin Ginis & Petruzzello, 2006)

Group Cohesion – a dynamic property of groups that is manifested by the tendency for members to stick together and remain united as they work toward collective goals and/or for social purposes (Carron, Hausenblas & Estabrooks, 2003)

## Chapter Two

### Literature Review

#### *Introduction*

Approximately 97 million adults in the United States are overweight or obese (Andersen, 2003). Being overweight is defined as a body mass index (BMI) greater than 25 kg/m<sup>2</sup> and obese is defined as BMI greater than 30 kg/m<sup>2</sup> (Andersen, 2003). Overweight and obesity are associated with an increased for risk of developing an assortment of negative health outcomes. These outcomes include hypertension, hypercholesterolemia, type 2 diabetes, coronary artery disease, and respiratory problems such as sleep apnea (Pate, Pratt, & Blair, 1995). Independent of changes to body composition, participation in regular physical activity reduces the risk for disease, improves health and overall quality of life (Pate et al., 1995). It is important to participate in regular physical activity in order to reduce the risk for disease and maintain a healthy lifestyle (Healthy People 2010). Regular physical activity, as defined by American College of Sports Medicine (ACSM) and the US Surgeon General, is to accumulate 30 minutes of moderate physical activity most days of the week (Pate et al., 1995). Approximately 38% of adults do not engage in any leisure time physical activity (Healthy People 2010). Although research has demonstrated the positive effects of physical activity, motivating people to participate in and adhere to exercise programs is difficult. Depending on the individual's motivation and preferences, there are varieties of activities

people choose to participate in. These activities include individual sports, recreational sports and group exercise classes.

Group exercise is a large contributor for meeting recommendations of physical activity (Kennedy & Yoke, 2005). Reducing the risk for disease and promoting healthy lifestyles can be achieved through participation in exercise, specifically group exercise classes. Understanding what motivates people to return to a class may help improve adherence. Improving adherence can ultimately have an effect on the overall health of the participants. Certain characteristics and qualities that instructors possess may influence whether or not participants return to a particular group exercise class. Instructors are role models who should display appropriate health and fitness behaviors. Demonstrating and teaching healthy exercise attitudes ultimately affects participants' health. Group cohesion, verbal reinforcement, and leadership style are examples of contributing influences on group exercise participation (Lox, Martin Ginis & Petruzzello, 2006).

Research has also demonstrated the influence of attractiveness and appearance on perceived intelligence, professor and teacher evaluations, knowledge of health related fitness components, and perceived effectiveness (Dean, Adams & Comeau, 2005; Goebel & Cashen, 1979; Jackson, Hunter & Hodge, 2006; Lewis & Walsh, 1978; Lubker, Watson, Visek, & Geer, 2005; Riniolo, Johnson, Sherman & Misso, 2006). For example, perceived intelligence, effectiveness and ratings were higher for those perceived as "more attractive" (Goebel & Cashen, 1979; Jackson et al., 1995; Rinolo et al., 2006). However, the influence of appearance and attractiveness of group exercise leaders has not been determined. Given that all other factors are equal, such as motivational techniques and

class environment, the relationship between appearance and group exercise participation and adherence has also not been determined.

One related study examined the relationship between physique anxiety, eating behaviors, and preferred qualifications and body type of fitness instructors among university students in exercise classes (Evans, Cotter & Roy 2005). Questions relating to current body type, ideal body type, and preferred instructor body type were used to determine preferences. A figure drawing scale was used to depict body image using nine silhouettes (Stunkard, Sorensen & Schulsinger, 1983). The silhouettes were numbered one through nine, with the lower numbers corresponding with thin body types and the higher numbers corresponding with overweight body types. The results stated that women depicted a thinner ideal physique as well as desired physique of the exercise instructor compared to current physique. However, when asked to choose from a checklist of preferred characteristics of fitness instructors, thinness was not highly ranked. Therefore, it is unclear if participants prefer one body type to another. Evans et al. proposed that participants could have been identifying a preference for a physically fit instructor rather than an excessively thin instructor. They proposed that the lack of clarity was a result of the instrument and perhaps the use of a different scale could better identify if there is a preferred body type. Preferences between genders may also exist. Evans et al. (2005) found that women preferred thinner ideals compared to men. The authors suggested that societal influences dictate that thin women and muscular men are more attractive and desirable, which may account for the gender differences.

Adherence to exercise programs is based on internal and external factors. Identifying



whether or not body type is an important external factor relating to group exercise class participation and adherence can be an effective health promotion tool (Evans et al., 2005). Identifying which qualities and characteristics are most influential to participants relative to returning to a group exercise class is important. Determining whether appearance and attractiveness are influential factors is also important. Limited amounts of research has targeted the perceptions of participants relative to preferred characteristics and qualities of instructors or the influence of appearance and attractiveness of the instructor relative to long-term participation in group exercise classes.

#### *Role of the Instructor*

The role of the instructor is important relative to exercise compliance. Although some studies show no relationship between exercise adherence and leadership (Carron, Hausenblas & Mack, 1996), instructors have the responsibility to encourage participants to attend regular physical activity sessions (Estabrooks & Munroe, 2004). Carron et al. (1996) used findings from nine studies determining the impact of social influences, including leadership, and found only a small effect. Two important responsibilities of the exercise leader are to ensure the demands of the group are met and satisfied and ensure the needs of the group are met and satisfied (Estabrooks & Munroe, 2004). This study was designed to examine exercise leadership qualities preferred by older adults, some qualities hold more value than others. This study found that older adults preferred leaders who are competent and qualified; demonstrated appropriate exercise technique, took interest in the individuals; gave encouragement and positive feedback, and those that set proper environment; appropriate music, voice, instruction, and provided group cohesion.

The instructor also serves as a role model for participants (Lox et al., 2006). They are viewed as a reliable source of health and fitness information. Instructors also have potential influence on exercise related thoughts, feelings, and behaviors. Displaying and encouraging positive and appropriate exercise attitudes affects participants (Bray, Gyurecsik, Martin Ginis & Culos-Reed, 2004; Bray Gyurecsik, Culos-Reed, Dawson & Martin, 2001; Carron & Hausenblas, 1998). The research by Bray and colleagues (2001) investigated the effect a third party (the instructor) has on class attendance. This study was conducted to determine the relationship of proxy efficacy, self-efficacy, and class attendance. Proxy efficacy is the confidence one has in a third party's ability to assist in achieving a specific goal. It is to relinquish of all or some of personal control to an intermediary party to help achieve a desired outcome (Bray et al. 2001). This is important to fitness classes where participants are relying on others to provide a structured workout. In this situation, participants do not have to worry about putting together a program for themselves so it is necessary for them to have confidence in their instructor's abilities. Therefore, it is important to determine participants' perceptions of instructors and preferred characteristics.

This particular study found that instructor's behaviors are associated with participants' self-efficacy and class attendance. The largest correlation observed was between instructor efficacy and exercise efficacy supporting the notion of proxy efficacy (Bray et al., 2004). The researchers found that confidence in the instructor's capabilities related to greater class attendance as well as the exercisers' confidence to complete a strenuous bout of exercise.

### *Qualities and Characteristics*

Certain instructor qualities and characteristics have greater correlation with group exercise participation rates and increased adherence than others (Bray, Gyurecsik, Martin Ginis & Culos-Reed, 2001; Bray et al., 2001; Martin & Fox, 2001; Fox, Rejeski & Gauvin, 2000). Employers also uphold standards for hiring effective leaders that maintain high participation rates. Leadership is one aspect of group exercise that influences long-term participation and enjoyment (Bray et al., 2004; Bray et al., 2001; Martin & Fox, 2001; Fox, Rejeski & Gauvin, 2000). Other influences important to group exercise are the environment, music selection, enthusiasm, punctuality and professionalism of the instructor, and safe and effectiveness of the class. Certain standards should be upheld when hiring fitness staff, however, little research has determined which qualities and characteristics are the most important to participants. Understanding which qualities affect long-term adherence can assist in the professional development of newcomers to the health and fitness industry.

Effective leadership is one important factor in group exercise settings. It has the ability to promote confidence in the instructor, increase self-efficacy, energy and enthusiasm, enjoyment of the class and intention to return as well as decrease the concern of embarrassment and promote new exercises and activities (Lox et al., 2006). Leadership style and group cohesion are two qualities that have been shown to impact enjoyment of physical activity and program adherence (Fox et al., 2000). In one particular study conducted by Fox et al. (2000), it was hypothesized that enjoyment of physical activity class would be highest when enhanced leadership style was combined with enhanced

group dynamics. Participants were randomly assigned to a two by two design with leadership style (enriched versus bland) and group dynamics (enriched versus bland). A single fitness instructor was trained to instruct class in both the enriched and bland leadership style as well as enriched group dynamic and bland group dynamic. The enriched leadership style provided social interaction, was pleasant and energetic. It involved engaging in conversation with the participants, positive reinforcement, giving specific instructions, ignoring mistakes and verbally rewarding effort. The bland leadership style avoided conversation, failed to follow up with praise, provided negative comments, gave vague instruction and verbally noting mistakes. Group dynamics was also manipulated by planting undergraduates within each of the classes to promote enriched or bland dynamics. The enriched group dynamics introduced themselves to other members, had casual interaction with others, were compliant with instructor's wishes, and gave positive remarks about the instructor. The bland group dynamics did not introduce themselves to other members or initiate interaction, was compliant with instructor's wishes but without enthusiasm, did not give encouragement or respond to questions that the leader directed toward the group. Results of this study indicated that a combination of enriched leadership style and enriched group dynamics produced the greatest enjoyment and intention to return to similar physical activity.

In the study discussed above (Fox et al., 2000), the effect of leadership style was examined independent of and in combination with group cohesion. Although results of the study were greatest when the two were combined, group cohesion has been shown to be influential independent of other factors (Carron, Widmeyer & Brawley, 1988; Spink &

Carron, 1994). Group cohesion is linked to numerous factors critical to the development and vitality of the group (Spink & Carron, 1994). Factors include communication, conformity, interactions, persistence and attendance of other group members (Widmeyer, Brawley & Carron, 1985). Attendance and adherence, specifically in group fitness classes, is largely affected by group cohesion (Carron et al., 1994).

Carron et al. (1994) conducted a study to determine the cohesion-adherence relationship as well as the degree of the relationship. It was determined that cohesion is highly related to adherence in different sport and physical activity groups, such as elite sports teams and fitness classes. The investigators divided the cohesion-adherence relationship into two studies. The first study's purpose was to identify if aspects of cohesiveness are related to adherence in sport and physical activity. In the second study, the degree to which the two are related was measured. Four samples were examined. The samples include fitness class adherers, fitness class non-adherers, elite sport adherers and elite sport non-adherers. Non-adherers were volunteers from a large university undergraduate class. Those that had left a fitness class or elite sport team within the past six months were asked to complete the questionnaire. The Group Environment Questionnaire was used to measure team cohesiveness. Modifications were made to the same questionnaire and used for the fitness class adherers and non-adherers. The questionnaire was given at the end of the competitive season for elite team sports or at the end of a six-week exercise class. Questionnaires were completed individually and anonymously.

The results of study one were similar for elite sport and fitness class adherers. Those

that maintained elite sport involvement were more personally attracted to the group's task and perceived the group as more integrated around social and task dimensions. Fitness class non-adherers were less personally attracted to the group's task and to the group as a social unit. According to the investigators, focus should be placed on developing the group as a whole or unit as well as encourage cohesive tasks. Study two was designed to determine the degree of cohesiveness and adherence behavior. Carron et al. (1994) found that the group as a whole influences its members to conform to established norms, to make sacrifices, and contribute to the group's effectiveness.

The authors conclude that it is important to encourage cohesiveness among participants to positively impact adherence. Implications of the study include greater adherence when the focus is on the group rather than the individual. Cohesion of the group has a powerful effect on its members relative to adherence. This is especially important when dealing with group exercise classes. In order increase the return rate, exercise leaders should find ways to incorporate cohesion among the members.

#### *Appearance and Attractiveness*

The role of the instructor along with qualities and characteristics are demonstrated to be influential in terms of participation and adherence to group exercise. However, limited research regarding appearance and attractiveness of the group exercise instructor has been conducted. Appearance and attractiveness have been shown to influence a variety of other areas. One area includes perceptions of competence (Jackson et al., 1995). A meta-analysis of physical attractiveness and intellectual competence was conducted. It was found that perceived attractiveness is related to perceived competence. Different

theoretical perspectives have been used to describe the relationship between attractiveness and intellectual competence including status generalization theory, implicit personality theory, and the expectancy theory (Jackson et al., 1995). With these three theories combined, the meta-analysis by Jackson et al. (1995), found that attractiveness is highly related to perceived competence and expectations are higher in males than females. Perceptions of attractiveness are stronger when less information about the person is known which supports the notion that first impressions have an important role in perceptions of competence. However, perceived competence and actual intelligence did not demonstrate a strong relationship. This meta-analysis revealed an insignificant relationship between attractiveness and actual competence but appearance has an important effect on first impressions.

Other studies support the notion that appearance affects perceptions of effectiveness of performance enhancement consultants and the female counselor (Lewis & Walsh, 1978; Lubker et al., 2005). Both of these studies confirmed that “looking the part” is important in building credibility. For example, those that dressed more professionally were perceived to do a better job than those that did not look as professional. These perceptions influenced judgments related to task completion as well as effectiveness in producing results. Lewis and Walsh (1978) found that initial attractiveness of the counselor was related to greater expectations in the ability to help in certain situations. The attractive female was perceived to be more competent, likable, friendly and more helpful when dealing with college situations such as drinking, drugs or speaking in groups.

Similarly, the appearance of the performance enhancement consultant was highly related to perceived effectiveness with the task at hand (Lubker et al., 2005). The female consultants were viewed as more friendly and approachable, whereas the males were associated with more sports knowledge. In this study, they found that clothing and build were more influential than gender and ethnicity. Athletes were more likely to seek information from those that were dressed professionally and had an athletic build. Those that demonstrated external cues such as an athletic build are perceived to have greater sport knowledge (Lubker et al., 2005). Knowing what other factors aside from the structure of a group fitness class and motivational techniques provides the opportunity to influence participation and adherence to group exercise classes.

Research has also found that appearance affects perceptions of leadership, student evaluations, and acceptance of health information and knowledge (Cherulnik, 1995; Dean et al., 2005; Hash, Munna, Vogel & Bason, 2003; Goebel & Cashen 1995; Riniolo et al., 2006). It is important for role models to practice what they preach in order to exhibit effective leadership. One particular study conducted by Dean et al. (2005), found that acceptance of health related knowledge was lower when coming from an “out-of-shape” person. There is strong support for physical fitness in physical educators. Those who exhibit poor health habits can negatively affect their students (Dean et al., 2005).

Likewise, small but significant differences in the way patients receive health advice from obese versus non-obese physicians were found (Hash et al., 2003). This study had higher confidence scores for receiving disease treatment information from a non-obese physician. Advice is more readily accepted when provided for by a health care



professional and even more accepted when the health care professional displays healthy lifestyle habits (Galuska, Will, Serdula & Ford, 1999; Nawaz, Adams & Katz, 2000). This is important relative to fitness professionals. Challenging stereotypes can have a positive impact on negative health and body image issues. However, research demonstrates that health related information is more widely accepted when coming from someone who displays certain characteristics rather than someone who is overweight or unfit.

### *Teacher and Professor Evaluations*

Not only has appearance been shown to be influential in the health and fitness industry and medical field, but it also has influence on teacher and professor ratings (Goebel & Cashen, 1979; Riniolo et al., 2006). The purpose of these studies was to determine whether attractiveness plays any significant role in teacher or professor evaluation. One study surveyed 150 students in grades 2, 5, 8, 11, and 13 using black and white photographs. Attractiveness had the dominant influence on ratings (Goebel & Cashen, 1979). Those with the lowest ratings were older unattractive males and middle-aged unattractive females. Multiple studies have been conducted in a variety of settings and all agree that attractiveness is highly related to first impressions independent of the task or situation to be performed (Goebel & Cashen, 1979; Riniolo et al., 2006).

A second study by Riniolo et al. (2006) concurred that a variety of factors influence teacher evaluations, to include attractiveness. This particular study used student evaluations from [www.ratemyprofessor.com](http://www.ratemyprofessor.com). They also obtained real student evaluations from four universities who had professors with a minimum of 25 responses from the

website. With that information they found that professors who were viewed as physically attractive had received better evaluations. This study points out that attractiveness is partially subjective and that personality characteristics also influence perception. They mentioned that clothing and status influence attractiveness rating as well. Limitations to this study include the inability to decipher how many times one particular person voted which could influence the outcome. Although a relationship was seen among attractiveness and evaluations, it is not causal. However, it is important to understand the influence appearance and attractiveness has on perceptions regarding perceived effectiveness, intelligence, and acceptance of health information. By identifying stereotypes, interventions to challenge them can be made (Rinolo et al., 2006).

### *Conclusion*

Group exercise is a major contributor for meeting recommendations for physical activity (Kennedy & Yoke, 2005). It provides the opportunity to achieve health and fitness benefits while interacting with others. Many contributing factors influence adherence to group exercise class including the role of the instructor. It is the instructor's responsibility to motivate and educate participants during the class as well as encourage them to attend classes on a regular basis in order to receive health and fitness benefits (Estabrooks & Munroe, 2004).

The current study is designed to determine which factors influence participation and adherence. Although many ideas that support a variety of factors, little research has been conducted to identify which are more influential to participants. Investigating participant's perceptions of their instructors will help identify preferred characteristics. In

doing so, health fitness professionals can tailor programs to meet the needs and demands of participants and ultimately impact adherence as well as their overall health.

## Chapter Three

### Methods

#### *Participants*

Participants recruited for this study were members of various fitness facilities in Tampa, FL including corporate, private/community, and college facilities. Members of each of the different facilities vary on age, fitness level, and desired goals, which will offer universal information. Sampling an assortment of facilities provides a broad range of participants that should improve the generalizability of the findings.

The total sample size for the survey was 166 participants. Of those recruited, 136 fully completed the survey, the rest of the surveys were either incomplete or filled out incorrectly. There were 112 females and 21 males who participated in the survey. Only female participants were included for analysis. Various sites were used to recruit participants, including corporate facilities (N=20; 17.7%), private and community centers (N=35; 30.9%), and a college recreation center (N=57; 51.3%). Mean age  $\pm$  standard deviation =  $27.6 \pm 10.3$  and BMI =  $23.8 \pm 6.0$ . Of the women who completed the survey, 61.9% were White, 18.9% Hispanic (Non-White), 9.7% African American/Black, 7.1% Asian/Pacific Islander, and 2.7% classified themselves as other.

Females who participated in this study also reported attending  $3.97 \pm 2.53$  classes per week. Classes attended include (N= average days attended per week) step ( $0.34 \pm .705$ ), kickboxing ( $0.47 \pm .977$ ), circuit training ( $0.14 \pm .551$ ), boot camp ( $0.04 \pm .207$ ),

dance aerobics ( $0.38 \pm .850$ ), indoor cycling ( $0.63 \pm 1.01$ ), cardio/tone combination class ( $0.58 \pm 1.05$ ), Pilates/yoga ( $0.50 \pm .849$ ), toning/strength class ( $0.54 \pm .976$ ), water aerobics ( $0.01 \pm .094$ ), Zumba ( $0.22 \pm .565$ ), or other ( $0.11 \pm .411$ ). Tables 3.1 and 3.2 provide demographic data for this study.

Of the female participants, 58% use group exercise along with other types of training, 97% plan group exercise into their schedule, 93% attend regular group exercise sessions, 75% prefer a combination of classes (e.g., Yoga and Spinning), and 71 % have no preference of gender of instructor. Figure 3.1 illustrates results for class preferences. Participants were asked to choose the class they attend most often and answer questions based on that particular class. Average years participating in the specific class was  $1.18 \pm 2.5$ .

### *Measurement*

The dependent variables measured in this study include exercise motivation, perceived exertion demonstrated during class, class attendance, willingness to accept health and fitness information, and perceived attractiveness. Independent variables measured included perceived body type of self and instructor, preferred body type of self and instructor, perceived attractiveness of the instructor, and instructional qualities. Sixteen instructor qualities and characteristics were combined into one single score.

The first section of the survey included the following demographic information: age, gender, height, weight and race, four questions identifying type of facility and classes, years of experience with group exercise classes and four questions identifying body type. A somatomorphic matrix was used to identify the participant's current and preferred body

type for self and instructor (See Appendix 1). The matrix is a 10 x 10 scale where the x-axis represents fatness from left to right and the y-axis represents muscularity from top to bottom. Essentially, the scale was split into four quadrants: low fat, low muscle; high fat, low muscle; low fat, high muscle; high fat, high muscle. Participants were asked to provide a letter, which corresponds with fatness and a number, which corresponds with muscularity to identify their current body type, preferred body type, instructor's current body type, and their preferred their instructor body type.

The second section included the Behavioral Regulation in Exercise Questionnaire (BREQ-2) (Mullan, Markland & Indeglew, 2004), which is designed to assess motivation for exercise (See Appendix 2). The BREQ-2 is comprised of 19 questions identifying motivation based on the Self-Determination Theory (Deci & Ryan, 1985). The questionnaire is a 5-point likert scale that establishes individuals' reasons for engaging in physical activity. The scale ranged from zero to four with one being not true for me to five being very true for me. The instrument is composed of five dimensions that reflect underlying motivation. The dimensions are amotivation, external regulation, integrated regulation, identified regulation, and intrinsic motivation. There are three to four questions pertaining to each of the subscales and can be found in Appendix 2. Items five, nine, 12, and 19 correspond with amotivation. Items one, six, 11, and 16 correspond with external regulation. Items two, seven, and 13 correspond with integrated regulation. Items three, eight, 14, and 17 correspond with identified regulation and items four, 10, 15, and 18 correspond with intrinsic motivation.

The third section included items related to instructional qualities and can be found

in Appendix 3. Items assessed instructor qualities by asking participants to rate how often their instructor carried out the following tasks: starting and ending on time, coming to class prepared, using good voice projection, proper tone, enunciating, appropriate music and attire, displaying professionalism, encouraging group cohesion, promoting a positive atmosphere, explaining proper technique, providing positive feedback, using simple cues and commands, greeting upon arrival, and knowing or using their name. The scale ranged from one to five, with one being never to five being always. The item that addressed instructor attractiveness asked participants the degree to which they agree with the statement that their instructor is physically attractive. The scale ranged from one to five, with one being strongly disagree to five being strongly agree. Part two of section three contained five single item questions relating to instructor physique and attractiveness as well as the participants motivation, effort, attendance, and willingness to accept health information from the instructor and can also be found in Appendix 3.

### *Procedures*

After receiving approval from the Institutional Review Board and obtaining permission from each of the facilities, the primary investigator distributed business cards and flyers to the facilities. Instructors were asked to promote the survey and hand out the cards at the end of each group exercise classes. The business cards had a web address to the survey, which was made available for three weeks on Surveymonkey.com. Participants were able to visit the website and complete the survey at their convenience. Flyers were also posted in the locker rooms and group exercise rooms of the facilities to promote the project. The primary investigator attended various classes at the corporate,

university and private/community facilities to offer paper and pencil versions of the survey. Information collected from the surveys was input daily by the primary investigator.

### *Statistical Analysis*

Data analysis was conducted using female participant responses only. The data analysis proceeded in three phases. Phase one included descriptive statistics on demographics including age, body mass index (BMI), race, type of facility, type of classes, and years of experience using group exercise. Phase two utilized dependent t-tests to determine differences between current and preferred fatness and muscularity. Data related to this analysis are expressed as means and standard deviations.

Phase three utilized correlation and regression analyses. Correlation analysis, using the Pearson product moment correlation coefficient was conducted to evaluate participants' perceptions of their exercise leader and appearance and attractiveness, adherence to the class, the degree of motivation, effort, and perceived credibility of the instructor. P-value for significance was set at 0.05. The first set of regression analyses were conducted using fatness and muscularity of the instructor as the predictor variable with the BREQ-2 and five single items as dependent variables. Cronbach alpha for the subscales along with means  $\pm$  SD are provided in Table 3.3. Alpha values were found to be within an acceptable range and actual values are reported in Table 3.3. These single items were the degree of motivation, level of effort, attendance, willingness to accept health and fitness information, and perceived attractiveness. The second set of analyses involved perceived attractiveness as the predictor variable and attendance as the



dependent variable. The third set of analyses used instructional quality as the predictor variable with BREQ-2 and single items as outcome variables. Means  $\pm$  SD for instructional quality is provided in Table 3.4.

Table 3.1

*Demographic Data*

Demographics	<u>N</u>	<u>Mean <math>\pm</math> SD</u>	<u>Percentage</u>
Age	112	27.67 $\pm$ 10.29	
BMI	112	23.74 $\pm$ 6.03	
Race	112		
African American/Black	10		9.70 %
Hispanic (Non-White)	21		18.9
White	69		61.9
Asian/Pacific Islander	7		7.1
Other	3		2.7
Facility	112		
Corporate	20		17.7
Private/Community	35		30.9
University	57		51.3
Years of Experience	112	3.50 $\pm$ 5.07	

Table 3.2

*Classes Attended Per Week*

<u>Class</u>	<u>Mean ± SD</u>
Classes Per Week	3.97 ± 2.53
Step	0.34 ± 0.71
Kickboxing	0.47 ± 0.98
Circuit Training	0.14 ± 0.55
Boot Camp	0.04 ± 0.20
Dance Aerobics	0.38 ± 0.85
Indoor Cycling	0.63 ± 1.01
Cardio/Tone Combination	0.58 ± 1.05
Pilates/Yoga	0.50 ± 0.85
Toning/Strength	0.54 ± 0.98
Water Aerobics	0.01 ± 0.09
Zumba	0.22 ± 0.57
Other	0.11 ± 0.41

Figure 3.1

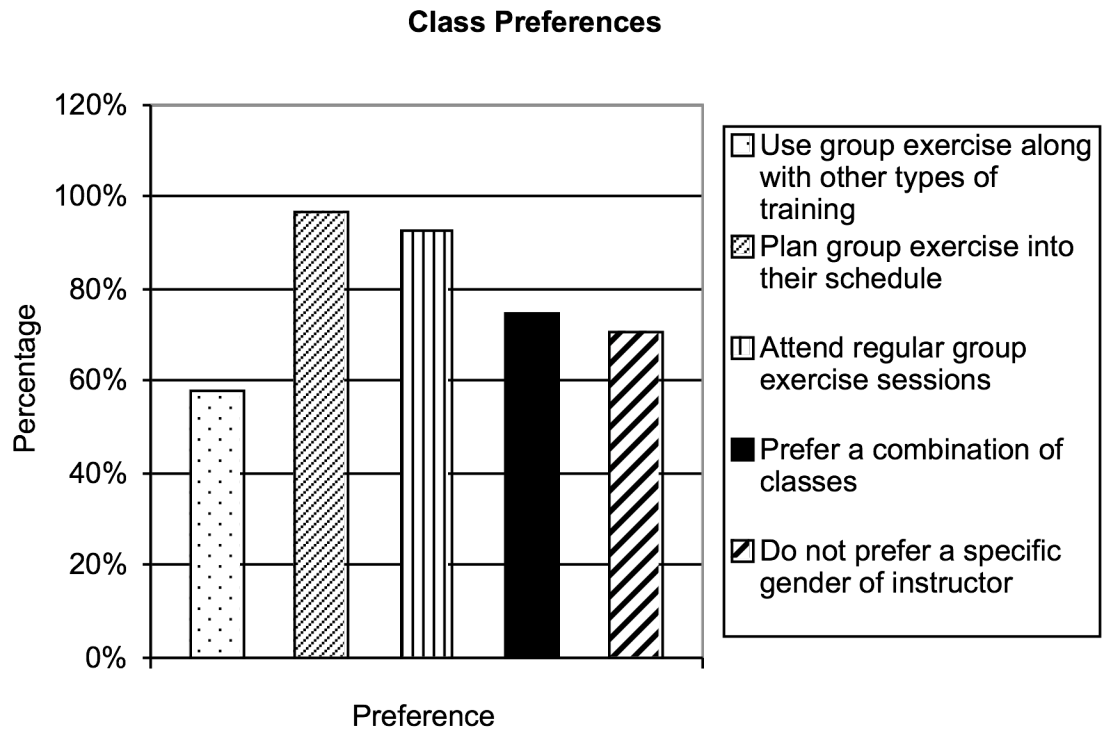


Table 3.3

*Mean Values for BREQ Subscales and Psychosocial Outcomes (N = 112)*

Variable	<u>Mean ± SD</u>	Cronbach <u>α</u>
BREQ-AM	0.14 ± 0.37	0.758
BREQ-ER	0.59 ± 0.74	0.800
BREQ-IT	2.16 ± 0.91	0.650
BREQ-ID	2.90 ± 0.65	0.664
BREQ-IM	3.31 ± 0.71	0.851
Motivation	4.59 ± 0.58	
Effort	4.57 ± 0.61	
Attendance	4.27 ± 0.87	
Accept Health Info	4.24 ± 1.03	
Perceived Attractiveness	4.02 ± 0.92	

Note. BREQ-AM is significantly greater than BREQ-ER, BREQ-ID and BREQ-IM at  $p < 0.01$  and significantly greater than BREQ-ER at  $p < 0.05$ . BREQ-ER is significantly greater than BREQ-IM at  $p < 0.01$  and BREQ-IT at  $p < 0.05$ . BREQ-IT is significantly greater than BREQ-ID at  $p < 0.01$ . BREQ-ID is significantly greater than BREQ-IM at  $p < 0.01$ .

Table 3.4

*Mean Values for Instructional Quality (N = 112)*

---

Variable	Mean $\pm$ SD
Start on time	4.53 $\pm$ 0.62
End on time	4.50 $\pm$ 0.63
Come Prepared	4.84 $\pm$ 0.39
Voice projection	4.86 $\pm$ 0.37
Proper tone	4.80 $\pm$ 0.53
Enunciate	4.68 $\pm$ 0.75
Use appropriate music	4.77 $\pm$ 0.59
Wear appropriate attire	4.86 $\pm$ 0.42
Display professionalism	4.88 $\pm$ 0.36
Encourage group cohesion	4.20 $\pm$ 1.15
Create positive atmosphere	4.84 $\pm$ 0.46
Explain technique	4.65 $\pm$ 0.73
Use positive feedback	4.69 $\pm$ 0.69
Use simple cues	4.75 $\pm$ 0.55
Greet upon arrival	4.63 $\pm$ 0.80
Use/know name	3.66 $\pm$ 1.53
Instructional quality	4.63 $\pm$ 0.66

---

## Chapter Four

### Results

#### *Current and Preferred Body Type*

Analyses based on the somatomorphic matrix revealed significant differences between participant current body type and preferred body type. Participants reported  $5.55 \pm 2.03$  for current body fatness and  $4.25 \pm 1.75$  for preferred fatness [ $t(1, 111) = 6.74, p < 0.01, ES = 0.68$ ]. Current rating for muscularity =  $2.92 \pm 1.88$ , while preferred muscularity =  $3.81 \pm 1.89$  [ $t(1, 111) = -6.21, p < 0.01, ES = -0.47$ ]. These responses indicate that their preferred body type was thinner and more muscular than their current body type. In contrast, no differences were observed between current instructor body type and preferred instructor body type. The current instructor body fatness =  $4.24 \pm 2.22$  and preferred instructor fatness =  $4.00 \pm 2.10$  [ $t(1, 111) = 1.56, p > 0.05, ES = 0.11$ ]. Current instructor muscularity =  $4.60 \pm 2.22$  and preferred muscularity =  $4.69 \pm 2.20$  [ $t(1, 110) = -0.543, p > 0.05, ES = -0.032$ ]. These data suggests participants do not prefer changes in fatness or muscularity in their instructor. Current and preferred body type data for both the participant and the instructor is provided in Table 4.1 and crosstabulation data is provided in Table 4.2.

#### *Correlations*

Correlation analyses were conducted between single item questions and body type of the instructor and characteristics of the instructor. This data is provided in Table 4.3.

The only significant correlation found relative to fatness and muscularity was between the current body fatness of the instructor and the desire to have a physique similar to that of the instructor ( $p < 0.05$ ). A moderate negative correlation exists between desiring a physique similar to the instructor and instructor fatness. This indicates that as instructor fatness increases, the desire of a physique similar to the instructor decreases. No significant correlations were found between instructor body type and motivation, effort, attendance, willingness to accept health and fitness information, perceived attractiveness or the decision to return to class ( $p > 0.05$ ). Motivation was significantly correlated ( $p < 0.05$ ) with coming prepared to class, good voice projection, enunciating, and appropriate music and attire. Effort was significantly correlated ( $p < 0.05$ ) with the use of good voice projection, appropriate attire, positive atmosphere, simple cues and commands and when greeted up arrival.

#### *Predictions of Psychosocial Outcomes From Fatness and Muscularity*

Multiple regression analyses were conducted using fatness and muscularity as the predictors and motivation by way of the BREQ-2 as the dependent variables. Body type of the instructor was not a significant predictor of amotivation [ $F(2, 108) = 0.708, p > 0.05$ ], external regulation [ $F(2, 108) = 0.380, p > 0.05$ ], integrated regulation [ $F(2, 108) = 1.441, p > 0.05$ ], identified regulation [ $F(2, 108) = 1.018, p > 0.05$ ], or intrinsic motivation [ $F(2, 108) = 2.058, p > 0.05$ ]. These data are provided in Tables 4.4 through 4.8. Motivation to exercise is independent from body type of the instructor. That is, body type is not predictive of motivation to attend group exercise classes.

A second set of regression analyses were also conducted using fatness and

muscularity as the predictors and five single items as dependent variables. These data are provided in Tables 4.9 through 4.13. Results of the analyses indicate that body type of the instructor does not predict motivation for exercise as measured by the single item indicator [ $F(2, 108) = 1.475, p > 0.05$ ]. These results mirror the findings from analyses related to the BREQ-2. Additionally, no significant predictions can be made for effort [ $F(2, 108) = 1.155, p > 0.05$ ], attendance [ $F(2, 108) = 0.421, p > 0.05$ ], willingness to accept health information [ $F(2, 108) = 0.053, p > 0.05$ ], or perceived attractiveness [ $F(2, 108) = 0.151, p > 0.05$ ]. Nonetheless, attendance was significantly predicted by perceived attractiveness [ $F(1, 110) = 9.850, p < 0.05$ ], as provided in Tables 4.14. Greater attendance exists for classes where the instructor is perceived as physically attractive.

#### *Predictions of Psychosocial Outcomes From Instructional Quality*

Regression analyses were performed using instructional quality as the predictor variable and the BREQ as dependent variables. External motivation [ $F(1, 110) = 8.229; p < 0.05$ ] was the only significant outcome variable predicted by instructional quality. The other types of motivation including amotivation [ $F(1, 110) = 0.022; p > 0.05$ ], integrated regulation [ $F(1, 110) = 0.0285; p > 0.05$ ], identified regulation [ $F(1, 110) = 0.256; p > 0.05$ ], and intrinsic motivation [ $F(1, 110) = 2.728; p > 0.05$ ] were not significantly predicted by instructional quality, as presented in Table 4.15 through 4.19.

Finally, regression analyses were performed using instruction quality as the predictor variable and seven single items as dependent variables. Results indicate instructional quality influence motivation [ $F(1, 110) = 11.827; p < 0.01$ ]. Furthermore, instructional quality is a significant predictor for effort [ $F(1, 110) = 7.471; p < 0.01$ ],



willingness to accept health information [F (1, 110) = 4.453; p < 0.05], and perceived attractiveness [F (1, 110) = 12.030; p < 0.01]. However, instructional quality was not a significant predictor of attendance [F (1, 110) = 2.118; p > 0.05]. These results are provided in Table 4.20 through 4.24.

Table 4.1

***Current and Preferred Fatness and Muscularity for Self and Instructor***

	<u>Current (Mean ± SD)</u>	<u>Preferred (Mean ± SD)</u>	<u>Sig.</u>
<b>Self</b>			
Fatness	5.55 ± 2.03	4.25 ± 1.75	0.001
Muscularity	2.92 ± 1.88	3.81 ± 1.89	0.001
<b>Instructor</b>			
Fatness	4.24 ± 2.22	4.00 ± 2.10	0.121
Muscularity	4.60 ± 2.22	4.69 ± 2.20	0.589

Table 4.2

*Crosstabulation for Instructor Fatness and Muscularity*

---

		Fatness										Total	
		0	1	2	3	4	5	6	7	8	9		10
Muscularity	1	1	1	2	1	1	3	1	1	2	0	2	14
	2	0	1	3	3	1	2	1	0	0	0	0	10
	3	0	2	4	9	2	3	2	2	1	1	0	26
	4	0	0	1	1	5	2	3	1	3	0	0	16
	5	0	0	2	6	1	5	4	4	0	0	0	22
	6	0	0	0	2	0	3	1	0	0	1	0	7
	7	0	0	0	2	3	0	3	0	1	0	0	9
	8	0	0	0	0	0	0	0	0	0	1	0	1
	9	0	0	0	0	0	1	1	0	2	0	0	4
	10	0	0	0	0	0	1	0	0	0	0	0	1
Total		1	4	12	24	13	20	16	8	9	3	2	112

---

Table 4.3

*Instructor, Instructional Qualities and Psychosocial Outcome Correlations*

Variable	Psychosocial Outcome						
	Motivation	Effort	Attendance	HealthInfo	Attractive	PhysSim†	PhysInflu††
Fatness	-0.091	-0.069	-0.095	0.053	0.046	-0.271	-0.034
Muscularity	0.067	-0.042	-0.018	0.070	0.021	0.104	0.080
Start	0.082	0.031	0.020	-0.046	0.127	**0.259	0.027
End	0.099	0.070	-0.049	0.048	0.078	0.133	-0.068
Come Prepared	**0.262	*0.236	0.101	0.119	0.158	0.146	0.077
Voice Projection	**0.266	**0.437	0.173	0.089	*0.190	0.043	-0.035
Proper Tone	0.145	*0.209	0.037	-0.011	**0.264	0.019	-0.014
Enunciate	**0.254	*0.188	0.119	0.089	**0.348	**0.275	*0.203
Music	**0.222	0.122	0.053	0.034	*0.242	0.131	0.024
Attire	**0.238	**0.250	0.081	-0.024	0.169	0.183	0.140
Professional	0.098	0.041	-0.094	0.033	0.143	0.122	0.135
Cohesion	0.123	*0.211	0.137	*0.211	0.168	0.104	-0.011
Atmosphere	*0.191	**0.300	*0.200	0.178	*0.350	**0.259	0.019
Explain Technique	0.149	0.127	0.006	-0.055	0.103	0.158	0.082
Positive Feedback	*0.196	*0.215	0.081	0.056	0.166	0.115	0.124
Use Simple Cues	*0.186	**0.406	0.104	0.060	*0.224	0.174	-0.063
Greet	*0.230	**0.408	0.120	*0.188	**0.268	0.041	0.034
Use Name	0.156	0.170	0.082	**0.325	0.036	0.087	-0.060

Note. \* $p < 0.05$  \*\* $p < 0.01$

† Desire a physique similar to that of the instructor

†† Instructor's physique is influential in their decision to return to class

Table 4.4

*Multiple Regression Analysis of Amotivation on Body Type*

Predictor	<u>Beta</u>	<u>Std. Error</u>	$\beta$	<u>Sig.</u>
(Constant)	0.100	0.031		
Fatness	0.079	0.017	0.014	0.417
Muscularity	0.067	0.017	0.012	0.494

Note.  $R = 0.013$ ;  $F = 0.708$

Table 4.5

*Multiple Regression Analysis of External Motivation on Body Type*

Predictor	<u>Beta</u>	<u>Std Error.</u>	$\beta$	<u>Sig.</u>
(Constant)	0.201	0.744		
Fatness	-0.022	0.035	-0.008	0.819
Muscularity	-0.076	0.034	-0.026	0.438

Note.  $R = 0.007$ ;  $F = 0.380$

Table 4.6

*Multiple Regression Analysis of Integrated Motivation on Body Type*

---

Predictor	<u>Beta</u>	<u>Std Error.</u>	<u>β</u>	<u>Sig.</u>
(Constant)	0.246	2.121		
Fatness	-0.125	0.042	-0.055	0.199
Muscularity	0.130	0.041	0.055	0.184

---

Note. R = 0.026; F = 1.441

Table 4.7

*Multiple Regression Analysis of Identified Motivation on Body Type*

---

Predictor	<u>Beta</u>	<u>Std Error.</u>	<u>β</u>	<u>Sig.</u>
(Constant)	0.176	2.824		
Fatness	-0.085	0.030	-0.026	0.384
Muscularity	0.125	0.029	0.038	0.203

---

Note. R = 0.018; F = 1.018

Table 4.8

*Multiple Regression Analysis of Intrinsic Motivation on Body Type*

---

Predictor	<u>Beta</u>	<u>Std Error.</u>	$\beta$	<u>Sig.</u>
(Constant)	0.190	3.001		
Fatness	0.009	0.033	0.003	0.929
Muscularity	0.190	0.032	0.063	0.052

---

Note.  $R = 0.037$ ;  $F = 2.058$

Table 4.9

*Multiple Regression Analysis of Motivation on Body Type*

---

Predictor	<u>Beta</u>	<u>Std Error.</u>	$\beta$	<u>Sig.</u>
(Constant)	0.156	4.720		
Fatness	-0.166	0.027	-0.046	0.089
Muscularity	0.040	0.026	0.011	0.682

---

Note.  $R = 0.027$ ;  $F = 1.475$

Table 4.10

*Multiple Regression Analysis of Effort on Body Type*

---

Predictor	<u>Beta</u>	<u>Std Error.</u>	<u>β</u>	<u>Sig.</u>
(Constant)	0.165	4.763		
Fatness	-0.137	0.028	-0.040	0.160
Muscularity	-0.025	0.028	-0.007	0.794

---

Note. R = 0.021; F = 1.155

Table 4.11

*Multiple Regression Analysis of Attendance on Body Type*

---

Predictor	<u>Beta</u>	<u>Std Error.</u>	<u>β</u>	<u>Sig.</u>
(Constant)	0.237	4.458		
Fatness	-0.760	0.041	-0.032	0.441
Muscularity	-0.032	0.040	-0.013	0.743

---

Note. R = 0.008; F = 0.421

Table 4.12

*Multiple Regression Analysis of Willingness to Accept Health Information on Body Type*

---

Predictor	<u>Beta</u>	<u>Std Error.</u>	$\beta$	<u>Sig.</u>
(Constant)	0.282	4.149		
Fatness	0.014	0.048	0.007	0.888
Muscularity	0.026	0.047	0.012	0.795

---

Note.  $R = 0.001$ ;  $F = 0.053$

Table 4.13

*Multiple Regression Analysis of Perceived Attractiveness on Body Type*

---

Predictor	<u>Beta</u>	<u>Std Error.</u>	$\beta$	<u>Sig.</u>
(Constant)	0.251	4.015		
Fatness	0.045	0.043	0.020	0.648
Muscularity	-0.038	0.042	-0.016	0.699

---

Note.  $R = 0.003$ ;  $F = 0.151$



Table 4.14

*Regression Analysis of Attendance on Perceived Attractiveness*

---

Predictor	<u>Beta</u>	<u>Std Error.</u>	<u>β</u>	<u>Sig.</u>
(Constant)	0.356	3.179		
Attractiveness	0.287	0.086	0.271	0.002

---

Note. R = 0.082; F = 9.850

Table 4.15

*Regression Analysis of Amotivation on Instructional Quality*

---

Predictor	<u>Beta</u>	<u>Std Error.</u>	<u>β</u>	<u>Sig.</u>
(Constant)	0.444	0.075		
Instructional Quality	0.014	0.006	0.001	0.883

---

Note. R = 0.000; F = 0.022

Table 4.16

*Regression Analysis of External Motivation on Instructional Quality*

---

Predictor	<u>Beta</u>	<u>Std Error.</u>	<u>β</u>	<u>Sig.</u>
(Constant)	0.851	3.023		
Instructional Quality	-0.264	0.011	-0.033	0.005

---

Note. R = 0.070; F = 8.229

Table 4.17

*Regression Analysis of Integrated Regulation on Instructional Quality*

---

Predictor	<u>Beta</u>	<u>Std Error.</u>	<u>β</u>	<u>Sig.</u>
(Constant)	1.090	2.741		
Instructional Quality	-0.051	0.015	-0.008	0.595

---

Note. R = 0.003; F = 0.285

Table 4.18

*Regression Analysis of Identified Regulation on Instructional Quality*

---

Predictor	<u>Beta</u>	<u>Std Error.</u>	<u>β</u>	<u>Sig.</u>
(Constant)	0.777	3.283		
Instructional Quality	-0.048	0.010	-0.005	0.614

---

Note. R = 0.002; F = 0.256

Table 4.19

*Regression Analysis of Intrinsic Motivation on Instructional Quality*

---

Predictor	<u>Beta</u>	<u>Std Error.</u>	<u>β</u>	<u>Sig.</u>
(Constant)	0.084	1.926		
Instructional Quality	0.156	0.011	0.019	0.101

---

Note. R = 0.024; F = 2.728

Table 4.20

*Regression Analysis of Motivation on Instructional Quality*

---

Predictor	<u>Beta</u>	<u>Std Error.</u>	<u>β</u>	<u>Sig.</u>
(Constant)	0.658	2.333		
Instructional Quality	0.312	0.009	0.030	0.001

---

Note. R = 0.097; F = 11.827

Table 4.21

*Regression Analysis of Effort on Instructional Quality*

---

Predictor	<u>Beta</u>	<u>Std Error.</u>	<u>β</u>	<u>Sig.</u>
(Constant)	0.680	1.739		
Instructional Quality	0.370	0.009	0.038	0.000

---

Note. R = 0.137; F = 17.471

Table 4.22

*Regression Analysis of Attendance on Instructional Quality*

---

Predictor	<u>Beta</u>	<u>Std Error.</u>	<u>β</u>	<u>Sig.</u>
(Constant)	1.032	2.771		
Instructional Quality	0.137	0.014	0.020	0.148

---

Note. R = 0.019; F = 2.118

Table 4.23

*Regression Analysis of Willingness to Accept Health Information on Instructional Quality*

---

Predictor	<u>Beta</u>	<u>Std Error.</u>	<u>β</u>	<u>Sig.</u>
(Constant)	1.213	1.689		
Instructional Quality	0.197	0.016	0.034	0.037

---

Note. R = 0.039; F = 4.453

Table 4.24

*Regression Analysis of Perceived Attractiveness on Instructional Quality*

---

Predictor	<u>Beta</u>	<u>Std Error.</u>	$\beta$	<u>Sig.</u>
(Constant)	1.046	0.400		
Instructional Quality	0.314	0.014	0.049	0.001

---

Note.  $R = 0.099$ ;  $F = 12.030$

## Chapter Five

### Discussion

#### *Introduction*

The purpose of this study was to examine the perceptions of group exercise participants with respect to the body type, appearance, and attractiveness of their group exercise leader. Hypotheses were tested using paired t-tests, correlations, multiple regressions and simple regressions. It was hypothesized that motivation, effort, attendance, and willingness to accept health and fitness information would be impacted by body type, appearance, and perceived attractiveness of the instructor. Additionally, it was hypothesized that qualities and characteristics of the exercise leader would predict behavioral outcomes.

#### *Preferences in Fatness and Muscularity*

Significant differences were found between participant current body type and preferred body type. Most of the participants reported medium fatness, not under or overweight, with relatively low musculature. However, their preferred body type was less fat with slightly higher muscle. There was a greater difference between ideal fatness than muscularity, but preferences between current and ideal body type were clear. The participants prefer to be less fat and more muscular. In contrast, there were no significant differences between current instructor body type and preferred instructor body type. Participants reported similar values for both current and preferred body type of the

instructor. This may indicate that group exercisers are content with their instructor body type or may not have a preference at all. It may be that since the instructor is less fat and more muscular compared to the participant, they are satisfied with the instructor's body type. Participant's preferred body type was very similar to that of the current instructor body type, indicating their instructor was thinner and more muscular and they desired to have a physique similar to that of the instructor. However, if the participants were thinner or more muscular, they might prefer their instructor's physique to be different.

Additionally, variability of instructor body type was low. All of the instructors had similar low fat moderate muscle body type. Had there been more variability in instructor body type, preferences may have differed.

One similar study involving group exercise participants supports these outcomes (Evans, Cotter & Roy, 2005). The researchers did not find significant preferences for instructor body type. Using a picture scale, participants were asked to identify their preferred instructor body type. Overall, they chose a thinner figure. However, this study utilized a one-dimensional fatness scale to identify body type, whereas the current study used a two dimensional scale representing fatness and muscularity. The authors suggested the identification of a preferred thinner instructor could be interpreted as preference for a more "fit" or leaner instructor. Though the current study targeted both muscularity and fat, no differences were found between current and preferred instructor body type.

#### *Relationships Among Body Type, Instructional Qualities, and Psychosocial Outcomes*

Contrary to the hypotheses, preferred fatness and muscularity of the instructor were not related with many of the psychosocial outcomes. Significant relationships were not



observed between preferred fatness or muscularity of the instructor and the single items. Nevertheless, some significant relationships were established between certain qualities, characteristics, and single items. Specifically, the single items related to motivation, effort, and perceived attractiveness were correlated with many different qualities and characteristics. Participant's level of motivation and effort are higher when instructors come prepared to class, use appropriate music, use good voice projection, enunciate, and provide simple cues or commands. Naturally, when the instructor is prepared and creates a class that is easy to follow, participants are more likely to be enthused, increasing their level of motivation and effort. Both motivation and effort were also correlated with appropriate attire, positive feedback, and a positive atmosphere. It is essential to create a healthy environment such as refraining from clothing that is too revealing or sloppy and by using music with a positive message. Creating a positive atmosphere also includes correcting and recommending alignment changes in a polite and non-threatening way (Kennedy & Yoke, 2005). Communication is an important skill in motivating participants. One example involves using clear simple cues while providing positive feedback. Another example of good communication is learning and using their name. Getting to know the participants and helping them reach their exercise goals creates a positive environment.

Group cohesion was also related to effort. Promoting cohesion among the group has a powerful effect. By structuring some class sessions to have participants work in pairs or groups, enhances their sense of relatedness which may affect effort. Working in pairs may encourage participants to work harder. Although the present study did not find

significant relationships between group cohesion and attendance, Spink & Carron (1994) found that participant's perceptions of cohesiveness plays an important role in adherence. Working in pairs or groups within the exercise class provides camaraderie among the members. Cohesiveness contributes to the development, maintenance, and accomplishment of the group's tasks and goals (Carron et al., 1988). However, in the present study attendance was found to be a reflection of a factor other than group cohesion. The current study found attendance to be associated with perceived attractiveness and not as a result of instructional quality or body type.

#### *Psychosocial Outcomes Related to Fatness and Muscularity*

Fatness and muscularity were not predictive of motivation as measured by the BREQ-2. Deci and Ryan (1985) proposed that motivation progresses along a continuum. According to the theory, motivation is categorized into amotivation, external regulation, integrated regulation, identified regulation, and intrinsic motivation. As one moves up along the continuum, self-determination is increased, and thus adherence to exercise is predicted to increase. Essentially, the more healthy forms of motivation are associated with identified and intrinsic motivation. Motives for these two types consist of receiving health benefits and pure enjoyment of the activity. On the other hand, amotivation is associated with lack of motivation. External regulation is related to participation in order to avoid feelings of guilt or shame and integrated regulation is associated with participation because of pressure from a spouse or family member.

The results of this study indicate that exercise participants of this sample are primarily motivated to exercise by intrinsic reasons. This finding generally suggests that

the participants derived enjoyment and pleasure through participation in the activity itself and that external motivation were less significant. This data indirectly supports the finding that body type of the instructor was not influential to their motivation. The participants value the activity, regardless of fatness or muscularity of the instructor. However, if the participants were motivated externally or by integrated regulation, fatness and muscularity might have been a strong predictor since appearance is associated with external types of motivation (Thogersen-Ntoumanis & Ntoumanis, 2006). Likewise, fatness and muscularity were not strong predictors for the single item motivation, which also indirectly support the results from the BREQ-2. Participants of this study appreciate the benefits that group exercise and physical activity provide and were generally less focused on forms of motivation that are less desirable such as body type of the instructor.

Fatness and muscularity of the instructor were used to predict effort, attendance, willingness to accept health information, and perceived attractiveness. Similar to motivation, fatness and muscularity were not predictors of these items. On the surface, this finding might be unexpected. However, the results associated with the BREQ-2 do suggest that these participants have high self-determination and it is probable that they will exert equal effort during their classes regardless of instructor body type. Those with low self-determination might use instructor body type as motivation and thus exert more effort during classes. These highly motivated exercisers appreciate the value group classes provide and work hard to achieve their goal. In this study, the amount of effort exerted is not dependent upon fatness or muscularity of the instructor.

Likewise, it can be expected that the group exercise participants will attend regular

exercise sessions without influence of instructor body type. Participants reported using group exercise along with other modes of training, plan group exercise into their schedule and use it regularly. They desire to be less fat and more muscular, which could serve as their driving force in attending group exercise classes. Since the participants appreciate the activity and value the health benefits, body type of the instructor would not be expected to influence attendance. In this study, instructor fatness and muscularity is not related to regular attendance of group exercise classes.

Surprisingly, willingness to accept health information was not predicted by fatness or muscularity of the instructor. Hash et al. (2002) found that patient's receptiveness to health advice was significantly greater coming from non-overweight physicians than from overweight physicians. Information coming from those who appear to practice healthy behaviors is more likely to result in behavior change in the patients. A different study conducted by Abramson, Stein, Schauffele, Frates & Rogan (1999) surveyed physicians on their current exercise habits and counseling practices. These researchers found that physicians who participate in physical activity are more likely to counsel and encourage their patients to be active. Furthermore, physicians that reported to counsel their patients on physical activity also reported to have better compliance. Thus, it is unexpected that willingness to accept health and fitness information is independent of fatness or muscularity of the instructor. Differences between these findings could be a result of differences between physicians and instructors.

Perhaps participants do not view their exercise leader as educators. For example, patients visit their physicians to specifically discuss their health and seek information.

Group exercise participants typically attend classes to work out rather than to receive health advice. Differences between the two physician studies and the current study may be attributed to the fact that participants do not view their instructors as educators but primarily as exercise leaders.

Another important finding from Abramson et al. (1999) was that physicians did not recommend duration or intensity according to the US Surgeon General's guidelines. The researchers who conducted this study stated that the vast majority of the population rely on physicians for recommendations on physical activity. It is not surprising that people are unsure what to believe when they hear conflicting recommendations regarding physical activity. The researchers support improving physical activity education among physicians. Additionally, whether group exercise leaders are viewed educators or not, it is still important for them to encourage regular physical activity sessions according to the US Surgeon General's recommendations.

Interestingly, perceived attractiveness strongly predicted attendance. Research shows that perceived attractiveness is associated with a wide range of outcomes. These outcomes include social competence, greater academic potential by teachers, persuasive communication, as well as professor and teacher ratings (Eagly, Ashmore, Mackijani & Longo, 1991; Ritts, Patterson, & Tubbs, 1992; Chaiken, 1979; and Rinolo et al., 2006). The study conducted by Rinolo et al. (2006) utilized [www.ratemyprofessor.com](http://www.ratemyprofessor.com) to examine whether or not teachers were rated as attractive or not. The researchers obtained actual evaluations of the teachers by the students and found that the more attractive teachers had higher evaluations. Implications from the current study support that

perceived attractiveness predicts many outcomes including attendance. However, it is unclear how participants interpreted “attractiveness.” Although the question specifically asked about physical attractiveness, perceptions of that could be influenced by other factors such as personality. We do not know whether they based their responses on facial appearance, bodily appearance, or how well “put together” the instructor came across. Even though attendance was highly related to perceived attractiveness, perceived attractiveness was related to a variety of instructional qualities, which may be an underlying factor in attendance, even if the results did not directly support that.

#### *Psychosocial Outcomes from Instructional Qualities*

Although fatness and muscularity of the instructor were not strong predictors of psychosocial outcomes of participating in group exercise classes, instructional quality was a strong predictor for some of these same outcomes. Sixteen different characteristics were combined into one score and used to predict motivation, both as a single item and as identified through the BREQ-2. Other dependent variables included effort, willingness to accept health information, and perceived attractiveness. The only outcome not influenced by instructional quality was attendance.

When using instructional quality as the predictor for motivation as defined by the BREQ-2, the only type of motivation predicted was external regulation. External regulation can be described as participation to avoid feelings of guilt or shame. This type of motivation is associated with low adherence, low self-determination, and is typically seen in novice exercisers. They have not developed a sense of appreciation for the benefits of physical activity. It is not surprising that those who are externally motivated

are influenced by positive characteristics of their instructor. Additionally, instructional qualities would not be expected to predict outcomes associated with intrinsically motivated participants since they already find pleasure and enjoyment with the activity.

Motivation, as a single item was significantly related to instructional quality. Instructional qualities include explaining proper technique, providing positive feedback and creating a positive atmosphere. When instructors create a positive environment, motivation and effort are high. Not only are participants going to be motivated, they will exert high amounts of effort during their exercise classes. Instructional quality is not only predictive of motivation and effort, but willingness to accept health and fitness information as well.

### *Limitations*

Limitations to the study include a small sample size and failure of the instrument to perform as expected. Additionally, the total sample size was lower than anticipated. Had the sample size been larger, significant differences might have been seen, specifically relating to some of the regression analyses with motivation. A limited number of the regression analyses approached significance and likely would have been significant had the sample size been larger. However, it should be noted that the associated correlations were modest.

The instrument was perhaps the greatest limitation. Many of the surveys had to be excluded because they were incomplete or filled out improperly. Of those that were filled out correctly, participants may have had difficulty distinguishing the representations of the matrix. Differences between the figures were so slight that people may have had some

difficulty in selecting the figure that most closely represented themselves and their group exercise instructor. Another difficulty relating to the scale was the lower body of the images. In comparison to the upper body, the clarity and image quality of the lower part was questionable and may have limited the ability of the participants to provide reliable responses.

### *Conclusions*

The following conclusions were made based on the study's findings:

1. No significant differences were found between current and preferred instructor fatness and muscularity.
2. Preferred instructor fatness and muscularity of the instructor were not associated with motivation, effort, willingness to accept health and fitness information or attendance.
3. Attendance is associated with perceived attractiveness.
4. Instructional quality is associated with motivation, effort, willingness to accept health information, and perceived attractiveness, but not attendance.

### *Implications for Practitioners*

Findings from the current study indicate that fatness and muscularity of the instructor does not have a large influence on motivation, effort, attendance, or willingness to accept health and fitness information or perceived attractiveness. However, attendance was highly correlated with perceived attractiveness. Measurement for attractiveness was a single item, where participants were asked if they perceived their instructor as physically attractive. The limitation to this question pertains to the interpretation. Some may judge



based on facial qualities, others may base it on body alone, or others may incorporate how “put together” the instructor is. Regardless, this piece of information should not be used when hiring and firing instructors. The purpose of that question in the research design was to identify if there are stereotypes associated with group exercise instructors, and if so, what can be done to combat those stereotypes. Although perceived attractiveness was highly related to attendance, even more, instructional qualities were associated with regular attendance and psychosocial outcomes of participating in group exercise.

Though instructors should have the freedom to design unique exercise classes, general guidelines should be applied to all classes, regardless of the format or instructor. Kennedy & Yoke (2005) address many important elements to incorporate in a group exercise class, not only pertaining to class structure and format, but their secondary roles as well. Instructors serve as role models and motivators as well. Group exercise leaders have the responsibility to create and promote healthy exercise attitudes, teach proper technique, and encourage regular physical activity participation (Kennedy & Yoke, 2005). It is important to focus on these elements in the professional development of instructors. Not only is it important that they understand elements of a warm up, but effective communication is also key.

Results from this study did not find body type to be influential. Instead, instructor qualities were identified as more important. It is encouraging to know that group exercise participants do not attend classes based on superficial motives such as body type, but rather the instructional quality is the driving force. On the other hand, attractiveness was

significantly related to higher attendance. Though this one result was significant, other less superficial factors were significant and perhaps more important.

*Summary*

Contrary to other areas of study, results of this research indicate that body type of the instructor does not influence group exercise participation. Although appearance and body type have been found to influence teacher ratings, perceived competence, and willingness to accept health information, the current study did not support those findings. Group exercise participation is more associated with qualities and characteristics that instructors possess. However, additional research using a more comprehensible instrument might result in a different outcome.

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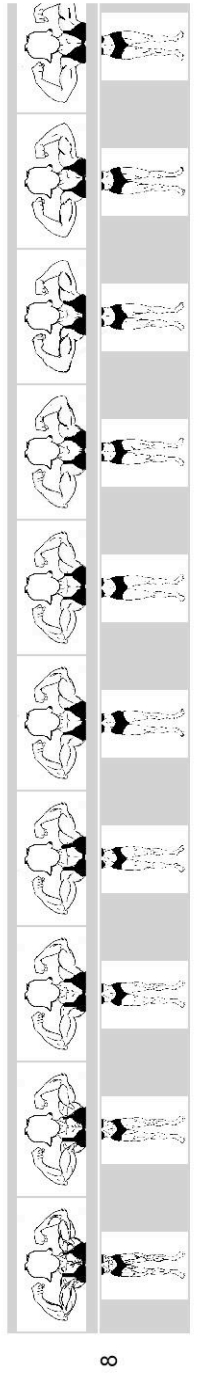
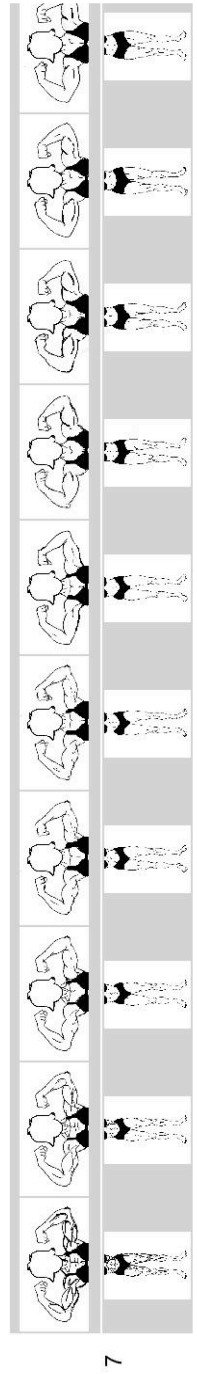
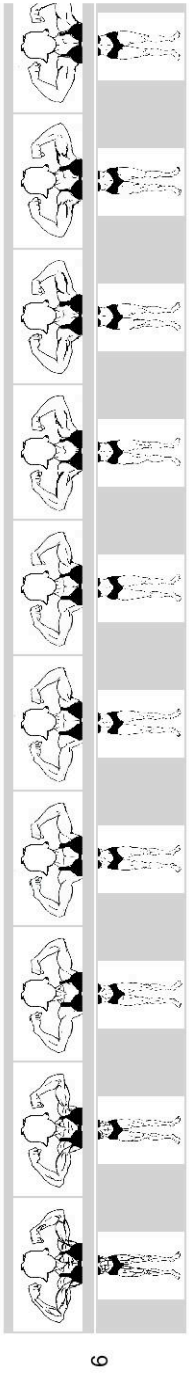
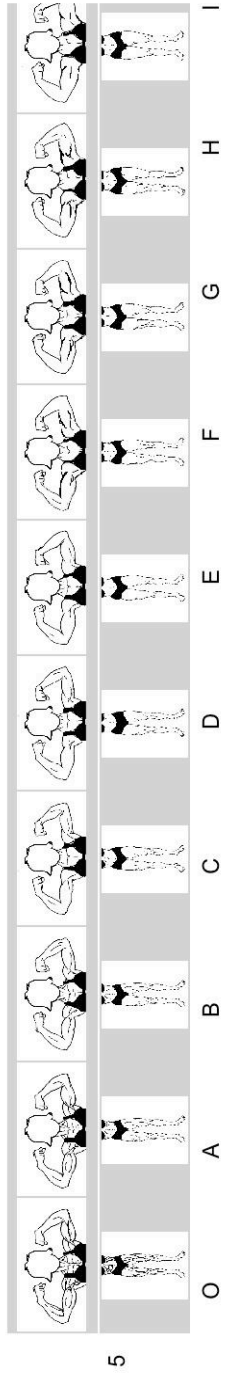
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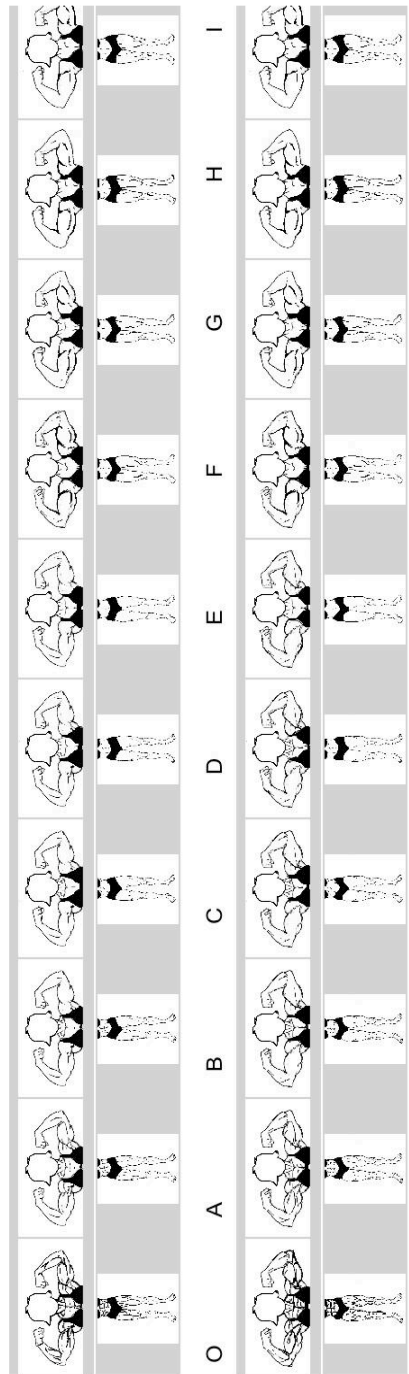
## Appendices

Appendix I – Somatomorphic Matrix

1	
2	
3	
4	







9

10

Appendix 2 – Behavioral Regulation for Exercise Questionnaire (BREQ-2)

**Section II**

We are interested in the reasons underlying peoples’ decisions to engage, or not engage in physical exercise. Using the scale below, please indicate to what extent each of the following items is true for you. Please note that there are no right or wrong answers and no trick questions. We simply want to know how you personally feel about exercise. Your responses will be held in confidence and only used for our research purposes.

		NOT TRUE FOR ME		SOMETIMES TRUE FOR ME		VERY TRUE FOR ME
<b>1</b>	I exercise because other people say I should	<b>0</b>	<b>1</b>	<b>2</b>	<b>3</b>	<b>4</b>
<b>2</b>	I feel guilty when I don’t exercise	<b>0</b>	<b>1</b>	<b>2</b>	<b>3</b>	<b>4</b>
<b>3</b>	I value the benefits of exercise	<b>0</b>	<b>1</b>	<b>2</b>	<b>3</b>	<b>4</b>
<b>4</b>	I exercise because it’s fun	<b>0</b>	<b>1</b>	<b>2</b>	<b>3</b>	<b>4</b>
<b>5</b>	I don’t see why I should have to exercise	<b>0</b>	<b>1</b>	<b>2</b>	<b>3</b>	<b>4</b>
<b>6</b>	I take part in exercise because my friends/family/partner say I should	<b>0</b>	<b>1</b>	<b>2</b>	<b>3</b>	<b>4</b>
<b>7</b>	I feel ashamed when I miss an exercise session	<b>0</b>	<b>1</b>	<b>2</b>	<b>3</b>	<b>4</b>
<b>8</b>	It’s important to me to exercise regularly	<b>0</b>	<b>1</b>	<b>2</b>	<b>3</b>	<b>4</b>
<b>9</b>	I can’t see why I should bother exercising	<b>0</b>	<b>1</b>	<b>2</b>	<b>3</b>	<b>4</b>
<b>10</b>	I enjoy my exercise sessions	<b>0</b>	<b>1</b>	<b>2</b>	<b>3</b>	<b>4</b>
<b>11</b>	I exercise because others will not be pleased with me if I don’t	<b>0</b>	<b>1</b>	<b>2</b>	<b>3</b>	<b>4</b>
<b>12</b>	I don’t see the point in exercising	<b>0</b>	<b>1</b>	<b>2</b>	<b>3</b>	<b>4</b>
<b>13</b>	I feel like a failure when I haven’t exercised in a while	<b>0</b>	<b>1</b>	<b>2</b>	<b>3</b>	<b>4</b>
<b>14</b>	I think it is important to make the effort to exercise regularly	<b>0</b>	<b>1</b>	<b>2</b>	<b>3</b>	<b>4</b>
<b>15</b>	I find exercise a pleasurable activity	<b>0</b>	<b>1</b>	<b>2</b>	<b>3</b>	<b>4</b>
<b>16</b>	I feel under pressure from my friends/family to exercise	<b>0</b>	<b>1</b>	<b>2</b>	<b>3</b>	<b>4</b>
<b>17</b>	I get restless if I don’t exercise regularly	<b>0</b>	<b>1</b>	<b>2</b>	<b>3</b>	<b>4</b>
<b>18</b>	I get pleasure and satisfaction from participating in exercise	<b>0</b>	<b>1</b>	<b>2</b>	<b>3</b>	<b>4</b>
<b>19</b>	I think exercising is a waste of time	<b>0</b>	<b>1</b>	<b>2</b>	<b>3</b>	<b>4</b>

## Appendix 3 – Participant Survey

### Group Exercise Participant Survey

Thank you for your interest and participation in this study!

An Exercise Science student at the University of South Florida is conducting this survey for a Master's thesis.

This survey is anonymous, please DO NOT write your name anywhere on the survey. Please answer all the questions to the best of your ability. This information will be used for research purposes only.

## **Demographics**

Age: \_\_\_\_\_ Gender: \_\_\_\_\_

Height: \_\_\_\_\_ Weight: \_\_\_\_\_

Race: Please check the box that represents you.

- African American/Black
- Hispanic (Non-white)
- White
- Asian/Pacific Islander
- Other

Which type of facility/gym are you a member of?

Capitol One/WellCare \_\_\_\_\_ USAA \_ Lifestyle \_\_\_\_\_

USF \_\_\_\_\_ YMCA \_ Apollo Beach Health/Racquet \_

## **Section I**

**1. For each of the paired or grouped statements, please CHECK the BOX for the one that best describes you.**

- I use group exercise as my **primary source** of physical activity
- I use group exercise **along with** other types of training
  
- I plan group exercise into my schedule
- If there happens to be a class going on at the time, I will attend
  
- I use group exercise **REGULARLY** (consistently attend specific classes)
- I **DO NOT** use group exercise **REGULARLY** (do not consistently attend specific classes)
  
- I prefer one specific class type (i.e., Step *only* OR Yoga *only*)
- I prefer a combination of class types (i.e., Step *and* Yoga OR Spinning *and* toning)
- I have no preference
  
- I prefer a female instructor
- I prefer a male instructor
- I prefer a combination of instructors
- I have no preference

**2. In general, how long have you been participating in group exercise classes? (# of**

weeks, months or years)

Weeks \_\_\_\_\_

Months \_\_\_\_\_

Years \_\_\_\_\_

**3. On average, how many classes do you participate in per week? (i.e. step aerobics, pilates, yoga, strength training, indoor cycling, water aerobics)?**

\_\_\_\_\_

**4. How many times per week do you participate in the following?**

Step \_\_\_\_\_ Dance Aerobics\_\_ Kickboxing \_\_\_\_\_

Strength/Toning \_ Yoga/Pilates \_\_\_\_\_ Water Aerobics \_

Cardio/tone combo \_\_\_\_\_ Circuit Training/Boot Camp \_\_\_\_\_

Indoor Cycling/Spinning \_\_\_\_\_ Zumba \_\_\_\_\_

Other (specify)\_\_\_\_\_

**Please use the attached matrix to answer the following questions.**

**5. According to the matrix, which of the following representations most closely resembles your current body type?**

Letter (beneath the picture) \_\_\_\_\_

Number (to the left of the picture) \_\_\_\_\_

**6. According to the matrix, which of the following representations most closely resembles your IDEAL body type?**

Letter (beneath the picture) \_\_\_\_\_

Number (to the left of the picture) \_\_\_\_\_











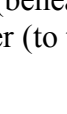











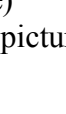











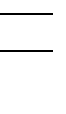













**7. According to the matrix, which of the following representations most closely resembles your INSTRUCTOR'S body type?**

Letter (beneath the picture) \_\_\_\_\_

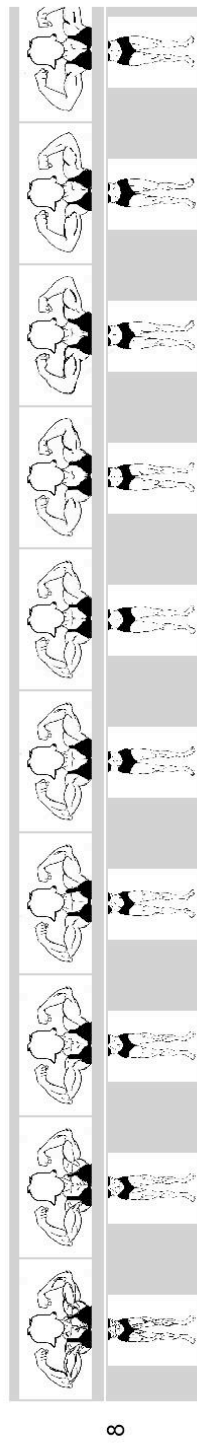
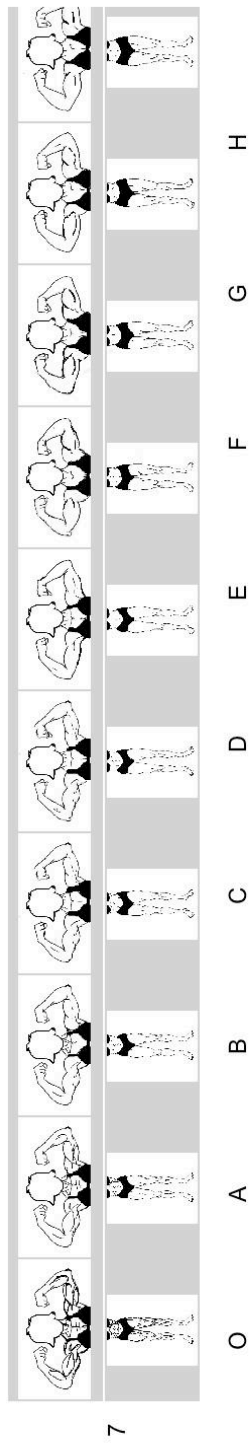
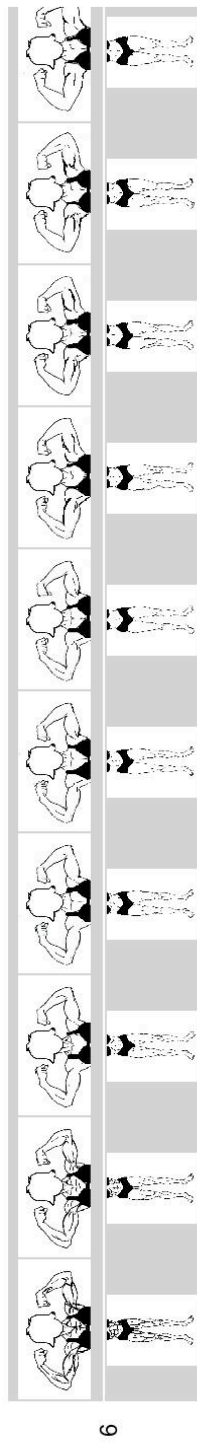
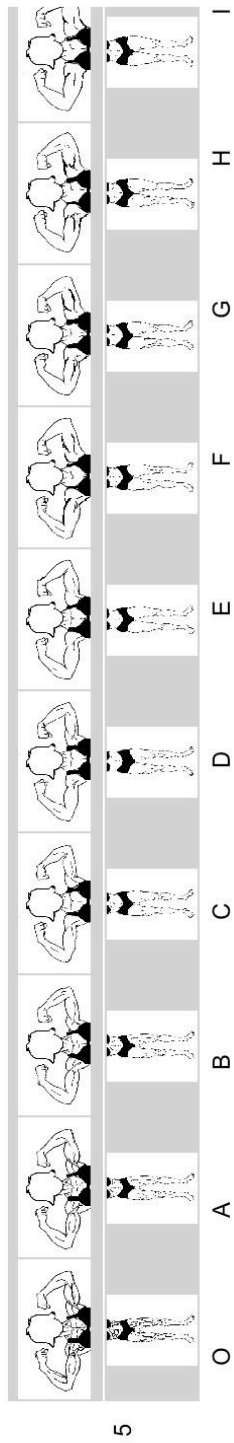
Number (to the left of the picture) \_\_\_\_\_

**8. According to the matrix, which of the following representations most closely resembles your PREFERRED INSTRUCTOR body type?**

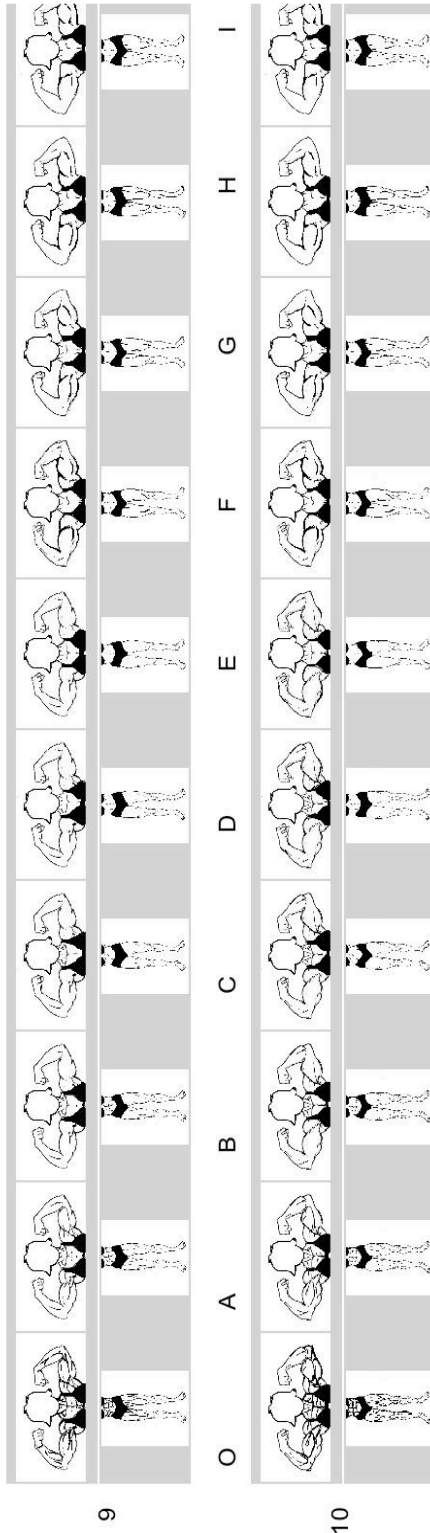
Letter (beneath the picture) \_\_\_\_\_  
 Number (to the left of the picture) \_\_\_\_\_

1													O	A	B	C	D	E	F	G	H	I
2													O	A	B	C	D	E	F	G	H	I
3													O	A	B	C	D	E	F	G	H	I
4													O	A	B	C	D	E	F	G	H	I

1 2 3 4 5 6 7 8 9 10







## Section II

We are interested in the reasons underlying peoples' decisions to engage, or not engage in physical exercise. Using the scale below, please indicate to what extent each of the following items is true for you. Please note that there are no right or wrong answers and no trick questions. We simply want to know how you personally feel about exercise. Your responses will be held in confidence and only used for our research purposes.

		NOT TRUE FOR ME		SOMETIMES TRUE FOR ME		VERY TRUE FOR ME
<b>1</b>	I exercise because other people say I should	<b>0</b>	<b>1</b>	<b>2</b>	<b>3</b>	<b>4</b>
<b>2</b>	I feel guilty when I don't exercise	<b>0</b>	<b>1</b>	<b>2</b>	<b>3</b>	<b>4</b>
<b>3</b>	I value the benefits of exercise	<b>0</b>	<b>1</b>	<b>2</b>	<b>3</b>	<b>4</b>
<b>4</b>	I exercise because it's fun	<b>0</b>	<b>1</b>	<b>2</b>	<b>3</b>	<b>4</b>
<b>5</b>	I don't see why I should have to exercise	<b>0</b>	<b>1</b>	<b>2</b>	<b>3</b>	<b>4</b>
<b>6</b>	I take part in exercise because my friends/family/partner say I should	<b>0</b>	<b>1</b>	<b>2</b>	<b>3</b>	<b>4</b>
<b>7</b>	I feel ashamed when I miss an exercise session	<b>0</b>	<b>1</b>	<b>2</b>	<b>3</b>	<b>4</b>
<b>8</b>	It's important to me to exercise regularly	<b>0</b>	<b>1</b>	<b>2</b>	<b>3</b>	<b>4</b>
<b>9</b>	I can't see why I should bother exercising	<b>0</b>	<b>1</b>	<b>2</b>	<b>3</b>	<b>4</b>
<b>10</b>	I enjoy my exercise sessions	<b>0</b>	<b>1</b>	<b>2</b>	<b>3</b>	<b>4</b>
<b>11</b>	I exercise because others will not be pleased with me if I don't	<b>0</b>	<b>1</b>	<b>2</b>	<b>3</b>	<b>4</b>
<b>12</b>	I don't see the point in exercising	<b>0</b>	<b>1</b>	<b>2</b>	<b>3</b>	<b>4</b>
<b>13</b>	I feel like a failure when I haven't exercised in a while	<b>0</b>	<b>1</b>	<b>2</b>	<b>3</b>	<b>4</b>
<b>14</b>	I think it is important to make the effort to exercise regularly	<b>0</b>	<b>1</b>	<b>2</b>	<b>3</b>	<b>4</b>
<b>15</b>	I find exercise a pleasurable activity	<b>0</b>	<b>1</b>	<b>2</b>	<b>3</b>	<b>4</b>
<b>16</b>	I feel under pressure from my friends/family to exercise	<b>0</b>	<b>1</b>	<b>2</b>	<b>3</b>	<b>4</b>
<b>17</b>	I get restless if I don't exercise regularly	<b>0</b>	<b>1</b>	<b>2</b>	<b>3</b>	<b>4</b>
<b>18</b>	I get pleasure and satisfaction from participating in exercise	<b>0</b>	<b>1</b>	<b>2</b>	<b>3</b>	<b>4</b>
<b>19</b>	I think exercising is a waste of time	<b>0</b>	<b>1</b>	<b>2</b>	<b>3</b>	<b>4</b>

### **Section III**

Of all the group exercise classes you participate in, please choose the one you participate in **MOST OFTEN** and answer the following questions based on that one class **and** instructor.

**1. How long have you been participating in this class? (# of weeks, months or years)**

Weeks \_\_\_\_\_

Months \_\_\_\_\_

Years \_\_\_\_\_

**2. Please indicate how often your instructor does the things listed below.**

		NEVER	RARELY	SOMETIMES	USUALLY	ALWAYS
<b>1</b>	Start class on time	<b>0</b>	<b>1</b>	<b>2</b>	<b>3</b>	<b>4</b>
<b>2</b>	End class on time	<b>0</b>	<b>1</b>	<b>2</b>	<b>3</b>	<b>4</b>
<b>3</b>	Come prepared	<b>0</b>	<b>1</b>	<b>2</b>	<b>3</b>	<b>4</b>
<b>4</b>	Use good voice projection	<b>0</b>	<b>1</b>	<b>2</b>	<b>3</b>	<b>4</b>
<b>5</b>	Use proper tone	<b>0</b>	<b>1</b>	<b>2</b>	<b>3</b>	<b>4</b>
<b>6</b>	Enunciate	<b>0</b>	<b>1</b>	<b>2</b>	<b>3</b>	<b>4</b>
<b>7</b>	Use appropriate music	<b>0</b>	<b>1</b>	<b>2</b>	<b>3</b>	<b>4</b>
<b>8</b>	Wear appropriate attire	<b>0</b>	<b>1</b>	<b>2</b>	<b>3</b>	<b>4</b>
<b>9</b>	Display professionalism	<b>0</b>	<b>1</b>	<b>2</b>	<b>3</b>	<b>4</b>
<b>10</b>	Encourage group cohesion (work in pairs or groups)	<b>0</b>	<b>1</b>	<b>2</b>	<b>3</b>	<b>4</b>
<b>11</b>	Promote a positive atmosphere for exercise	<b>0</b>	<b>1</b>	<b>2</b>	<b>3</b>	<b>4</b>
<b>12</b>	Explain proper technique	<b>0</b>	<b>1</b>	<b>2</b>	<b>3</b>	<b>4</b>
<b>13</b>	Provide positive feedback	<b>0</b>	<b>1</b>	<b>2</b>	<b>3</b>	<b>4</b>
<b>14</b>	Use simple commands/cues	<b>0</b>	<b>1</b>	<b>2</b>	<b>3</b>	<b>4</b>
<b>15</b>	Greets upon arrival	<b>0</b>	<b>1</b>	<b>2</b>	<b>3</b>	<b>4</b>
<b>16</b>	Knows/uses your name	<b>0</b>	<b>1</b>	<b>2</b>	<b>3</b>	<b>4</b>

**3. Please indicate how you agree to the following statements.**

		<b>STRONGLY DISAGREE</b>	<b>SOMEWHAT DISAGREE</b>	<b>NEITHER DISAGREE OR AGREE</b>	<b>SOMEWHAT AGREE</b>	<b>STRONGLY AGREE</b>
<b>1</b>	<b>I am highly motivated in class</b>	<b>0</b>	<b>1</b>	<b>2</b>	<b>3</b>	<b>4</b>
<b>2</b>	<b>My level of effort during this class is high</b>	<b>0</b>	<b>1</b>	<b>2</b>	<b>3</b>	<b>4</b>
<b>3</b>	<b>My attendance for this class is high</b>	<b>0</b>	<b>1</b>	<b>2</b>	<b>3</b>	<b>4</b>
<b>4</b>	<b>I readily accept health and information/advice from my instructor</b>	<b>0</b>	<b>1</b>	<b>2</b>	<b>3</b>	<b>4</b>
<b>5</b>	<b>I think my instructor is physically attractive</b>	<b>0</b>	<b>1</b>	<b>2</b>	<b>3</b>	<b>4</b>
<b>6</b>	<b>I would like a physique similar to my instructor</b>	<b>0</b>	<b>1</b>	<b>2</b>	<b>3</b>	<b>4</b>
<b>7</b>	<b>Physique of the instructor is influential in my decision to return to the class</b>	<b>0</b>	<b>1</b>	<b>2</b>	<b>3</b>	<b>4</b>