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## ENJOYMENT BASED MOTIVATION AND THE ENJOYABLE EXERCISE EXPERIENCE IN A GENERATION Y SAMPLE: A MIXED METHODS APPROACH

by

#### JONATHAN STEWART

#### (Under the Direction of Daniel Czech)

#### ABSTRACT

Individuals who choose to live a healthy lifestyle often have different preferences for a variety of exercise activities, exercise settings and eating plans. In fact, numerous researchers have examined the preferences of individuals in diet and exercise programs from past generations (Daley, Copeland, Wright, & Wales, 2008; Ekkekakis, Hall, & Petruzzello, 2005). Numerous research studies have examined the correlation between exercise adherence and exercise enjoyment (Bartlett, Close, Maclaren, Gregson, Drust, & Morton, 2011; Ebben & Brudzynski, 2008; Fleig, Lippke, Pomp, & Schwarzer, 2011; Frederick-Recascino, 2002; Leslie, Owen, Salmon, Bauman, Sallis, & Lo, 1999). However, little research has been found investigating the optimal exercise experience of the current college aged generation. The first purpose was to compare obese and nonobese members as well as sufficiently and insufficiently active members of Generation Y on Enjoyment Based Motivation (EBM) to exercise. Results suggest that there is not a significant difference between obese and non-obese members of Generation Y on EBM. EBM was found to be significantly higher active members of Generation Y when compared to insufficiently active members. The second purpose was to describe what the enjoyable exercise experience of the millennial generation is through an existential phenomenological approach. The second purpose revealed five themes: vigor, social

relatedness, accomplishment, dissociation, and positive emotions. Implications from this study may benefit exercise psychology consultants, fitness professionals, and others involved in the exercise experience of members of Generation Y. Further research may explore how these results influence exercise adherence and possible interventions for fostering the development of the themes discussed in exercise experiences.

INDEX WORDS: Exercise motivation, Enjoyment, Generation Y, Obese, Non-obese, Active, Insufficiently active

# ENJOYMENT BASED MOTIVATION TO EXERCISE IN OBESE AND NON-OBESE MEMBERS OF GENERATION Y: A MIXED METHODOLOGICAL STUDY

by

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B.S., University of Florida, 2011

A Thesis Submitted to the Graduate Faculty of Georgia Southern University in Partial

Fulfillment of the Requirements for the Degree

MASTER OF SCIENCE

STATESBORO, GEORGIA

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by

## JONATHAN STEWART

Major Professor: Daniel Czech Committee: Brandonn Harris Trey Burdette

Electronic Version Approved: May 2013

## DEDICATION

I would like to dedicate this to my family. Things haven't been perfect, but I truly am blessed to have all of your love and support. I am who I am today and have accomplished what I have because I knew I could always count on you to be there for me. Clay and Logan, I am so proud of the both you. You are both on your way to doing great things and I could not be more proud of what you have already accomplished. Thank you, everyone, for everything.

#### ACKNOWLEDGMENTS

I would like to start by acknowledging my committee members, you all have been amazing. Dr. Czech, thank you for being you and keeping me on track. Brandonn, thanks for always making time and Go Mountaineers! Trey, your input and advice has been priceless. I don't think I will ever do a study with BMI. Without you all's constant support this project would have been infinitely harder. You have all had a strong influence on me both personally and professionally and you all have meant a lot to me.

To my class...we made it! Words can't express how thankful I am to have had the chance to get to know each of you. The positive environment we shared was unbelievable. Getting to know each of you and your stories was inspiring. As we progress in different directions know that I am incredibly proud of all of you and of all that we have accomplished. We brought the noise! The past two years have been nothing short of amazing and I can't think of a better group of people to have gone on this journey with.

To all of the first years...you are on your way! I feel privileged to have been part of your journey. It has been amazing to see your growth, both personal and professional. Remember to take a second and enjoy the little things, school is never as stressful as it seems. Your time here goes by fast. Ciaran...6:07. I can't wait to see what you all accomplish. Bring the noise!

"What lies behind us and what lies before us are tiny matters compared to what lies within us." - R. W. Emerson

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#### CHAPTER 1

#### **INTRODUCTION**

Obesity in the United States is a growing concern. According to the Centers for Disease Control and Prevention (2011) nearly one third of adults and around 17% of children and adolescents in the U.S. are obese. The number of obese Americans has been steadily increasing over the past few years. In 2010, 12 states had an obesity rate of at least 30%, compare that to 2000, when no stated had prevalence over 30% (CDC, 2011). One contributor to the growing levels of obesity is the increasing numbers of sedentary Americans (Harris & Giacobbi, 2007; Suggs, McIntyre, & Cowdery, 2010).

An increase in exercise and physical activity has been recommended and shown to help decrease obesity and improve health both physically and psychologically (Adamo, Rutherford, & Goldfield, 2010; Berger, 2004; CDC, 1997; Ferrara, 2009). Exercise can be defined as structured physical activity with the objective of improving or maintaining physical fitness (Caspersen, Powell, & Christenson, 1985). For this study physical activity and exercise will be used synonymously. It is important not only to increase physical activity but also to examine what motives influence continued participation or adherence to exercise. Ryan, Frederick, Lepes, Rubio, and Sheldon (1997) investigated motivations in two physical activity classes, Tae Kwon Do and Aerobics. They found that participants' motives for taking part in the classes were related to adherence, and that enjoyment motives predicted higher adherence to the activity chosen.

In a second study Ryan and colleagues (1997) examined individuals' who were new members at a university fitness center and their motives for exercise. The revised Motivation for Physical Activity Measure (MPAM-R) was used. The researchers revealed that the new members who showed higher adherence had significantly higher ratings for competence, enjoyment, and social motives. They also found that postworkout ratings for average enjoyment were positively correlated with attendance.

Similar results were found in a population of individuals with multiple sclerosis (MS). The authors found that individuals with MS who had higher levels of enjoyment following exercise sessions, showed significantly more adherence to the program (McAuley et al., 2007).

An investigation into college students' motivations and barriers to exercise revealed several differences (Ebben & Brudzynski, 2008). "Enjoyment/pleasure" was one of the top reasons why students exercised along with "general health" and "stress reduction" (Ebben & Brudzynski, 2008). The study also found that more enjoyable exercise options was listed by those who exercise as something that would cause them to increase their amount of exercise and was something that would cause non-exercisers to begin to exercise.

Similarly, a study involving Australian college students examined perceived personal, social, and environmental influences to exercise (Leslie et al., 1999). The study involved over 2,000 male and female college students from four Australian College campuses. For both females and males, low enjoyment of activities was found to be a predictor of being insufficiently active. This is in contrast to a study by Egli, Bland, Melton, and Czech (2011) which found that male college students were intrinsically motived while female college students were extrinsically motivated. This study also found enjoyment to be less of a motivation for exercise.

It has been suggested that individuals' preferences should also be taken into account when examining exercise adherence (Dishman, 1994b; Rose & Parfitt, 2012).

Research has shown that individuals differ on their preferences for weight loss programs and the degree to which their preferences are matched has been shown to influence various aspects of physical activity (Daley, Copeland, Wright, & Wales, 2008; Owen, Pettman, Hass, Viney, & Misan, 2009; Suggs et al., 2010; Thomas, Hyde, Karunaratne, Kausman, & Komesaroff, 2008).

Daley and colleagues (2008) examined experiences in an exercise therapy intervention with obese adolescents. The participants ranged in age from 11-16 and participated in different exercises in the intervention three times a week and were provided with a supportive environment to exercise. Several themes were found to be important by the researchers. Among these were preferences of exercise, the structure, and sources of motivation (Daley et al., 2008). This study provides support for the idea that individuals will exercise for different reasons and will choose to exercise in different ways. It is important to educate participants about different ways in which they might exercise in order to help with sustained weight loss (Daley et al., 2008).

Exercise research has revealed the significance of social support during weight loss interventions (Allan, Hoddinott, & Avenell, 2010; Owen et al., 2009; Suggs et al., 2010; Thomas et al., 2008). Allan and colleagues (2010) compared commercial and health service groups. They found that commercial organizations typically provided more supervision and peer support, something that most participants favored. In a different study, researchers investigated preferences during a diet and exercise intervention. The results showed that the participants who gained weight significantly

favored supervised exercise and a large amount of support in the beginning, however as the intervention went they showed a decreased interest in both (Owen et al., 2009). The participants who lost weight showed a similar preference for supervision and support; however support continued to be somewhat important to them even though they showed more focus and appeared to not need it (Owen et al., 2009).

In a study comparing diet programs, social support and group meetings were cited as an important reason to join a particular program (Thomas et al., 2008). The study interviewed individuals who participated in various diet programs and found that participants who joined a more social program did so because of friends or family members and continued the program because of the social support and shared experiences (Thomas et al., 2008). A study of obese adults in the U.S. found that, of the participants interviewed, many prefer to have individual attention in interventions to help with motivation and often cited a lack of social support or someone to exercise with as a barrier to their participation (Suggs et al., 2010).

Research has also cited reasons why people complete or fail to finish weight loss interventions (Epstein, Koeske, & Wing, 1984; Herriot, Hart, & Truby, 2008; Thomas et al., 2008; VanWormer, Martinez, Cosentino, & Pronk, 2010). Thomas colleagues (2008) highlighted several barriers that participants identified as reasons for not exercising, including embarrassment and the difficulty associated with exercising. A study by Epstein and colleagues (1984) involving obese children examined exercise adherence. The amount of exercise and the value of exercise influenced the children's adherence to the exercise programs (Epstein et al., 1984). Exercise may take time away from other activities, such as watching television. Individuals are less likely to participate in

exercise; if it is not valued as high as the activities it replaces (Epstein et al., 1984; Thomas et al., 2008).

Individuals' satisfaction with a weight loss program is related to their continued participation in the program and endorsement of the program (VanWormer et al., 2010). Herriot and colleagues (2007) investigated individuals' experiences of a commercial weight loss program. They found that participants enjoyment of exercises as well as the incompatibility of the exercise program with their lives as being barriers to exercise. Participants stated that some of the exercises were bored during some of the exercises and that sometimes they felt embarrassed. The researchers noted that increasing intrinsic motivation and matching preference to individuals are important (Herriot et al., 2007). . Berger (2004) stated that moving to a more intrinsic attitude where individuals want to exercise is important to getting more participation.

Fleig and colleagues (2011) examined the influence of exercise experience during rehab and maintenance of exercise after rehab is complete. They stated that exercise post-rehab was related to the experience of rehab and that satisfaction will mediate post-rehab behavior. Their study included 415 patients that were currently in a standard clinical physical rehabilitation program. Satisfaction at the end of the end of rehab, among other variables, was found to be significantly correlated with exercise six weeks later. The positive experiences that the participants had during rehab, the more likely they were to continue exercising after rehab.

When exploring motivations of different populations, Generation Y deserves some consideration. Generation Y has grown to be the largest generation in America's history (Rainer & Rainer, 2011). As the new millennium progresses, Generation Y will be in position to have a large cultural influence, it is important to understand as much as possible about this generation as we move forward (Rainer & Rainer, 2011).

It has been pointed out that the increasing rates of obesity and the lack of participation in exercise are related to the failure of research to impact daily behavior (Berger, 2004). More specifically, over half of Americans who try an exercise program will drop out before they finish (Ebben & Brudzynski, 2008).

The research that has been found has seemed to only focus on individuals experiences and their likes and dislikes of established diet and exercise programs (Daleyet al., 2008; Herriot et al., 2007; Owen et al., 2009; Suggs et al., 2010; Thomas et al., 2008). Little research has been found examining obese and non-obese members of Generation Y's exercise experiences in regards to enjoyment motivation. Thus, the purpose of this research study is twofold. The first purpose is to measure the level of Enjoyment Based Motivation (EBM) to exercise in non-obese, obese, active, and insufficiently active members of Generation Y. The first hypothesis is that the non-obese scores for enjoyment on the revised Motivation for Physical Activity Measurement (MPAM-R) will be significantly greater than the scores for enjoyment on the MPAM-R for obese participants. The second hypothesis is that active members of Generation Y will score significantly higher on the subscale of enjoyment of the revised Motivation for Physical Activity Measure (MPAM-R) than the insufficiently active members. The secondary purpose is to describe what the enjoyable exercise experience of members of Generation Y is through a phenomenological approach.

## CHAPTER 2

#### METHODS

#### Purpose I

#### **Participants**

Participants included 202 collegiate students from the Southeastern United States who are members of Generation Y. To be classified as a member of Generation Y, participants must have been born between 1980 and 2000 (Rainer & Rainer, 2011, p. 8). Participants were identified as obese or non-obese and as active and insufficiently active. The participants were then grouped by obesity level (obese or non-obese) as determined by percentage of body fat, which was measured using bioelectrical impedance analysis and the standards established by the American Council on Exercise (Muth, 2009). These guidelines were deemed appropriate for the population and purpose of the study. For women 31% and below was considered non-obese and 32% or high was considered obese. For men, 24% and lower was considered non-obese and 25% and higher was considered obese. Participants were grouped by activity level (active or insufficiently active) as determined by the Godin Leisure-Time Exercise Questionnaire (Godin & Shephard, 1985). The participants were recruited in class from undergraduate classes.

#### *Instrumentation*

*Body Fat Percentage*. Body fat percentage was measured using a hand held bioelectrical impedance analysis (BIA) device. BIA is a non-invasive and simple way to measure body fat percentage that is widely used (Company & Ball, 2010).

*Motivation for Physical Activity*. The revised Motivation for Physical Activity Measurement (MPAM-R) was used to assess participants' motivation for exercise participation (Ryan, Frederick, Lepes, Rubio, & Sheldon, 1997). The MPAM-R asses five different motives for engaging in physical activity and consists of 30 questions. Scores are measured on a seven-point Likert scale that ranges from one (low) to seven (high). The five subscales of the MPAM-R are fitness, appearance, competence, enjoyment, and social motives for participating (Ryan et al., 1997). Ryan colleagues (1997) found reliability of each of the subscales to be reliable with alpha values of .78, .88, .91, .92, and .83 respectively. Pilot studies show construct validity in the MPAM-R (Ryan et al., 1997).

Godin Leisure-Time Exercise Questionnaire. The Godin Leisure-Time Exercise Questionnaire (GLTEQ) is a five question measure that assess how often individuals participate in light, moderate, and strenuous levels of exercise (Godin & Shephard, 1985). The measure has been shown to be valid and reliable (e.g. .74 test-retest reliability; Godin & Shephard, 1985). The questionnaire has also shown concurrent validity with physiological measures of exercise (Godin & Shephard, 1985)

#### Procedures

Participants were recruited from undergraduate classes that are a part of the universities undergraduate curriculum. Informed consent was given and BIA measurements were taken at individual as the participants completed the questionnaire. The questionnaire consisted of the MPAM-R, GLTEQ, and demographic questions consisting of the BIA results, age, and gender. All of the participants completed a pencil and paper version of the questionnaire during class and delivered it to the researcher upon completion.

#### Data Analysis

A Mann-Whitney U test was used to determine the relationship between the independent and dependent variables. The independent variables will be obesity and activity level and the dependent variable will be the scores on the enjoyment subscale of the MPAM-R.

#### Purpose II

#### Existential Phenomenology

The existential phenomenological approach is a method of qualitative study that focuses on the lived experience of individuals and acquires this data through interviews, observation, and discussion (Dale, 1996). This approach is concerned with the detail provided by the participants' description of their experience (Czech, Wrisberg, Fisher, Thompson, Hayes, 2004).

#### The Researcher

In a qualitative approach to collecting research it is important to recognize that the lead researcher is an essential tool for data collection (Czech et al., 2004; Dale, 1996). Researchers have their own set of life experiences and biases and must explore these before conducting research to prevent them from impacting the experience of the participant (Czech et al., 2004; Dale, 1996).

I am currently a first year master's student at Georgia Southern University and am studying sport psychology. This program has given me the opportunity to be educated in the areas of both sport and exercise psychology. I enjoy exercising on a regular basis. I began a regular exercise plan during my third year of undergraduate study and have continued this practice. During this time I have tried different exercises in different settings and at different intensities. My exercise experiences have been broad and have included various forms of cardio training and weight training. These experiences have helped me to form my own opinion about what is an enjoyable exercise experience.

#### Bias Exploration and Bracketing Interview

A bracketing interview of the primary researcher was completed prior to the collection of data from participants. This interview was analyzed and themes were listed in plain view of the researcher in order to prevent researcher biases from influencing the participants (Dale, 1996). After the bracketing interview was completed focus was moved to the participants.

#### Pilot Study

A pilot study was conducted in order to test the research question. This process allowed the researcher to practice the interview protocol before official data collection began. The interview, data collection, and data analysis followed the same procedures as those set for the actual study.

Four themes emerged from the pilot study: 1) Level of Motivation, 2) Goal Achievement, 3) Social Interaction, and 4) Experience. In theme one, the participant mentioned "motivation" as being part of what made their exercise experience enjoyable. They described motivation as a feeling "energized" or "pumped". The level of enjoyment that they experienced contributed to their level of motivation. The second theme identified was goal achievement. The participant mentioned that achieving or passing personal goals made the experience more enjoyable. The third theme, social interaction, is somewhat tied to theme one, motivation. The participant mentioned social interaction as something that contributed to making the experience more enjoyable and adding to their motivation. The final theme that emerged was experience. Being able to demonstrate mastery and the ability to exercise made the experience more enjoyable. Working out is something the participant "grew up doing", having participated for a long time made it more enjoyable.

#### **Participants**

The second purpose utilized 10 participants who were all current members of Generation Y and attending college. Participants were purposefully chosen in order to assure that they met the established criteria and would contribute information that would lead to consequential information. The participants were identified as obese or non-obese. Participants were grouped by obesity level (obese or non-obese) as determined by percentage of body, which was established using percent body fat as measured by bioelectrical impedance analysis. The criteria for a participant to be considered obese were determined by general body-fat percentage and the American Council on Exercise's body-fat percentage guidelines (Muth, 2009). For women 31% and below will be considered non-obese and 32% or high will be considered obese. For men, 24% and lower will be considered non-obese and 25% and higher will be considered obese.

#### Procedure

All interviews were conducted in person and recorded on a digital recording device. The interviews occurred in a private consultation room, an empty class room, or the co-participant's private office to ensure privacy and confidentiality for the participants. The digital recording device was used to aid the primary investigator with the transcription process and for accuracy. All participants completed an informed

consent form prior to the interview and were informed about the procedure and made aware that they may withdrawal from the study at any time during the interview.

#### Interview Protocol

Each participant was presented with a general statement and the same question:

Please answer the following questions to the best of your ability. Think back to a specific time when you had an enjoyable exercise experience. When you think about a specific enjoyable exercise experience what comes to mind?

Probing questions were used to during the interview process to enhance the detail of the experience of the participants. These questions include:

"Can you elaborate on that statement?"

"Can you explain what you mean when you say \_\_\_\_?"

#### Data Analysis

This study used a procedure developed by Czech and colleagues (2004) and Patton (2002) to analyze the data collected. The procedure consisted of the following four steps:

- 1. Approaching the interviews
  - a. Transcribing the interview
  - b. Obtaining a grasp of the interview
- 2. Focusing the data
  - a. Bracketing the data
- 3. Phenomenological reduction
  - a. Eliminating irrelevant, repetitive, or overlapping data
  - b. Verifying the elimination of the data

#### 4. Releasing meanings

- a. Forming categories
- b. Identifying the themes
- c. Describing the themes

#### Approaching the Interviews

All of the interviews were recorded and transcribed verbatim. After all of the interviews were transcribed in their entirety and checked for accuracy the lead researcher read the transcriptions multiple times in order to gain a fuller understanding of the participants experience and better grasp the data.

#### Focusing the data

The next step was to bracket the data. This step required the researcher to remove all biases and preconceptions in order to identify the data in its purest form. The data was then analyzed directly as it pertains to the phenomenon questioned. At this point all of the data collected held equal weight (Dale, 1996; Patton, 2002).

#### Reduction

Irrelevant, repetitive, and overlapping statements were removed from the transcripts. The revised transcripts were delivered to the participants via email so that they could verify the edited transcripts as being correct.

#### **Releasing Meanings**

During this stage of the analysis the researcher and a research team placed the data into categories (Czech et al., 2004). Themes were established based on the structure of the data.

#### Reliability

Lewis (2009), states that in qualitative research it is important that the data collected to have trustworthiness, accuracy, and to be dependable. This study will be considered reliable based on the grounds that the participants will give accurate, trustworthy, and dependable answers to the research question.

#### Validity

Qualitative research should be concluded to be valid if the reader is able to follow the process that leads to the results (Czech et al., 2004; Dale, 1996). A researcher may help provide validity through the use of triangulation (Lewis, 2009). In this study, triangulation was accomplished through a bracketing interview, verification of transcriptions, and the aid of a research team in developing and verifying themes.

## CHAPTER 3

## RESULTS

#### Purpose I

Data was collected from two hundred and two participants (N=63 males; N=139 females). The participants were all members of Generation Y and ranged in age from 18 to 30 years ( $\bar{x}$ =19.29; SD±1.79). Thirty three of the participants were classified obese (N=6 males; N=27 females) and 166 were classified as non-obese (N=56 males, N=110 females) according to their body percentage as measured by bioelectrical impedance and the American Council on Exercise's general body-fat percentage categories. Obesity was non-normally distributed, with a skewness value of 1.81 (SE=.17) and kurtosis value of 1.29 (SE=.343). For the purposes of this study, activity level was classified into insufficiently active (N=6 males; N=19 females) and active (N=43 males; N=94 females) in accordance with the standards established by the Godin Leisure-Time Physical Activity Questionnaire. Activity level was also non-normally distributed, with a skewness value of .58 (SE=.35). The frequencies and percent of obesity and activity levels are presented in Table 1 and Table 2, respectively.

## Table 1

	FEMALE		MALE	
	Frequency	Percent	Frequency	Percent
Obese				
No	110	80.3	56	90.3
Yes	27	19.7	6	9.7
Total	137	100	62	100

Descriptive Statistics: Obesity Frequencies and Percent by Gender

## Table 2

Descriptive Statistics: Activity Levels Frequencies and Percent by Gender

	FEMALE		MALE	
	Frequency	Percent	Frequency	Percent
Activity Level				
Insufficiently Active	19	14.8	6	10.2
Active	94	73.4	43	72.9
Total	113	88.2	49	83.1

Obesity was determined by body fat percentage and groups (obese and non-obese) were established based on the ACE standards for percent body fat (Muth, 2009). A Mann-Whitney U test was used to compare the obese and non-obese participants on enjoyment as motivation. The test indicated that there is not a significant difference

between the obese (Mdn=31) and the non-obese participants (Mdn=34) for the scores on the enjoyment subscale of the MPAM-R (U=2455.000, p=.347, r=-.067).

The scores from the Godin Leisure-Time Physical Activity Questionnaire yielded three subscale scores but for the purpose of this study, two scores were used including active and insufficiently active. A Mann-Whitney *U* test was used to compare the insufficiently active and active groups on enjoyment as motivation. The test indicated that the score on the subscale of motivation on the MPAM-R was significantly higher for the active group (Mdn=35) than for the insufficiently active (Mdn=24) (*U*=784.5, *p*<.001, *r*=-.338).

## Purpose II

A description of the co-participants is found in Table 3. All of the participants were member of Generation Y and were considered either obese or non-obese as determined by percent body fat.

#### Table 3

Participant	Age	Gender	Obese
1	24	Male	Non-obese
2	21	Female	Obese
3	23	Male	Non-obese
4	23	Male	Obese
5	24	Female	Non-obese
6	24	Female	Non-obese

Description of Co-participants

7	23	Female	Non-obese
8	24	Male	Obese
9	21	Female	Obese
10	21	Female	Obese

The purpose of this qualitative question was to explore the enjoyable exercise experience of obese and non-obese members of Generation Y. Analysis of the interview results yielded 5 themes for each the obese and non-obese participants. The four obese themes are: (1) pushing yourself to the limit, (2) sense of pride and accomplishment, (3) exercise that makes you feel positive, and (4) social support. Subthemes were identified within three of the main themes. The subtheme identified in pushing yourself to the limit was not realizing you're working out. Sense of pride and accomplishment yielded a subtheme of health benefits. Two subthemes were identified in social support: social bonding and motivation. The five themes associated with the non-obese participants were: (1) sense of pride and accomplishment, (2) escape from stress, (3) pushing yourself to the limit, (4) exercise that makes you feel positive, and (5) social support. Subthemes were identified within four of the main non-obese themes. With the first theme of sense of pride and accomplishment the sub-theme of progress was revealed. The sub-theme under pushing yourself to the limit is the idea of giving everything. One sub-theme was identified for exercise that makes you feel positive, a positive attitude. One final sub-theme was identified for social support and that is shared experiences. Table 3 lists the main and subthemes by obesity. The main themes for both the obese and non-obese participants were identified in at least three of the five participants in each group.

# Table 4

Themes

<u>Obesity</u>	Main Themes	<u>Subthemes</u>
	Pushing yourself to the Limit	Risk Avoidance
	Sense of Pride and Accomplishment	Health benefits
Obese	Exercise that makes you feel Positive	
	Social Support	Social bonding Motivation
	Sense of Pride and Accomplishment	Progress
	Escape from Stress	
Non-Obese	Pushing yourself to the Limit	Giving everything
	Exercise that makes you feel positive	Positive Attitude
	Social Support	Shared Experiences

#### **Obese Experience Themes**

#### Theme #1: Pushing Yourself to the Limit

The feeling of working out was tied closely to the physical feeling of fatigue for all of the participants. It was important for them to know that they 'worked out'. Muscle soreness or 'good hurt' and fatigue or 'good tired' were used to describe the experience. These symptoms were used to gauge if the participant worked hard during the exercise activity.

- "I don't feel like I can get as much out of it because I can't go as far as I could in like a class like this" – Participant 2
- "I mean, it depends on how hard I go and there's definitely going to be some level of fatigue compared to other work. But I also like pushing myself" – Participant 4
- "...what is the word I am looking for...limit, my limit yeah of how much I can take or how good I am in a certain situation" – Participant 8
- "It's because you're at the top, your heart rates really going and you're tired but you just push through it because you know it's working." – Participant 9
- "...it's [racquet ball] just as intense if not more intense than anything else" –
   Participant 10

#### Subtheme #1 – Risk Avoidance

This was identified as a contributor of being able to exercise and push yourself. Situations where they felt less of a challenge and less risk or a higher chance of accomplishing a goal allowed them to push themselves more. Situations that did not seem like exercise made it easier for these participants to push themselves.

- "It's just easier to exercise when you don't, like know you're doing it, I guess you could say it that way. You don't have to think about it..." Participant 2
- "So you're almost getting more of a workout but you're not realizing it because you're not just swimming back and forth." – Participant 4
- "So if somebody's there talking to me I don't feel like I'm working out." –
   Participant 9

#### Theme #2: Sense of Pride and Accomplishment

Reaching a set goal or an achievement that the participant did not expect to reach was associated with an enjoyable exercise experience. The participants had pride in what they had achieved. This theme seemed to be closely related to the positive feelings following the experience and in some cases seemed connected to motivation to exercise again.

I believe that it is important to note that reaching/surpassing a goal or winning was not required to feel a sense of achievement. It often times seemed that just completing the act or form of exercise was enough to create the sense of achievement.

- "Just, I mean makes me feel better about myself that I can actually achieve something that I didn't think I could do." Participant 2
- "I think pushing yourself and realizing that you're less tired the next time than you were time before but you did more, that's what I like doing" – Participant 4
- "...but once I made it once I'm in it [exercising], that's a sense of accomplishment that I got. I made it that's something I can check off my list until tomorrow." – Participant 8

- "Setting goals and achieving those goals is a really good workout." Participant 9
- "I feel good after I am done, like I said earlier after practicing for a long time

being able to win, shows that I am doing something right." – Participant 10

#### *Subtheme #1 – Health Achievement*

One area of accomplishment that was mentioned by several of the participants was that of health. Exercising and feeling like they had worked toward being healthy or healthier was important to them. There was a sense of pride of knowing they worked toward being healthier.

- "because I do it to make myself healthier" Participant 2
- "I guess it would feel good to someone to know that they are handling their business and staying where they are supposed to be physically. So I guess it would be considered a sense of accomplishment to get that done" – Participant 8
- "I feel like whenever I start losing weight or doing lots of exercise, I feel like I've done a really great job." Participant 9

#### *Theme #3: Exercise that makes you feel Positive*

Another theme explored in the data was that of exercise that makes you feel positive. Participants often mentioned joy or happiness when discussing their enjoyable exercise experiences. The experiences discussed often just made the participants 'happy' and feel good. The participants distinguished between experiencing these positive feelings during and after the exercise activity.

"I mean it's really just because I enjoy it [softball] – I mean I just enjoy it." –
 Participant 2

- "I mean, just getting in the water and swimming just any form of exercise, I mean it feels good where you just – you feel good afterwards" – Participant 4
- "So, once I do it's, you know, I feel, yeah, this is what you should be you know this is what you need to do in your life a lot more. And the fact that you are doing it at all is a good thing." – Participant 8
- "I always feel really good. After a workout, I always feel very healthy. My body is almost singing. It feels so good." Participant 9
- "It [racquet ball] just gets good." Participant 10

## *Theme #4: Social Support*

Social support was an important theme for the obese participants in this study. It seemed to be a center piece of an enjoyable exercise experience and was related to several of the other themes that emerged from the data. Being in a social situation with others is important.

- "Well I've got my friends in this class with me and we did an intramural softball last semester, there was a bunch of us, so it is just more enjoyable. I mean you have people there to support you." – Participant 2
- "Being around people you know...just being around people I guess, I hate being by myself, I'd rather talk with someone else, if always someone is there with me I am happy." – Participant 4
- "I guess anything involving a couple of…a group of people and people you actually know" – Participant 8

- "And also again, I also like working out with people. I feel like working out with somebody, helps me a great deal." Participant 9
- "I like to have someone else to motivate me, keep me going."

#### Subtheme #1 – Motivation

One way in which social support helped foster an enjoyable exercise experience was through motivation. Several participants in this group mentioned social support as a motivating factor for exercise.

- "They keep me in check. Make sure that I do it [exercise]." Participant 2
- "So I always have to have at least one other person that's willing to either push me or just to workout with me and not let me give up, I need that." – Participant 9
- "If I feel like I want to quite she is there to pick me up, and if she feels like she needs to quite, then I can help her too." Participant 10

#### *Subtheme #2 – Bonding Experience*

Several of the participants stated social support was one way in which they were able to bond with their friends. The ability to bond over exercise made it more enjoyable.

- "Usually I go with my friends so yeah it is kind of like a bonding experience I guess" Participant 2
- "And as a team as a bonding, you know friendship, we are going to do this together kind of a thing." Participant 8
- "I feel it brings us closer. Because you talk about so much stuff during workouts.
   It only brings us closer when we do workout. Helping each other is healthy." –
   Participant 9

#### Non-obese Experience Themes

#### Theme #1: Sense of Pride and Accomplishment

Many of the non-obese participants felt a sense of pride and/or accomplishment after an enjoyable exercise experience. This could be the result of several factors including winning or reaching/surpassing a goal.

- "I mean, I definitely enjoy it regardless, like, in the end I want to be able to say I won. Just for that, the next 24 hours of pride, whatever it is." Participant 1
- "Whenever there's an end goal, and you see yourself getting gains and getting stronger and getting fitter. Being able to do things that you couldn't..." –
   Participant 3
- "And I think we get this feeling of accomplishment from it…being pushed to your very limit in circumstances that aren't ideal like pouring down rain or thunderstorms." Participant 5
- "I think it's more of just changing up my routine, just makes me feel physically, mentally, better and more accomplished" – Participant 6
- "I remember crossing the finish line and I stopped running. I just couldn't believe that I had just run 26.2 miles...I was just so overwhelmed...and just so proud of the fact that I had pushed myself through that race, and the 18 weeks of training that I did." Participant 7

#### Subtheme #1 - Progress

One common area that several of the non-obese participants were able to derive a sense of pride or accomplishment was seeing progress.

- "I can bang out 20, 25 [pull-ups], without stopping, and it's pretty cool to see your own progression. Of how you find out you're kind of becoming more fit." –
   Participant 3
- "Like, last week I ran this, or last week I was only able to do ten push-ups, and now I'm able to do this many." – Participant 5
- "I think it is going to be cool a couple of months down the road…and I can see measureable results like was I able to increase from the bare minimum to lifting this." – Participant 6

### *Theme #2: Escape from Stress*

Another theme from the non-obese participants refers to using exercise participation as a way to relieve stress or as a way to relax. The participants mentioned exercise as an escape from the day to day stressors. It was stress relieving when they were able to engage in exercising and for that time not worry about what was going on outside.

- "I mean, because like for instance, I remember for over Christmas break I was really stressed about finishing up my doctoral school applications and stuff...Then once we start playing, I wouldn't think about it for the next 2 hours so it was like even if I am really stressed before the game, right when we start moving and playing and stuff it just leaves my mind immediately..." Participant 1
- "The more enjoyable it is I mean it is just I have to get away from daily rigors."
   Participant 3

- "That's enjoyable for me to actually be able to just remove myself from real life for a little bit." – Participant 6
- "It is almost sort of a meditative process for me when I run...I don't have to focus on anything but moving my legs" – Participant 7

### *Theme #3 – Pushing yourself to the Limit*

When the non-obese participants described an enjoyable exercise experience it was about pushing themselves to the edge. They wanted to test the boundaries of what they were capable of. It was about really exerting everything and challenging themselves to get to their limits.

- "Like if I was to try to beat you or something, just because we are completely different people, so knowing that I can push my own limits more so than trying to beat someone else." Participant 1
- "I really, really like pushing myself physically to see what I can do." Participant
   3
- "That to me is enjoyable so being pushed to the limit, I think being pushed to your max to me is enjoyable." Participant 5
- "My idea of getting a good workout in is like: A. by the end of it, you're sweaty and you're tired and you know that you've kind of exhausted everything." –
   Participant 6
- "Really just digging deeper down inside of myself to really push through and just keep finishing." – Participant 7

## *Subtheme* #1 – *Giving Everything*

In several of their descriptions of pushing themselves to their limit the non-obese participants mentioned giving everything. They did not want to have anything left when they were done. Pushing the limit was giving everything they possibly could while exercising.

- "...we are all exhausted and there is nothing else I could have given." –
   Participant 2
- "So to me it is not just winning is everything but pushing yourself and given everything as everything." – Participant 3
- "It was giving a hundred percent of my effort maxing out that effort." –
   Participant 5
- "...by the end of it, you're sweaty and you're tired and you know that you've kind of exhausted everything." – Participant 6

*Theme #4 – Exercise that makes you feel Positive* 

One theme that stood out in the participants' answers was that of an exercise experience that made them feel positive. The process or result of the experience left the participants feeling positive emotions, whether it was joy or happiness, they left the experience in a positive affective state.

- "Honestly, as unoriginal as it sounds, just straight up happiness, because if I am out doing something immediately I am happy regardless of what it is." –
   Participant 1
- "...trying to strive to get back to physical peak performance, it gives me that
   joy." Participant 3

- "I can like... I just, I feel better when I do it." Participant 6
- "...just play more so for the fact you really enjoy the game and enjoy what you are doing." Participant 7

## *Subtheme #1 – Positive Attitude*

One idea that was a part of the exercise experience becoming a positive experience was that of having a positive attitude.

- "...there is a lot more excitement and everyone is happy." Participant 1
- "It is a relaxed environment and everyone is joking and having a laugh..." –
   Participant 3
- "…you make it as enjoyable as you want to. You make anything that you do in
   life as enjoyable as you want to." Participant 6
- "But in the end, really, the biggest thing is that just knowing you did your best and that you actually enjoyed yourself because that's what's going to be the most beneficial bottom line..." – Participant 7

## *Theme #5 – Social Support*

As with the obese participants, social support emerged as a strong influential factor of the enjoyable exercise experience of non-obese members of Generation Y. Having someone there as you exercised enhanced the experience and made it more enjoyable. Four out of five non-obese participants said it was a factor in their experience.

"I'd rather have quality time together and lose than you know win against people I don't know." – Participant 1

- "Doing anything with other people makes it more enjoyable than doing it on your own." – Participant 3
- "I enjoy it more when I can feed off the energy with others. Like when there is a lot of social support." Participant 5
- "...working out with other people, who also enjoy doing the same kind of things that I do, makes it enjoyable..." Participant 7

# Subtheme #1 – Shared Experience

Sharing the experience was an important aspect to the social support for the nonobese participants.

- "...battle through something together whether it's like a boot camp class or running a race, like a 5K and stuff. You don't know that other thousands of people who are there but in the end you can go up and talk to any of them. Talk about how their 5K was. It's kind of like; you have accomplished something with another person which is cool." – Participant 1
- "Some of the best friends I had are people that I played sports with and it is more so at a competitive level, it is almost like war with each other. You've been through thick and thin." – Participant 3
- "Yeah it kind of glorifies it. It is kind of like yeah I did this and on top of that we did this together you know like in the rain and in these horrible temperatures..." –
   Participant 5
- "And just like having somebody there, having that social aspect and we were kind of complaining together about how we had like 13 miles left to go or 14 miles left

to go and it was so long, but at the same time then you kind of talked about different races you'd done, and compared experiences..." – Participant 7

#### CHAPTER 4

#### DISCUSSION

With regards to the first purpose, data were collected from 202 participants. Descriptive statistics revealed that 19.7% of females and 9.7% of males were considered obese. In terms of reaching adequate physical activity levels, 73.4% of females and 72.9% of males surveyed were considered active while 14.8% of females and 10.2% of males were considered insufficiently active. The results from the current study do not support the first hypothesis that non-obese members of Generation Y will score significantly higher on enjoyment as motivation for physical activity; a significant difference was not found between the two. The second hypothesis was supported, as it was found that active members Generation Y were found to score significantly higher on enjoyment as motivation compared to insignificantly active members of Generation Y. In response to the second purpose, the obese group yielded four main themes: social support, sense of pride and accomplishment, exercise that makes you feel positive, and pushing yourself to the limit. The non-obese group interviews produced five main themes: sense of pride and accomplishment, escape from stress, exercise that makes you feel positive, pushing yourself to the limit, and social support. The results of the current study will be examined with respect to their meanings, related research, and practical relevance. Limitations of the current as well as suggestions for future research and conclusions will also be discussed.

The descriptive statistics point to the level of obesity and participation in physical activity among the sample. Statistics published in 2012, examining U.S. high school

students, found 13% of the sample was obese (The Centers for Disease Control, 2012). A study examining Australian college students reported 47% of females and 32% of males as being insufficiently active and 53% of females and 68% of males as active (Leslie et al., 1999). The results of this study may show lower levels of physical inactivity among male and female college students.

The lack of a significant difference between obese and non-obese members of Generation Y may suggest that both groups are equally motivated by enjoyment to participate in exercise behavior. Research supports this idea as enjoyment is a key factor to exercise adherence among individuals (Weinberg & Gould, 2011). The lack of a significant difference in the current investigation that regardless of weight obese and nonobese individuals may have at least one shared motivation for exercise, enjoyment.

The results of this study support the notion that active members of Generation Y are more motivated by enjoyment to exercise than those that are insufficiently active. A lack of enjoyment is often mentioned as a major barrier against exercise participation among those who are inactive (Sallis & Hovell, 1990; Sallis, Hovell, & Hofstetter, 1992). In a previous study by Leslie colleagues (1999), physical inactivity low enjoyment of physical activity was one predictor of being insufficiently active for both male and female Australian college students. This lack of enjoyment motivation may contribute to enjoyment as a barrier to exercise participation among the inactive members of Generation Y. The higher level of enjoyment based motivation for active members of Generation Y falls in line with research that supports the notion that enjoyment increase exercise adherence (Ryan et al., 1997).

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All four of the main themes mentioned by the obese participants were shared with the non-obese participants: social support, sense of pride and accomplishment, exercise that makes you feel positive, and pushing yourself to the limit. The non-obese participants had one additional theme when describing an enjoyable exercise experience: escape from stress.

# Social Support

Social support was found to be one of the elements of an enjoyable exercise experience for both groups. Research has shown that nearly 90% of individuals who participate in exercise programs prefer to participate with others (Carron, Hausenblas, & Estabrooks, 1999). In terms of the obese group, social support was described in terms of social bonding and motivation. Exercise offered an opportunity for these participants to bond with their friends or family. Social support also was described as having added motivation. This provides support for research that states that social support functions as motivation and accountability (Carron et al., 1999). Social support in the form of shared experiences was highlighted by the non-obese group. It was enjoyable for these participants to share their experiences in exercise with others and to be able to discuss these experiences with them. Social support was an important component in the descriptions of an enjoyable exercise experience. This supports one of the three basic needs as outlined by self-determination theory and adds to research that supports the importance of social support in an exercise setting (Deci & Ryan, 2008; Ryan & Deci, 2007).

## Sense of Pride and Accomplishment

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Members of both groups mentioned a sense of pride and accomplishment as part of their enjoyable exercise experience. A subtheme for the obese group was the pride and accomplishment that came from working toward being healthier. It appears that being healthier may add to their motivation to exercise. This may add to research, such as the health behavior model, which incorporates working toward being healthy as motivation for behavior (Becker & Maiman, 1975; Becker, Maiman, Kirscht, Haefner, & Drachman, 1977). When discussing the sense of pride and accomplishment with the non-obese participants the subtheme of making progress was found. Tracking progress and seeing improvement may have given the participants added motivation to continue to exercise. This appears to be related to working toward establishing a display of mastery or competence, one of the three needs outlined by the self-determination theory (Deci & Ryan, 2008; Ryan & Deci, 2007) as well as achievement motivation (Weinberg & Gould, 2011).

#### Exercise that makes you Feel Positive

An activity where the participant experienced positive emotions during or after was discovered as one contributor to an enjoyable exercise experience. Members of the non-obese group may have approached exercise with a positive attitude which in turn may have contributed to the activity being enjoyable. As participant 6 put it "You make anything that you do in life as enjoyable as you want to". For both groups, exercising it seems that enjoyable exercise experiences are, at least in part, influenced on some level by intrinsic motivation (Hagger & Chatzisarantis, 2005). This adds to the research that supports the influence of intrinsic motivation on exercise behavior (Deci & Ryan, 2008; Ryan & Deci, 2007).

#### Pushing yourself to the Limit

Both groups described pushing their personal limits as an element of an enjoyable exercise experience. A subtheme of the obese group was pushing themselves in activities where they were able to avoid risk or avoid failure. These activities did not feel like working out.. These activities may have provided easier opportunities for the participants to succeed or avoid failure.

- "it's just *easier* to exercise when you don't know you're doing it" - Participant 2 The subtheme for the obese group involved giving 'everything' and having nothing left. The participants in this group may have chosen tasks that presented a challenge and would require more effort to feel accomplishment (a theme identified in both groups for an enjoyable exercise experience).

- "I like the feeling of challenging myself to see if I am tough enough for it." This difference in activity selection may be explained by the achievement goal theory. In a previously discussed theme, obese participants appeared to show more of an outcome goal orientation while the non-obese participants showed a mastery goal orientation. According to the achievement goal theory, individuals with a mastery goal orientation select moderately challenging tasks while outcome oriented people may select less challenging activities (Ryan et al., 1997).

#### Escape from Stress

The final theme discussed by participants of this study was that of using exercise to escape from stress. This was only recognized as theme in the non-obese group. Exercise was a way for them to escape from the 'daily rigors' associated with stress. This supports research which states that exercise can be used as a way to mediate the effects of stress (Dyer & Crouch, 1998; Long, 1993; Steptoe, Edwards, Moses, & Mathews, 1989). With an increasing number of people experience anxiety in our society, exercise is one way people can effectively cope with stress (Weinberg & Gould, 2011). *Generation Y* 

As mentioned earlier, Generation Y is the largest generation in America's history. This study supports previous research about what is important to and motivates members of this up and coming generation. This generation has had access to a wide array of technology and is considered very mobile. As this study supports relationships are very important to members of Generation Y (Rainer & Rainer, 2011). This study also supports a previous study which examined motives for leisure time physical activity in a park. This study found that members of Generation Y were motivated by achievement, in fact, they were more motivated by achievement than members of the Baby Boomers and Generation X.

## Practical Application

To repeat a point made in the introduction, over half of Americans who try an exercise program fail to finish it (Ebben & Brudzynski, 2008). As obesity rates increase, one may point at research and conclude that it has failed to impact daily behavior (Berger, 2004). Research supports the notion that intrinsic motivation, such as exercising

for enjoyment, increases adherence to exercise programs (Rhodes, Martin, Taunton, Rhodes, Donnelly & Elliot, 1999; Ryan et al., 1997). Exercise has also been shown to increase self-esteem amongst participants, to help them feel better (Moore, Mitchell, Bibeau, & Bartholomew, 2011; Ryan, 2008). Participant 2 described what the sense of feeling better was to them –

"I just want to feel a little better about myself, to like who I see in the mirror. I want my outside to match who I am on the inside."

When public health professionals search for ways to increase exercise participation they should consider what draws participants to exercise and aspects that increase adherence, such as intrinsic motivation (Weinberg & Gould, 2011).

### Future Research

Future research should continue to explore ways in which exercise participation can be improved and understand the experiences of exercise participants. It may be beneficial to explore possible applications that foster intrinsic motivation, more specifically enjoyment in exercise amongst insufficiently active members of society. One avenue for future consideration may be to probe the relationships between exercise participation, intrinsic motivation, and the attitude or mindset of participants toward exercise.

# Limitations

Several factors contribute to the limitations of this study. Data was collected from a convenient sample, members of a small southeastern university in the United States. The results may not be generalizable to all members of Generation Y. Another limitation is that the experiences discussed during the interviews would have occurred in the past. It is possible that the time between previous enjoyable experiences and the interview may have influenced the co-participants' ability to accurately recall information. There may be other factors that produced enjoyable exercise experiences that were not recalled by the participants.

# Conclusions

Findings from the current study may allow for the following conclusions to be drawn in reference to members of Generation Y:

- There is not a significant difference for enjoyment as motivation between the obese and non-obese.
- Enjoyment motivation is significantly higher for those who are active compared to those who are insufficiently active.
- Pushing yourself to the limit influences enjoyable exercise experiences for obese individuals.
- A sense of pride and accomplishment influences enjoyable exercise experiences for obese individuals.
- Exercise that makes you feel positive influences enjoyable exercise experiences for obese individuals.
- Social support influences enjoyable exercise experiences for obese individuals.
- A sense of pride and accomplishment influences enjoyable exercise experiences for non-obese individuals.

- Escape from stress influences enjoyable exercise experiences for non-obese individuals.
- Pushing yourself to the limit influences enjoyable exercise experiences for nonobese individuals.
- Exercise that makes you feel positive influences enjoyable exercise experiences for non-obese individuals.
- Social Support influences enjoyable exercise experiences for non-obese individuals.

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# APPENDIX A

# RESEARCH HYPOTHESIS, RESEARCH QUESTION, LIMITATIONS, DELIMITATIONS, ASSUMPTIONS, DEFINITIONS

# Research Hypothesis

- Non-obese scores for enjoyment on the revised Motivation for Physical Activity Measurement (MPAM-R) will be significantly greater than the scores for enjoyment on the MPAM-R for obese participants.
- Active members of Generation Y will score significantly higher on the subscale of enjoyment of the revised Motivation for Physical Activity Measure (MPAM-R) than the insufficiently active members.

# Research Question

• What is an enjoyable exercise experience of obese and non-obese members of Generation Y?

# Limitations

- The sample will not be completely randomly chosen
- It will be a convenient sample
- The participants in the study will be from a small southeastern university in the United Sates; therefore the results may not be generalizable to all members of Generation Y.
- The researcher participates regularly in exercise, there is the potential for bias
- Some participants may have trouble recalling details of enjoyable exercise experiences

# **Delimitations**

- Enjoyment motivation will be measured using the Revised Motivation for Physical Activity Measure (MPAM-R)
- The participants will be college students from a university in the southeastern United States
- This study focuses specifically on the experiences of members of Generation Y.
- The sample size for the first purpose was 202 members of Generation Y.
- The size of the sample for the second purpose was 10 members of Generation Y.
- The criteria for a participant to be considered obese will be a percent body fat of at least 25 (males) and 32 (females).
- The criteria for a participant to be considered non-obese will be a percent body fat less than 25 (males) and 32 (females).
- Convenient sampling method will be used to select participants for the first purpose of this study.
- Purposeful sampling method will be used to select participants for the second purpose of this study.

# Assumptions

- Assume that the bioelectrical impedance are accurate and reliable ways to assess obesity
- It is assumed that the main instrument used in part two of the study, mostly the interviewer, is reliable.
- Participants will answer all parts of the MPAM-R truthfully and to the best of their ability

• The participants in the study will be honest and truthful when describing an enjoyable exercise experience.

# Definitions

- The criteria for a participant to be considered obese will be a percent body fat higher than 32 (females) or 25 (males).
- The criteria for a participant to be considered non-obese will be a percent body fat less than 32 (females) or 25 (males)
- Enjoyment Based Motivation driven by enjoyment (desire to be stimulated, pursue your interests, have fun (Ryan et al., 1997))

# APPPENDIX B

# EXTENDED REVIEW OF LITERATURE

Buckley, J., & Cameron, L. D. (2011). Automaticity of Exercise Self-Regulatory Efficacy
Beliefs in Adults With High and Low Experience in Exercise Self-Regulation.
Journal Of Sport & Exercise Psychology, 33(3), 325-348.

The researchers examined if exercise efficacy beliefs can be triggered nonconsciously in individuals that are experienced and inexperienced in self-regulation of exercise behavior. They also examined if those beliefs were automatically associated with the self-regulation process. There 186 participants. The subjects were randomly assigned to subliminal, supraliminal, or a no priming group. Each participant completed a diary response to a hypothetical situation that was measured for self-regulatory efficacy and self-regulation expressions. Priming resulted in automaticity of exercise expressions for exercise experienced individuals, while it resulted in automaticity of self-regulatory efficacy in the inexperienced exercise group. [This study gives me an example of how different surroundings or cues can lead to different behaviors in experienced and inexperienced exercises.]

"A representation of self-regulation efficacy for exercise is a configuration of beliefs about one's abilities to carry out the steps involved in exercise, such as overcoming barriers to exercise, scheduling regular exercise sessions and setting exercise goals." Page 326

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Daley, A. J., Copeland, R. J., Wright, N. P., & Wales, J. H. (2008). 'I can actually exercise if I want to; It isn't as hard as I thought': A qualitative study of the experiences and views of obese adolescents participating in an exercise therapy intervention. *Journal Of Health Psychology*, *13*(6), 810-819. doi:10.1177/1359105308093865

This study used semi-structured interviews to examine the experiences of obese adolescents in an exercise therapy intervention. They discussed several topics including both positive and negative experiences of the intervention, what they thought about the structure, and sources of motivation among other issues. It was found that participants thought the aerobic exercises to be positive. Some found parts of the intervention to be negative including the exercise machinery. They also found an intermittent structure to be achievable and acceptable. The participants reported having more energy during and after when compared to before the intervention. They also expressed that they were happier and more confidant. [This study provided me with an example of qualitative research and some idea of how I may want to structure my questions.]

"I didn't like the bike it hurts." Page 812

"It was fun, you had time to exercise and time to have a break in between, so I wasn't tired." Page 812

Ebben, W., & Brudzynski, L. (2008). Motivations and barriers to exercise among college students. *Journal Of Exercise Physiology Online*, *11*(5), 1-11.

This study investigated motivations and barriers to exercise among college students. There 1044 participants, both male and female. 76.8% of the participants reported exercising. The researchers identified a variety of motives and barriers to exercise. Enjoyment was listed as one reason why people exercise and reason why individuals would exercise more or begin to exercise. [This supports the notion that exercise is an important motivator for exercise participation.]

"Thus, interventions need to be directed assisting current and potential clientele in overcoming barriers and capitalizing on the motives for exercise such as those described in this study, in order to increase the likelihood that people will begin and continue to exercise." – Page 7

Ekkekakis, P., Hall, E. E., & Petruzzello, S. J. (2005). Some Like It Vigorous: Measuring
 Individual Differences in the Preference for and Tolerance of Exercise Intensity.
 *Journal Of Sport & Exercise Psychology*, 27(3), 350.

The purpose of the research study was to develop a questionnaire that measures differences in preference of and tolerance of exercise intensity. The researchers defined intensity preference as an individual's preference to exercise at a specific intensity and intensity tolerance as a trait that gives someone the ability to continue exercising at certain intensity level. There were several phases in the creation of this instrument including factor analyses and validity testing. The end result of the study was a 16-item questionnaire, eight items for each intensity preference and intensity tolerance. [This study provides me with information that may help explain individuals exercise preferences.]

"Along similar lines, we speculate that the preference for and tolerance of exercise intensity will be closely linked to affective responses to exercise. Thus, brain areas involved in such responses should be relevant to individual differences in intensitypreference and intensity-tolerance." Page 356

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Epstein, L. H., Koeske, R., & Wing, R. R. (1984). Adherence to exercise in obese children. *Journal Cardiac Rehabilitation*, *4*(5), 185-195.

This study was a meta-analysis that examined fitness changes, adherence to exercise, and weight loss among obese children. The researchers found that the amount of exercise influenced adherence. The more exercise the lower the adherence. They also found no gender differences when considering exercise adherence. [This article provided me with some idea of what may influence exercise adherence and what may contribute to an optimal exercise experience.]

Ferrara, C.M. (2009). The college experience: Physical activity, nutrition, and implications for intervention and future research. *Journal Of Exercise Physiology Online*, 12(1), 23-35.

In this study examined the prevalence and risk of obesity in a college student population. Physical activity and dietary behavior were also examined. The study found that a lot of college students are overweight or obese and do not participate in an adequate amount of physical activity. Exercise programs, including physical education classes, that educate students about exercise can be effective. Classes that require physical activity participation have more of an impact on physical activity than something like a seminar. However it was found that most are ineffective in the long-term at creating a healthy lifestyle change. [This article provided me with evidence that exercise programs can be successful, but more emphasis on long-term results should be made.]

Harris, K. G., & Giacobbi, P. R. (2007). Exercise preference: Development of a standardized measure. *Journal Of Sport & Exercise Psychology*, 29S168

The focus of this study was on creating standardized measure for exercise preference. The result was the Exercise Preference Inventory. They used a process of literature reviews and theory consideration to create the model. They identified eight factors of exercise preference. [This study provided me with an idea of what to look for in preferences from participants.]

"The eight categories identified were exercise intensity, social context, competition, solitary activity, expert-directed, self-directed, novelty, and self-care focused." Page S168

Leslie, E., Owen, N., Salmon, J., Bauman, A., & Sallis, J. F. (1999). Insufficiently active Australian college students: Perceived personal, social, and environmental influences. *Preventive Medicine: An International Journal Devoted To Practice And Theory*, 28(1), 20-27.doi:10.1006/pmed.1998 .0375

This article investigated perceived influences into exercise behavior of Australian college students. The participants were classified as sufficiently or insufficiently active and then personal, social, and environment factors for exercise were assessed. Lower enjoyment and lower social support were significant predictors of being insufficiently active for both males and females.

"Thus, there is a need to better understand the factors that may influence participation. Modifiable factors such as self-efficacy, social support, and enjoyment were found to be strongly related to physical activity." – Page 26

Miller, B. M., Bartholomew, J. B., & Springer, B. A. (2005). Post-Exercise Affect: The Effect of Mode Preference. *Journal Of Applied Sport Psychology*, *17*(4), 263-272.

This research study examined the relationship between exercise and affect. The participants in this study completed two different exercises, one high preference and one low preference. The participants' affect was measured with the PANAS before the exercise and then five, twenty, and forty minutes after completing the exercise. The results of the study showed that there is some relationship between exercise preference and improvement in positive affect. [This study shows evidence of how exercise preference may relate to affect.]

"Results indicated that differences in exercise preference resulted in differences for positive affect. Specifically, participants reported greater improvements in positive affect following high preference exercise modes than for low preference exercise modes." Page 269-270

Owen, K., Pettman, T., Haas, M., Viney, R., & Misan, G. (2010). Individual preferences for diet and exercise programmes: changes over a lifestyle intervention and their link with outcomes. *Public Health Nutrition*, 13(2), 245-252.

doi:10.1017/S1368980009990784

The purpose of this study was to investigate how a lifestyle intervention related to individual's preferences on a variety of diet and exercise programs and if there was a difference between those who were successful and those that were unsuccessful. The interventions included nutrition and exercise classes. Participants' preferences were taken at three different times. The researchers found that as time went on there was a change from preferring structure to flexibility. The unsuccessful participants preferred support and supervision; while the successful participants preferred a wider variety of aspects. The authors believe that the unsuccessful participants' reliance on support and

supervision may have contributed to their failure. [This gives me an idea of what participants may look for in their exercise experience.]

"...relinquishment of responsibility for lifestyle change to programme staff may be a factor in their failure and in their greater cost sensitivity, since they focus on external rather than internal resources." Page 245

Patton, R. W., McGuire, A., Greenleaf, C., & Jackson, A. (2011). Sex differences in fitness equipment use. ACSM's Health & Fitness Journal, 15(3), 15-18.

The purpose of this study was to investigate gender differences in fitness equipment preference. They study compared gender difference in strength and cardiovascular equipment use. The researchers counted individuals at gym and their equipment use. They counted over a thousand different individuals. The researchers found that males prefer to use strength equipment while females preferred to use cardiovascular equipment. [This article gives me some insight as to how gender differences may impact preferences in the study.]

"However, future research is needed to examine and elucidate equipment preferences and usage rates across different populations and markets to help fine-tune appropriate decisions about fitness equipment selection and location in a facility." Page 18

Ryan, R. M., Frederick, C. M., Lepes, D., Rubio, N., & Sheldon, K. M. (1997). Intrinsic motivation and exercise adherence. *International Journal Of Sport Psychology*, 28(4), 335-354.

This article was composed of two different studies. The first used the Motivation for Physical Activity Measure (MPAM) to assess motives and predict adherence in Tae Kwon Do and Aerobics classes. It was discovered that participants in the Tae Kwon Do class showed higher enjoyment motives and adherence when compared to the Aerobics class and that the difference in adherence was mediated by enjoyment motives. The second study in this article used the MPAM-R and investigated new gym members' initial motives. Among others enjoyment was associated with adherence. Ratings of enjoyment post-workout were also predictive of adherence.

"The enjoyment and competence motives were considered to be primarily instances of intrinsic motivation insofar as these motives are focused on inherent aspects of the activity (i.e., interest value, desire for challenge, exercise of skills)..." – Page 337 "The overall models were significant for both attendance and dropout. In each of these models, only the enjoyment motive emerged as a significant predictor, being significantly associated with both higher attendance and lower dropout." – Page 341

"...although extrinsic motives concerning body-related outcomes were highly rated as reasons for initiating physical activity programs, adherence was more reliably a function of differences in motives concerning enjoyment and competence,..." – Page 349 "Continued study of how to enhance intrinsic motivation in exercise promotion and instruction may thus contribute to increased adherence to exercise and the health benefits associated with it." – Pate 352

Suggs, L., McIntyre, C., & Cowdery, J. E. (2010). Overweight and obese sedentary adults' physical activity beliefs and preferences. *American Journal Of Health Studies*, 25(2), 69-77

This study examined the communication practices and physical activity preferences of overweight and obese adults. The researchers used three focus group sessions to collect data from participants. The data was analyzed using framework analysis. The researchers found that most of the participants wanted other people to work with them or to motivate them. Most participants reported feeling uncomfortable exercising near individuals that are inshape. They valued information that was interpersonal or personally relevant to them. [This study game an example of a qualitative study looking at obese individuals preferences.]

"It is not that easy, I don't have the buddy system." Page 73

"I have a gym membership at Bally's and I actually go out there a couple of times over the winter but I kept looking for gym partners because I won't go by myself. I need somebody there for motivation, just a work out buddy." Page 73

"[If I was to motivate someone like me,] I would talk to them about what was going on with myself and say we can do it together. Like a buddy system." Page 74

Thomas, S. L., Hyde, J., Karunaratne, A., Kausman, R., & Komesaroff, P. A. (2008).
"they all work..when you stick to them": A qualitative investigation of dieting, weight loss, and physical exercise, in obese individuals. *Nutrition Journal*, 734-40.

This study examined the extent that obese individuals had attempted to lose weight and how they viewed dieting and physical exercise. They also explored their attitudes toward what would help them with their weight. The researchers used a qualitative approach and used open-ended interviews. Many of the participants used commercial weight loss techniques. Friends and family appeared as important themes when considering why participants began to use weight loss systems and why they were persistent in them. Participants reported more barriers to physical exercise than to dieting. Most of the

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participants blamed themselves for not being able to stick to a diet. [This study provided me with more support of what may be an optimal exercise experience.]

"...felt uncomfortable or embarrassed about taking part in organized exercise activities."

Page 737-738