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Progress Checks As A Motivational Tool For Adult Fitness Participants

Stephanie James

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This research is a product of the graduate program in [Kinesiology and Sports Studies](#) at Eastern Illinois University. [Find out more](#) about the program.

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PROGRESS CHECKS AS A MOTIVATIONAL TOOL
FOR ADULT FITNESS PARTICIPANTS

JAMES

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Progress Checks as a Motivational Tool for Adult Fitness Participants

(TITLE)

BY

Stephanie James

THESIS

SUBMITTED IN PARTIAL FULFILLMENT OF THE REQUIREMENTS
FOR THE DEGREE OF

Master of Science in Physical Education

IN THE GRADUATE SCHOOL, EASTERN ILLINOIS UNIVERSITY
CHARLESTON, ILLINOIS

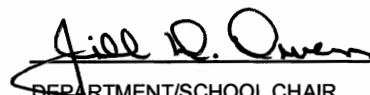
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ABSTRACT

Progress Checks as a Motivational Tool for Adult Fitness Participants

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2008

This study will examine the effect of an exercise screening on the motivation to adhere to an exercise program. The purpose of this study was threefold: 1) to determine how a 12 week progress report effects motivation in Adult Fitness participants at Eastern Illinois University, 2) to determine the effectiveness of an exercise readiness screen in modifying exercise behavior, and 3) to examine the participants reaction to the feedback given. Throughout this study, motivation was compared to the feedback that the participants were given after twelve weeks of the Adult Fitness Program. The participants in this study were current Adult Fitness members who had been in the program for at least three consistent months prior to the interview. The study was administered in an interview format during which the participants were read set questions from a questionnaire, to see how they felt about the Adult Fitness Program's twelve week progress screening. In addition, the study examined whether if the progress screening motivated each individual in a positive way. The findings indicated that that the participant mostly found the progress screening to be a beneficial tool in their fitness experience, and liked knowing if they had earned different scores on their tests, whether good or bad. Overall, participants wanted to continue using the twelve-week progress screening to measure their progress, and stated that the feedback they received positively motivated them to continue exercising.

DEDICATION

I would like to dedicate this masters thesis to my parents, Dennis and Shelley James, and my grandmother Rita James. They were very patient and encouraging throughout this entire process. Without them, I would not have had the strength to overcome the many obstacles of this journey.

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TABLE OF CONTENTS

ABSTRACT.....	i
DEDICATION.....	ii
ACKNOWLEDGEMENTS.....	iii
Chapter I: INTRODUCTION	
Purpose.....	2
Hypothesis.....	3
Definition of Terms.....	4
Chapter II: LITERATURE REVIEW	
Measurement of Motivation.....	6
Feedback.....	7
Motivation.....	8
Progress Screenings.....	17
Exercise Behavior.....	20
Summary.....	23
Chapter III: METHODOLOGY	
Statement of Purpose.....	24
Participation.....	25
Demographics table.....	26
Procedures.....	27
Chapter IV: RESULTS & DISCUSSION	
Introduction.....	28
Participant 1.....	28

Participant 2.....	29
Participant 3.....	31
Participant 4.....	31
Participant 5.....	32
Participant 6.....	33
Participant 7.....	34
Participant 8.....	34
Participant 9.....	35
Participant 10.....	36
Participant 11.....	37
Summary.....	37
 Chapter V: DISCUSSION, SUMMARY, & RECOMMENDATIONS	
Discussion.....	38
Conclusion.....	40
Recommendations.....	41
 REFERENCES.....	
Appendix A Consent Form.....	47
Appendix B Questionnaire.....	51

CHAPTER I

INTRODUCTION

In the last fifty years, epidemiological research has demonstrated the positive effects of regular exercise and physical activity on cardiovascular disease, obesity, non-insulin dependent diabetes mellitus, osteoporosis, osteoarthritis, and some forms of cancer (U.S. Department of Health and Human Services, 1996). Previous research has also indicated that regular exercise and physical activity is essential to promote successful aging through maintenance in physical and psychological function (Godin, Desharnais, Valois, & Bradet, 1995).

Participants in regular exercise programs have experienced progressive changes in their motivation to participate in a structured exercise program (Godin, Desharnais, Valois, & Bradet, 1995). When an exercise program is linked with positive feelings such as being “energized”, it may help individuals stay motivated, while negative feelings such as being “exhausted”, might lead to an early drop-out from an exercise program (Annesi, 2005). Programs need to be careful on how they portray exercise to its participants. If the programs make exercise seem like tedious work, the exercisers will not enjoy what they were doing and would be more likely to dropout. On the other hand, if the programs keep things positive and make the participants feel that what they are doing is worthwhile, then they will be more likely to stay.

This study had the same general purpose as many of Annesi’s studies. Annesi’s research has examined several external factors (e.g. exercise intensity and duration, computer feedback, exercise professional’s behavior) that might affect exercise

adherence; however, this study probed deeper into the psychology of exercise adherence through personal interviews. Annesi also worked with progress screenings in his research, to see if participants had improved and how they had changed.

The proposed study will continue the line of research that examines motivational factors that influence exercise adherence. This will be different from previous studies because of the combination of variables examined. For example, no previous studies have utilized both male and female participants, checked their attendance, and most importantly questioned them in an interview format--so that they did not feel limited in their responses. This strategy may help people expand their answers beyond a "yes" or "no" response. The rationale for this study was based on the high dropout rate of around forty percent, for the Adult Fitness Program at Eastern Illinois University. The results of this study may allow for modifications in policies that allow for greater program adherence among current members and future members; thus making a positive impact on the surrounding community.

Purpose

This study examined the effect of an exercise screening on the motivation to adhere to an exercise program. The purpose of this study was threefold: 1) to determine how a 12 week progress report effects motivation in Adult Fitness participants at Eastern Illinois University, 2) to determine the effectiveness of an exercise readiness screen in modifying exercise behavior, and 3) to examine the participants reaction to the feedback on their progress reports, given by the Adult Fitness staff.

Hypothesis

The 12-week progress screening will be a positive motivator to EIU Adult Fitness participants to continue an exercise program for the next nine months.

Definitions of Terms

The terms listed below have been defined for the purpose of this study:

Extrinsic Motivation- the desire or push to perform a certain behavior based on the potential external rewards that may be received as a result (allpsych.com/dictionary/dictionary2.html).

Feedback - the return of information about the result of a process or activity; an evaluative response (www.answers.com).

Intrinsic Motivation - behaviors that are performed for rewards provided by the activity itself such as accomplishment, knowledge, and stimulation (Deci & Ryan, 1985; Vallerand et al., 1992).

Self Determination Theory - (SDT) a general theory of human motivation concerned with the development and functioning of personality within social contexts. The theory focuses on the degree to which human behaviors are volitional or self-determined - that is, the degree to which people endorse their actions at the highest level of reflection and engage in the actions with a full sense of choice (<http://www.psych.rochester.edu/SDT/theory.html>).

Transtheoretical Model of Change -

- Precontemplation - The state in which there is little or no consideration of change of the current pattern of behavior in the foreseeable future.
- Contemplation - The stage where the individual examines the current pattern of behavior and the potential for change in a risk – reward analysis.

- Preparation - The stage in which the individual makes a commitment to take action to change the behavior pattern and develops a plan and strategy for change.
- Action - The stage in which the individual implements the plan and takes steps to change the current behavior pattern and to begin creating a new behavior pattern.
- Maintenance - The stage where the new behavior pattern is sustained for an extended period of time and is consolidated into the lifestyle of the individual.

(www.answers.com)

CHAPTER II

REVIEW OF LITERATURE

Measurement of Motivation

There are many different ways that motivation can be measured. For the purpose of the current study, ideas were gathered from many different motivational scales including the EMI, EMI2, and the BREQ, combined, and tailored to fit the hypothesis. For example, the Exercise Motivations Inventory or EMI has often been utilized. According to Markland and Hardy (1993),

The EMI was developed as a means of assessing participation motives in order to examine such issues as the influence of motives on exercise participation, how such motives might influence the choice of activities undertaken, how affective responses to exercising may be influenced by reasons for exercising and how involvement in physical activity might have a reciprocal influence on participation motives (p.1).

Theoretical approaches for increasing exercise adherence involve many potential motivational factors (Deci & Ryan, 1985). For example, the EMI-2 scale (more extensive version of the original EMI scale) included a greater range of motivational factors that may contribute to exercise adherence and included more specific modes of exercise such as strength emphasis and/or endurance emphasis (Edmunds, Ntoumanis, & Duda, 2006).

The reasoning for making the second scale was that the first scale, the EMI, had weaknesses in terms of the fitness and health related subscales (Edmunds, Ntoumanis, & Duda, 2006). On the original EMI scale, the health-related subscales focused on the

avoidance of ill health, neglecting potential positively oriented health-related motives (Edmunds, Ntoumanis, & Duda, 2006). In addition, the original EMI scale was designed for people who are currently exercising; the EMI-2 assessed the reasons why non-exercisers might have for starting an exercise program (Edmunds, Ntoumanis, & Duda, 2006).

Another beneficial tool of motivation measurement is the Behavioral Regulation in Exercise Questionnaire (BREQ). This questionnaire has two different tests, the BREQ and BREQ 2. These two tests can be used either as a multidimensional instrument giving separate scores for each subscale, or as a one-dimensional index of the degree of self-determination, known as the relative autonomy index (Ryan & Connell, 1989). In accordance with the self-determination theory (SDT), Edmunds, Ntoumanis, and Duda (2006) examined the relationship between autonomy support, psychological satisfaction, motivational regulations, and exercise behavior. The authors found that there was a significant difference between exercisers and non-exercisers.

Feedback

There are many different types of feedback relevant to human behavior. For instance, positive feedback is the process used when an individual hears their results and does something that will have a positive effect relevant to a personal goal (Pollock, Vincent, & Vincent 1998). Negative feedback may cause an individual to become less motivated and hinder their ability to reach their goals (Pollock, Vincent, & Vincent 1998).

Koka and Hein (2003) stated, "situations that provide failure feedback were more likely to generate feelings of incompetence and undermine one's intrinsic motivation for a given activity" (p. 334). Because feedback is a strong source of motivation, it can be a vital factor in learning.

Annesi, (1998) examined the effects of a computer feedback system on adherence to exercise, attendance, and dropout rate. The subjects of this study were healthy males and females who were evaluated on their maintenance of newly prescribed exercise. The results demonstrated significantly higher attendance and adherence in the treatment group, as indicated by fewer dropouts per month, a larger number of days prior to dropout, and less overall dropout over the eight months tested. The authors concluded that regular, specific, personalized feedback about participants' attendance, technique, and movement toward predetermined goals was useful in promoting improved regularity of attendance.

Motivation

Situational motivation symbolizes the here-and-now of motivational feedback and reflects the reasons an individual has for participating in a specific activity (Vallerand, 2001). Three major forms of situational motivation have been described along a continuum of self-determination: intrinsic motivation, extrinsic motivation, and amotivation (Deci & Ryan, 1991; Ryan & Deci, 2000). Extrinsic motivation is a drive that comes from an external source as opposed to an internal source, such as individual feelings. Conversely, intrinsic motivation represents behaviors that are performed for

rewards provided by the activity itself such as accomplishment, knowledge, and stimulation (Deci & Ryan, 1985; Vallerand et al., 1992). These rewards tie into the most important part of feedback; the motivational effect.

Most individuals have a difficult time accomplishing tasks without sufficient motivation. For example, individuals might be aware that they should exercise for better physical health; however, they might find it difficult to justify the time necessary to reap such benefits. The challenge for exercise professionals is in determining the appropriate motivational strategy. If everyone was motivated to exercise, there might not be the apparent obesity epidemic in the United States.

The participants in the Adult Fitness Program at Eastern Illinois University participate for many different reasons. Some of them participate because their doctor recommended it, some because they would like to lose weight, and others to stay in shape for sports participation. Like most novice exercisers, participants in the Adult Fitness Program tend to lose motivation after a couple of months. Observing the Adult Fitness participants every day, and checking the attendance records it is obvious that some new participants stop coming a frequently (usually once per week or less). They start coming less frequently until one day they completely stop coming all together.

Despite the wealth of evidence, that has connected regularly performed physical activity to a healthier life, substantial numbers of the US population do not engage in sufficient activity to reap these benefits. Physical activity declines with age during adolescence, and by the time US citizens reach adulthood, more than two-thirds are sedentary or inactive below the recommended level for health benefits (Buckworth et al., 2007).

As a result, of these staggering numbers, exercise adherence has become a common theme among physical activity researchers. Because motivation is one of the critical cognitive variables in exercise adoption and maintenance, a clear understanding of the motivations underlying the decision to be physically active can provide insight into the decline in physical activity.

Buckworth et al. (2007) evaluated the reliability and predictive validity of measures of intrinsic and extrinsic motivation for exercise, and examined differences in motivation as a function of the stage of motivational readiness for exercise. The study used 184 healthy college students. The authors found that intrinsic and extrinsic motivation were important to both physical activity adoption and maintenance and could be decomposed to reveal a complex substructure of factors that are related to exercise stage of motivational readiness and behavior over time. For example, intrinsic motivation for exercise was most common in Maintenance and lowest in the Contemplation stages; whereas, extrinsic motivation was also most prevalent in Maintenance compared to other stages. Therefore, some aspects of motivation may be more important during adoption and others more important during maintenance of regular physical activity. The authors concluded that motivation could be thought of as considerations that compel one to undertake a task, and determine the direction, intensity, and persistence of specific task-related behaviors.

A more specific type of motivation, intrinsic motivation, refers to the purpose of performing a behavior for the pleasure and satisfaction of the process. Conversely, extrinsic motivation promotes behavior through contingent outcomes that lie outside the activity itself, such as awards or evaluations; the purpose of a behavior is to gain benefits

or avoid negative consequences that are expected to occur afterwards. There is evidence that intrinsic motivation for sport and exercise activities is also undermined by the use of extrinsic rewards. Intrinsically motivated behavior may be more likely to be maintained and less likely to fall to extinction in the absence of external reinforcers.

Casual relationships between feelings of stress and poorer psychological well-being and between the release of stress and better psychological well-being suggest a relationship between exercise motives and psychological well-being—that is, that extrinsic motivations for exercise will result in poorer psychological well-being and intrinsic motivations for exercise will lead to better psychological well-being. Maltby and Day (2001) examined the potential relationship between motivation to exercise and a person's mental well-being. The authors hypothesized that extrinsic motives for exercise would lead to stress in individuals, whereas intrinsic motives for exercise would lead to a release of stress.

The self-determination theory is thought to alter over time the motivation to exercise, suggesting that exercise motivation and psychological well-being may be best considered over time. Exercise motivations are thought to change over time, therefore the benefits to psychological well-being of intrinsic exercise motives may only become apparent among those individuals who have been exercising for a long period of time. Maltby and Day (2001) utilized the self-determination model to predict psychological well-being, by comparing extrinsic and intrinsic motives, making the distinction between individuals exercising for shorter versus longer periods of time. The findings indicated that individuals who exercised for more than six months scored higher on Stress Management, Enjoyment, and Challenge exercise motives than those exercising for less

than six months. Additionally, those individuals exercising for less than 6 months scored significantly higher on Social Recognition, Affliction, and Competition exercise motives than those exercising for six months or more. The participants of this study were Canadian university students who used a questionnaire to answer questions for this study.

Wilson and Rodgers (2000) examined the relationship between autonomous exercise motives and physical self-perceptions in female participants on the basis of arguments forwarded by SDT (Deci & Ryan, 1985; Ryan & Deci, 2000). Autonomous exercise motives are independent motivations towards exercise (Wilson and Rodgers, 2002). In addition to extrinsic motives, SDT also contends that behavior can be intrinsically regulated when participation is undertaken volitionally for the pleasure, satisfaction, and interest derived from exercise itself (Deci & Ryan, 1985, 1995; Ryan & Deci, 2000). One implication is that even though some do enjoy exercising per se, a number of people are not intrinsically motivated to exercise. Ryan and Deci (2000) demonstrated positive relationships between more autonomous exercise motives and higher physical self-esteem; for example, females reporting high physical self-esteem were accurately classified as exercising for intrinsic motives that regulated their exercise involvement. The study found that autonomous exercise motives are associated with higher physical self-esteem. The author's findings support their theory that autonomous exercise motives may play an important role in positive physical self-esteem in the exercise domain.

Kilpatrick et al. (2003) suggested that given the different criteria for success, it is suspected that intrinsic motivation would be related to a number of sport and exercise outcomes. Neither the presence nor the impact of differential goal orientations has been

examined in relation to exercise behavior (Kilpatrick, Bartholomew & Reimer, 2003). Most research has supported the benefits of exercise in older adults, unfortunately, 45% of older persons in America do not engage in any leisure-time physical activity. Even when offered structured exercise programs, 40% to 60% of older persons dropped out. It is frustrating to health professionals that older persons are only willing to exercise for a short time.

Knowledge and skills about changing exercise behavior is needed for health professionals to develop appropriate interventions to engage older persons in exercise (Tseng, Jaw, Lin, & Ho, 2003). The authors studied how exercise processes of change were used by community-dwelling older persons to engage them in an exercise program. The most common type of exercise this study found that older persons participated in was walking. The American College of Sports Medicine defines exercise as moderate to vigorous activity but this study evaluated lower intensity exercise (i.e. slow walking). The results revealed that half of the older people were underactive or inactive.

Based on the finding, health professionals should suggest that older persons walk after meals instead of watching television. Exercise behavior of older persons is similar to the finding in previous studies in older persons in which over 50% of older persons were in the action and maintenance stage with 20% being in the pre-contemplation and contemplation stages (p. 269).

Huang, Lee, and Chang (2007) studied the effects of personality on individual exercise motivation and exercise participation. People with a more positive personality, meaning that they were more intrinsically motivated to exercise, tended to have higher levels of exercise motivation and exercise participation. The nationalities that were a part of the study are from Taiwan, Europe, and the United States. The study's results may

indicate that American respondents have higher exercise motivation, higher exercise participation, and higher quality of life.

According to Thogersen-Ntoumani & Ntoumanis (2006), exercisers in the Maintenance stage of change displayed significantly more self-determined motivation to exercise than those in the Preparation and Action stages. These results demonstrated the importance of promoting self-determined motivation in exercisers to improve the quality of their experiences, as well as their exercise behavior. Some individuals view exercise, together with healthy eating and adequate rest, as important components of a continuum, behaviours are engaged in for instrumental reasons, and thus they are extrinsically regulated. Behavior is considered fully self-determined, only when individuals are intrinsically motivated towards an activity

Self-determination theory has recently been used by researchers to study motivation in exercise contexts. The results have been similar to those found in other life contexts in that self-determined motivation to exercise has been associated with more positive behavioural, cognitive and affective outcomes, compared with controlling motivational regulations or amotivation (p. 395).

One of the greatest challenges facing researchers and clinicians alike is how to prevent relapse for those individuals who have recently started exercising. Controlling exercise regulations may lead to a greater number of relapses compared with more self-determined types of exercise regulation (Thogersen-Ntoumani & Ntoumanis, 2006). This is because people who are self-determined tend to exercise because they find it fun or because it is important to them personally. Therefore, they might be less likely to experience motivational setbacks versus individuals who exercise out of feelings of guilt or other extrinsic reasons.

Thogersen-Ntoumani & Ntoumanis (2006) demonstrated that adherence to an exercise program was associated with enjoyment and competence motives as opposed to body appearance motives. Furthermore, intentions to be physically active were negatively correlated with amotivation and extrinsic motivation, and positively associated with intrinsic motivation. Self-determined motivational regulations may be positively related to physical self-worth. For example, engaging in exercise to achieve personally important goals is more likely to lead to feelings of accomplishment and subsequently to high physical self-worth, as opposed to engaging in exercise to avoid feelings of guilt or to appease significant others.

According to Merkle et al. (2002) lack of self-motivation is one reason for dropping out of an exercise or rehabilitation program. Many fitness or rehabilitation centers have a 50-60% dropout rate within the first three to six months. At this rate, it becomes increasingly difficult for successful behavior change. Perseverance in such programs is essential for success in creating new habitual behaviors (i.e., changes in lifestyle). Yet, studies repeatedly show that initiating a program and adhering to a program are independent.

There are many influences on a person's participation, including exercise history, ability, extrinsic and self-motivation, control and barriers to exercise. The key to exercise adherence might be long-term participation, as the benefits of exercise accrue over time (Merkle et al., 2002). Self-motivation is not the only determinant of exercise behavior; many active people are concerned with health and enjoy physical activity, and are not affected as easily by exercise barriers (e.g. job, time commitments, and family life). Exercise adherence not only is affected by the frequency, intensity, and duration of

exercise, but also individual mechanisms for planning, adoption, maintenance, relapse, and resumption. Merkle et al., 2002 found that the Self-Motivation Inventory was a valid and reliable measure of self-motivation as demonstrated by the tendency of participants to persevere in the absence of reinforcement.

Physical activity is one changeable risk factor for cardiovascular disease (CVD) that has remained relatively constant and uninfluenced by public health efforts over the past ten years. Therefore, physical activity promotion among sedentary adults has the potential to have a strong public health impact on CVD risk reduction. Only 25% of Americans participate in the recommended amount of physical activity, even though, there has been numerous health benefits associated with exercise (Merkle et al., 3).

Song et al. (2001) assessed the effects of a 12-week cardiac exercise program, specifically examining the motivation and lifestyle of participants. Because physical activity has been recognized as important for health, this study examined the relationship between exercise and a healthy lifestyle by focusing on the role of motivation as an intervening factor. Studying the relationship between physical activity and motivation and the relationship to health-promoting behaviors could be useful for developing appropriate health-promotion programs for both sick and healthy persons. Song et al. (2001) found that the exercise group scored significantly higher than the control group in most motivation-related variables. Both groups made positive changes over the twelve weeks, but no significant difference was found between the two groups in overall lifestyle.

Progress Screenings

Since motivation is very difficult to measure, there has not been a lot of research done on the topic that directly relates to exercise motivation and feedback. A few studies have involved situational motivation, 12-week exercise programs and the motivational correlation, and others that relate to the following key words: feedback, exercise motivation, and progress screenings (Annesi, 2005b). Recently, there has been more interest in studying motivational factors that relate to exercise adherence (Annesi, 2005b). There is still a lot of controversy in giving feedback to exercise participants because it is still not known whether it helps more than hinders.

Although exercise motivation in correlation to progress screenings, is lacking in research, one study seems to be very closely related to the current study. Annesi (2005) examined the motivational correlation of a twelve-week program and the participants perceived physical condition. However, Annesi's procedures were slightly different from the current study; his study utilized only females, whereas the current study utilized males and females together. Annesi's program was founded on similar principles as the Adult Fitness Program at Eastern Illinois University.

Annesi utilized a three-day a week cardiovascular program for a total of twelve weeks. The results indicated that researchers should account for both personal characteristics, such as exercise-induced changes in feelings when developing a comprehensive model of physical activity behavior in women. The exercise-induced changes in feelings were of a more positive outlook on exercise and a better self-image (Annesi, 2005b).

In a similar study, exercise behavior and the self-determination theory were examined (Annesi, 2005a). Their reason for conducting this study was that most Americans are sedentary, despite numerous physical and psychological benefits received by engaging in exercise. The evident motivation problem makes explaining and predicting components of exercise adherence especially important. Individuals who perceive themselves to be in good physical condition may interpret bodily sensations associated with physical exertion more positively than individuals with a more negative self- image.

Annesi's (2002e) examined a potential correlation between feeling-state changes induced by moderate bouts of cardiovascular exercise and attendance in a new exercise program. For the majority of new participants to receive the benefits of exercise, ways to increase exercise maintenance are needed. Internally driven, goal-oriented individuals may have no problem accommodating exercise discomfort, but in individuals with limited motivation, possibly beginning exercise programs only with external prompts (e.g., a medical professional's demands) may need to have workouts associated with pleasurable feelings to promote adherence. The study used the Exercise-induced Feeling Inventory, and the Self-motivation Inventory. There were not significant differences for any of the variables tested.

Donna Plonczynski (2000) has stated repeatedly how difficult it is to relay the conception of motivation in literature. She stated,

Motivation for exercise is a theoretically and empirically significant concept that is variously measured in the literature. Exercise motivation is an important concern due to the complex nature of the activity, the abundance of health benefits inherent in habitual exercise and the plethora of conflicting framework utilized in the literature (p.695).

Plonczynski (2000) also stated, "...motivation is important and the best predictor of adherence to exercise" (p. 695). Understanding how motivation works is very important when trying to promote exercise adherence for others. Motivation is divided into two different categories. First, self-motivation, which is known to be the best determinant of exercise adherence among the mental variables researched. Self-motivation is defined as ability to satisfy a desire, expectation, or goal without being influenced to do so by another person. Self-motivation has also been called intrinsic motivation. Extrinsic measures such as encouragement from family, friends, or professionals are seen as social support. This type of motivation is also known as extrinsic motivation. The primary goal for people in the health care industry is self-motivation, because it is the biggest factor to adherence. Improvements in measurement issues are critical to the advancement of the science of motivation for exercise and its application to the significant sedentary population. According to Pollock (1998), "providing feedback on workout performance and caloric expenditure motivates exercisers" (p.44).

Markland and Psychol (2007) studied the importance of motivation to better understand the role of motives in exercise participation. They hypothesized that motives influence exercise participation by influencing behavioral regulation, and that motives are themselves influenced by personality traits. According to the final model, appearance/weight motive increased external regulation, thereby reducing participation, and also increased introjected regulation. This statement means that people who use motives like appearance and weight to stay in an exercise program are more likely to let their attendance slip. In addition, health/fitness, social, and neuroticism motivation all

had a strong influence on the way people perceive exercise and increased their participation. The authors concluded that exercise promotion programs should not focus on weight and appearance motives but should encourage other motives more beneficial to independent motivation.

In conclusion, the articles that have been published on exercise motivation demonstrated many different aspects that will aid future researchers in their quest to find the best way to keep participants in a program all the way to the end. Since motivation is very difficult to measure, there has not been a lot of research done on the topic that directly relates to exercise motivation and feedback. With the increasing prevalence of obesity in the United States, this topic may become heavily researched in the future. Lack of motivation to exercise is a very common reason for people to quit their exercise programs before they reach their goals. A benefit of the current study could be a greater understanding of how getting feedback related to exercise might have a positive effect on exercise adherence and motivation.

Exercise Behavior

Annesi (2005a) assessed the change in body-esteem factors associated with a newly initiated exercise program after 12 weeks and whether these changes were significantly related to exercise session scores related to perceptions of one's body. The authors hypothesized that changes would account for a significant difference in attendance, and that including for age would explain why the difference was so great. Durations, amount of exertion, and types of apparatus used were self-recorded on a calendar-type logbook provided. There was over 98% agreement between the self-

recorded check in and the electronic one. Attendance ranged from 29% to 100%. Scores on the Physical Condition subscale significantly increased over the 12 weeks for the exercise group, but not the control group.

Theoretical models have been created to explain exercise behavior with varied success. Although improvements in health and physical attractiveness are often goals of women beginning exercise programs, it is not known to what extent new exercise programs are associated with such changes, if such changes are related to adherence to exercise regimens, and if age is a moderating factor. Although the reciprocal relationship among general self-esteem, self-worth, and self-efficacy and exercise, is well supported, it is not known how important body esteem is in predicting exercise adherence.

Annesi and Westcott (2007) examined sedentary adults who participated in a weight lifting program at moderate to vigorous intensity. The results demonstrated that there were changes in vigor and anxiety in 12-weeks. Many people are very uncomfortable with exercising in a group setting, after these participants had been involved with the program for twelve weeks they felt more comfortable with their surroundings. Also the longer they were there the more familiar there were with the setting and equipment. There is not a lot of data available on the association of weight training with psychological changes occurring immediately after exercise or with older individuals.

The authors cautioned about generalizing previous findings to older adults (Annesi & Westcott, 2007). Although changes in feelings from before to after exercise are transient and return to baseline within several hours, they have been associated with more sustained mental health changes, as well as maintenance of newly initiated exercise.

The authors theorized that feeling states might improve adherence to exercise programs. Older individuals would benefit physically from initiating weight training, increased strength and flexibility, and would also improve bone density and balance. Women are less likely than men to incorporate regular exercise and reap associated physiological and psychological benefits. Positive perceptions of one's body and physical health would be associated with perceptions of greater physical competence and improved affect related to an objective exercise stimulus.

According to Annesi and Westcott (2007), a 10-week study was done to determine the effect of strength and cardiovascular exercise program had on both physiological and psychological change in 17 older previously sedentary women. Significant reductions were found throughout the study, including body mass index, body fat, and resting heart rate, and balance was increased. Adherence to exercise programs has been a concern. Although many exercise and physical activity studies have demonstrated favorable effects for those who have typically been 40-65% attendance within 3 to 6 months of starting. Participants always start a new exercise program with a lot of enthusiasm, but after a few months of exercising and not seeing dramatic results they tend to stop coming as often. When they slow down on their attendance their body esteem lowers because they are not losing weight and they may actually be gaining some back; this could make them self-conscious about exercising in front of people.

Annesi (2000) tested a 12-week treatment protocol, which employed low intensity cardiovascular and resistance exercise as well as cognitive behavior modification on 13 obese, previously sedentary women. The exercise induced feeling changes from single sessions showed significant before and after differences, for all groups. Research has

consistently indicated that exercise has a positive effect on mood and general well-being. Exercise has been suggested as a possible treatment for depression and other affected disorders and as help for people to cope with stress more effectively, thereby providing prophylactic effects on pathologies. Some research suggests that high intensity exercise may even promote anxious feelings for some. Wilfley and Kunce (1986) indicated that tension and anxiety reductions are largest for individuals with low fitness and those who have elevated anxiety before an exercise program.

Summary

All of Annesi's studies were very similar to each other. While the other studies provide very good additions and examples, Annesi's studies were the closest related to the current study. The current study was based on a combination of his study ideas that best fit the Adult Fitness Program. After completing this study, it was obvious that motivation and adherence to exercise are the most important aspects to examine when studying understand exercise motivation. Most of the literature on motivation has concluded that it is very difficult to get a direct answer on how to measure motivation in exercise.

CHAPTER III

METHODOLOGY

Feedback was used in the Eastern Illinois University Adult Fitness Program; after the twelve-week progress screening is completed, feedback is verbally given to the participants. In the twelve-week progress screening are the following measurements: blood pressure, body composition, weight, flexibility, one repetition maximum, and waist-to-hip ratio. How the participant responded to the feedback, whether positive or negative, was the subject of interest for the current study.

In the current study, the relationship between the motivation to continue exercising was compared to the feedback that the participants were given after twelve weeks of the Adult Fitness Program. Feedback was provided by an exercise specialist in the Adult Fitness Program. The Feedback was given on their progress in the 12-weeks since they have started. Feedback is given in a one-on-one setting where the specialist and the participant examine the information together and the specialist explains the results, and answers questions or concerns. After that time, participants could ask questions or have clarification. If they would like a copy of their results, they are made available to them. A member of the Adult Fitness staff then explains the results to them. The member is shown where they have improved during the previous three months. After all the assessments are complete, it takes approximately fifteen minutes to explain the results to the participant.

Participation

The participants in this study were current Adult Fitness members who had been in the program for at least three consecutive months prior to the interview. Eleven participants were chosen who had recently completed their twelve-week progress screening in the Adult Fitness office. These participants have to complete at least half of the assessments, to have better feedback, for the twelve-week progress screening before they qualified for the study. Participants were measured on various assessments, including: 1-repetition maximum, waist-to-hip ratio, weight, body composition, flexibility, and blood pressure. No cardiovascular or endurance tests were done due to the fact that many Adult Fitness participants have difficulty completing them. There were three males and eight females who participated in the current study, ranging in age from 50 to 70 years old.

Table 1: Demographics

Participants	Age	Weight	Height	BMI	Risk Stratification
Participant 1	65	145.0	65.5in	23.8	Moderate
2	59	294.0	67.5in	45.4	Moderate
3	57	181.0	63.0in	32.1	Moderate
4	52	199.0	72.0in	27.0	Moderate
5	61	168.0	61.0in	31.7	Moderate
6	63	188.0	68.0in	28.6	Moderate
7	48	153.5	64.5in	25.9	Low
8	30	164.0	65.5in	26.9	Low
9	58	200.0	66.0in	32.3	Moderate
t 10	69	171.0	65.5in	28.0	Moderate
11	78	203.0	66.0in	32.8	Moderate

Procedures

The Institutional Review Board (IRB) at Eastern Illinois University approved all procedures. Participants were informed that their responses would be kept confidential and the voluntary nature of the study prior to the start of the interviews. Participants received a copy of the questionnaire at the beginning of the interview, and then the interview was recorded as they were read the questions. In this way, the participants were able to discuss their answers at greater length. Each interview took approximately fifteen to twenty minutes to complete.

Due to the difficulty of measuring motivation, participants were interviewed personally. A questionnaire was created for consistency and to reduce the confounding effect of bias in their answers. The questions were created from the BREQ and the EMI 2 scale (Appendix B). The questions were then modified to fit the purpose of the current study. Furthermore, the attendance of each participant was recorded, to make sure they qualify for the 12-week progress screening. The data was gathered by observation in the Adult Fitness Program, and by recorded information by the participants.

Since this was a qualitative study, the data collected from the participants was analyzed differently, because open-ended questions were used instead of having a survey with a number correlated answer, as will be demonstrated in the Results chapter.

CHAPTER IV

RESULTS

Introduction

The purpose of this study was threefold: 1) to determine how a 12 week progress report effects motivation in Adult Fitness participants at Eastern Illinois University, 2) to determine the effectiveness of an exercise readiness screen in modifying exercise behavior, and 3) to examine the participants reaction to the feedback given. The following participants gave their feedback on the Adult Fitness Program.

Participant 1:

Participant 1 has been a part of the Adult Fitness Program at Eastern Illinois University since October of 2007. She has never been a part of any other type of exercise program before and had no previous experience with progress screenings. When asked if the 12-week progress screening at Eastern Illinois University influenced her exercise behavior, her response was that it made her want to exercise more and that when she did exercise she felt better overall. To make the program enjoyable for her, Participant 1 suggested that the program have longer hours including after work time and have different exercise incentives to keep her motivated to stick with it. To motivate Participant 1 in a more positive way she suggested that there be assigned partners for everyone who wanted one. This way they would be held more accountable for their exercise and they would have a constant person by their side to keep them motivated and encouraged. When asked to rate the Adult Fitness program on a scale with one being not enjoyable and four being completely enjoyable, Participant 1 stated that she thought the

program was a three. Participant 1 said that she participated in exercise (including light activity) at least twenty to thirty minutes per day. These activities would include walking across campus, using the stairs, sweeping and yard work. This answer is very similar to the type of activity (including daily physical activity) she enjoys doing. To this she answered walking, housework, and cleaning outside. Last, she stated that she would like to see recreation center passes available at a reduced rate for Adult Fitness Members and be used at whatever time they would like, not just morning or afternoon.

Participant 2:

Participant 2 has been with the Adult Fitness Program since the end of August 2007. In the past, she has been involved in other fitness programs besides the one at Eastern Illinois University. For the past two years, she has been a member at Curves. She has also used exercise tapes and gathered with a group of friends to exercise. She stated that the only past program that used a progress screening was Curves. Curves fitness center would measure its participant every month and weigh-ins. When she participated with her friends at work to exercise, they used weekly weigh-ins. She felt that the past progress screening changed her exercise behavior by it being very competitive. It made her want to keep going to better herself, and it was great for socialization. When asked if the 12-week progress screening at Eastern Illinois University had influenced her exercise behavior, Participant 2's response was yes. She stated that she knows it works because her exercise blood pressure has gone down and her diabetic blood glucose has also been reduced. Her doctor has stated that the program has done wonders for her and has helped her lower her medication. Participant 2 thinks

that to make the program more enjoyable for her, the program would allow more time for exercise and not just morning and noon times. Also she would like to see more graduate students working with the Adult Fitness Program that would provide more people to keep her on track and to stay motivated. Another suggestion that she had was to add more Pilates classes, to include the classes on Mondays Wednesdays and Fridays. To motivate her in a more positive way she suggested that we schedule all appointments a few weeks in advance, so that she could mark it on a calendar. In addition, Participant 2 suggested that the Adult Fitness program adopt the buddy system. Similar to Participant 1, Participant 2 thinks that having a person to work with for a few weeks would be beneficial. After that time, a new person is assigned so you could switch your exercise partner. She thought that it would be a great way to socialize and get to meet different people in the Adult Fitness Program. When she was asked to rate how enjoyable the Adult Fitness Program was to her on the same one through four scale as Participant 1, Participant 2 gave a four plus. She says that she exercises every day between 45 minutes to one hour. She takes her dog for a long walk every day and walks for pleasure every day. Participant 2 stated that she enjoys swimming, hiking, and housework, as alternate forms of exercise. The final comments made by Participant 2 were that she felt the Adult Fitness Program was an important program for lifestyle changes, the cost is very fair and worth it, and when she has to get up to exercise in the morning, it guarantees that she is never late to work.

Participant 3:

Participant 3 has been with the Adult Fitness Program on and off for the past fifteen years. Other fitness programs that she has been involved in the past were Jazzercise and Curves. Only Curves fitness center used a progress screening. The methods that were used were monthly weigh-ins and measurements around the body, including arms, legs, waist, and hips. She felt that the results of the progress screening were a good motivator no matter what the results. She felt the exact same way about the 12-week progress screening at Eastern Illinois University. When asked what could be done differently to make the Adult Fitness Program more enjoyable, she stated that she would like to see aerobics classes added in late afternoon and in the evening. In addition, she thought that some basic nutrition classes would be a great start to get peoples eating habits under control. Participant 3 rated the Adult Fitness program a 4 out of 4 on the Likert scale of how enjoyable the program at Eastern is to her. She stated that the only exercise she does is when she comes to the Adult Fitness Program, which is about three times per week. She said that the non-conventional forms of exercise that she enjoys are walking, push mowing, and golfing. The final comments made by Participant 2 were that she would like to have more social events like the breakfast, maybe add a few more throughout the year.

Participant 4:

Participant 4 has been with the Adult Fitness Program January 2008. His only past program that he has been involved in is walking regularly on his own. Since this was his fist exercise program, the 12-week progress screening technique was a very new concept to him. After his progress screening was complete, Participant 4 felt more

motivated and thought he would adhere better to his exercise routine. He also stated that he liked the program just the way it is and had no suggestions as to how it could be improved. Participant 4 rated the Adult Fitness program at Eastern Illinois University a 3 out of 4 on how enjoyable it has been. When asked how often he exercises, Participant 4 stated that he is active every day for at least 30 minutes. He participates in the Adult Fitness Program twice a week and walks and does push-ups the other weekdays. On the weekends, he stays even more active participating in various activities. Other non-conventional activities that Participant 4 is involved with are yard work, basketball, and doing things with his family. For final comments about the Adult Fitness Program, Participant 4 stated that he was not notified about certain upcoming activities and felt that there could be a better way to send out that information to all of the participants. He did say that he felt that the Adult Fitness Program is very beneficial and that it is a good program for all types of people.

Participant 5:

Participant 5 has been in the Adult Fitness Program since October of 2007. Before she joined the EIU program, she was active in the Taking Off Pounds Sensibly Program or TOPS as it is more commonly known. In addition, Participant 5 worked out at home on her own. With the TOPS program, she did weekly weigh-ins. She liked having the weekly weigh-ins at her former club as that it positively motivated her exercise behavior. Participant 5 stated that she really enjoys the Adult Fitness Program and that she is very glad to be here. The 12- week progress screening to her is a positive way to motivate her to keep exercising. She had no suggestions on what could be done to

make the program more enjoyable. She also feels that the program is already doing a great job on keeping her motivated in a positive way. She rated the program a 4 out of 4 on a Likert scale of how enjoyable the Adult Fitness Program at Eastern Illinois University is to her. Participant 5 is currently exercising three times per week for one hour each session. Other non-conventional forms of exercise that she participates in are yard work, golf, and housework. Suggestions for future improvement would be more hours especially later in the morning.

Participant 6:

Participant 6 has been a part of the Adult Fitness Program since October of 2007. Before this program, Participant 6 was inactive and had never been involved in any kind of regular exercise program. He felt that the 12-week progress screening was a very positive motivator for him. Participant 6 would like to see more machine and treadmills added to the Recreation Center. He felt that everyone needs to be more supportive towards his exercise efforts. He scored the Adult Fitness Program a three out of four on the Likert scale of how enjoyable the program has been to him. Participant 6 stated that he is currently exercising three times per week, plus he is involved with a small farm and regularly chops wood. Some other non-conventional forms of exercise that he participates in are his garden, fishing and hunting. His final comments were that he would like to have his routine regularly changed by the Adult Fitness staff to make it more enjoyable to him and not become monotonous.

Participant 7:

Participant 7 has been with the Adult Fitness Program since November of 2007. Before joining this program, she was a member at Gold's Gym and participated in aerobics. There she did have a progress screening very similar to the one at EIU. It included weight, body fat, and other similar tests. Participant 7 stated that she feels more motivated after going through the 12-week progress screening with the Adult Fitness Program. It has made her more motivated to lose weight. When asked what could be done differently to motivate her in a more positive way, she thought that adding Pilates on Mondays, Wednesdays, and Fridays, and to let the entire program continue until seven-thirty in the morning. Participant 7 stated that she needs more self-motivation to keep her in a more positive direction. She ranked the Adult Fitness Program a four (completely enjoyable) on a Likert scale. Participant 7 currently is working out five days per week. She participates in Pilates twice a week, walks, and uses weights the other three days. Other forms of exercise she is involved in are playing with her kids and doing things outside. The final comment made by Participant 7 was that she thought that all the staff had such great attitudes.

Participant 8:

Participant 8 began the Adult Fitness Program summer of 2007. Before beginning the EIU program, she participated in gymnastics, jazz, tap, ballet, Curves free trial, show choir, softball, and tennis. The only previous program that involved a progress screening was gymnastics. Every few months, gymnasts would be evaluated and they would have to meet a list of qualifications before they could be moved up to the next level of gymnastics. When asked how has the 12-week progress screening

influenced your exercise behavior, Participant 8's response was that she feels more motivated, and feels good about her results. To make the program at Eastern Illinois University more enjoyable for Participant 8, activities such as swimming, tennis, and Pilates should be added and increase the time allotted for activities. To motivate Participant 8 in a more positive way, she would like to have weekly weigh-ins, available motorized blood pressure cuffs, scales, and have their chart available to them when they workout. Participant 8 rated the Adult Fitness Program a 3 out of 4 on how enjoyable the program is to her. She has been exercising in some form every day for a half of an hour to one hour. Other than the Adult Fitness Program, Participant 8 enjoys tennis, hiking, playing with kids, and swimming. For her final comments, she states that the program is a great price for all of the programs available; she wishes that there would be a facility for children so that she could bring her children during her time with Adult Fitness. In addition, she would like to have guest passes every so often to bring a family member or a friend to exercise with her.

Participant 9:

Participant 9 has been a part of the Adult Fitness program since September 2007. Before coming to the EIU Adult Fitness Program, Participant 9 worked out in a full body workout gym. There she did self weigh-ins and measurements. She says that the 12-week progress screening has been a positive motivator for her and makes her want to workout at a more intense level. When asked what she would change with the Adult Fitness Program to make it more enjoyable for her she stated that it is a great program and she would keep it just how it is. She ranked the Adult Fitness program a four out of

four on how enjoyable it is for her. Participant 9 currently is exercising three times per week with the Adult Fitness Program and then using resistance bands three times per week. Other non-conventional forms of exercises that she likes to do include sweeping and yard work. Her final comments about the program included that she liked the support the program gave her.

Participant 10:

Participant 10 has been a part of the Adult Fitness Program since October 2007. Before joining the Adult Fitness Program, Participant 10 was a member at Curves and at a 24 hour fitness center. She had never been a part of a progress screening prior to this program. She felt that the 12-week progress screening has influenced her exercise behavior. She said that she likes knowing about her overall health, and it has really motivated her. To make the program more enjoyable for Participant 10, she would like to have more days and more time to exercise. She would like to see different machines in the Recreation Center and to be able to try new things. In addition, she would like to have someone help her work on her flexibility. She has rated the Adult Fitness Program a three out of four on a Likert scale. Currently Participant 10 is exercising three times per week for one hour each visit. Her favorite type of exercise is walking, especially outdoors. For her final comment, she said that she would like to see more classes and programs in Adult Fitness.

Participant 11:

Participant 11 began the Adult Fitness Program in October 2007. Before joining the Adult Fitness Program, Participant 11 had never been involved in any type of exercise program. When asked if the 12-week progress screening influenced his exercise behavior, Participant 11 replied that he would just like to stay the same on his fitness level. He is not very concerned with improving. He had no suggestions on how to make the program more enjoyable and did not have any ideas on how to get him more motivated. Participant 11 rated the Adult Fitness program a 2.5 out of 4 on the Likert scale on how enjoyable he found the program. He also stated that he is currently exercising seven days per week. This included non-conventional forms of exercise, such as working outside and around the house. His final comment about the program was that he found it too strict. For instance, he feels that he should be able to run without a doctor's note. The rule in the Adult Fitness Program is that the participants have to be under 50 or have doctor's clearance to run or swim. Since Participant 11 is over 50, it is required for him. Last, he stated that he really did enjoy the staff of the Adult Fitness Program.

Overall, the participants have stated that they really enjoy the Adult Fitness Program. Since the interviews, half the study's participants have quit coming or come sporadically. All nine of the female participants would like to have someone who will keep them more accountable for their exercise like using an exercise buddy. Two of the male participants prefer to work out on their own, they did not feel as positive about the program as the females, but still enjoyed it, and gave minimal detail on what they like, or on any improvements that could be made.

CHAPTER V

DISCUSSION, CONCLUSIONS, AND RECOMMENDATIONS

Discussion

The purpose of this study was threefold: 1) to determine how a 12 week progress report effects motivation in Adult Fitness participants at Eastern Illinois University, 2) to determine the effectiveness of an exercise readiness screen in modifying exercise behavior, and 3) to examine the participants reaction to the feedback given. All of the participants have said they really enjoy the program, even though they came from different exercise backgrounds. The biggest problems expressed during this study was that even though the participants thought that the feedback from the 12-week progress screening was very beneficial, some still slowly got out of the habit of coming in to exercise. Half of the participants listed in the above section have either quit coming into the program on a regular basis or they reduced the number of days that they do come in. All of the female participants had some very good ideas on how to make the program more enjoyable.

These findings were similar to those in the review of literature section. Many of those articles found that there are many factors to why participants seem to dropout of exercise programs after only a few months. In addition, another similarity was that intrinsic motivation was more important in participants staying active as opposed to extrinsic motivation.

The most frequent answers were to increase the amount of activities that we offered and to add more time to let them come in to exercise. Three of the participants also suggested that the program develop a buddy system to keep them accountable for their exercise and to know that someone else will be counting on them to show up to exercise. Only a two of the study's participants had anything negative to say about the Eastern Illinois University's Adult Fitness Program, and they happen to both be males. One felt that the program was too restrictive on what they were allowed to do, and the other felt there needed to be a better source of communication from the staff to the participants on upcoming events and new programs. Overall, most of the participants found the program adequate to keep them motivated and felt very positively motivated after hearing the results of their progress screening, whether it be positive or negative.

Conclusions

The results that were obtained from the Adult Fitness participants were as follows:

(1) Participants found the 12-week progress screening very motivational because after they completed their tests they knew if they were making progress or if they needed to increase the intensity of their workouts.

(2) Male participants gave much shorter answers to the questionnaire than females and gave less detail.

(3) Time and inconvenience were reported as the biggest barriers to continue exercise by Adult Fitness participants.

(4) Participants would like to be held more accountable for their exercise attendance by being watched more closely by the Adult Fitness staff or having someone work with them one on one.

(5) While participants still enjoy the program and find the progress screening beneficial, the dropout rate remains around the average of 40% dropout within three months.

Overall participants in the Adult Fitness Program felt very positive about the program and the progress screening. They felt that this program was a positive motivator to continue exercising.

Recommendations for Future Studies

1. Future studies might consider using a larger sample group.
2. Interview the participant one or two weeks after they receive their initial screening, when they start the program. There would be a lot more response and consistency.
3. Since participants tend to drop out around the three month mark, it might be a better idea to get their opinion sooner before they have a chance to lose interest in exercising.
4. Offering a reward to people who have not missed a certain number of days, would be a good way of keeping people active.
5. Selecting a specific population within the program, based on demographics, or new participants' versus people who have been involved with Adult Fitness for multiple years would be a good way to determine why people are dropping out.
6. Future studies could ask the staff a full range of questions of how they feel about the motivation of the participants and how the staff keeps participants motivated.
7. Future studies may focus on either intrinsic or extrinsic motivation. Another option would be to do two separate studies on each intrinsic and extrinsic motivation and then compare the two.

8. Having more control of the 12-week results, doing all of the progress screenings myself instead of other graduate students would ensure that the results were being given the same way every time.

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Appendix A
Consent Form

CONSENT TO PARTICIPATE IN RESEARCH

Progress Checks as a Motivational Tool for Adult Fitness Participants

You are invited to participate in a research study conducted by Stephanie James and Dr. Jeffrey M. Willardson, Professor in the Kinesiology and Sport Studies Department at Eastern Illinois University. You have been invited to participate in this study because you are an Adult Fitness member who has recently completed a twelve week progress screening.

Your participation in this study is entirely voluntary. Please ask questions about anything you do not understand, before deciding whether or not to participate.

PURPOSE OF THE STUDY

1. To determine how the 12-week progress report effects motivation in Adult Fitness participants at Eastern Illinois University.
2. To determine the effectiveness of an exercise readiness screen in modifying exercise behavior.

PROCEDURES

As a participant you have already undergone an initial screening, as part of the screening process for the Adult Fitness Program. This screening consists of body fat analysis, flexibility; arm and leg strength tests, height and weight, and waist to hip ratio, along with an annual electrocardiogram (EKG) which is just a check of your heart rhythm. This test will be done prior to you starting the Adult Fitness Program. After you have been consistently in the program for three months the as an Adult Fitness member, you will go through a twelve week progress screening where Adult Fitness workers will repeat the same tests as the initial screening with the exception of the EKG. This is to show the improvements that you have made since you started. As an Adult Fitness member who has recently completed their twelve week progress screening, you will then be interviewed. All questions will be generated from a pre-made questionnaire. You will answer questions concerning your feelings towards exercise and the twelve week screening process. There will be a tape player in the interview, to record what I am not able to write down during the interview. Since there will be a recording you will be able to talk openly as you wish and at length about each question. It will only be used for recording data and nothing else. Attendance records will be examined to determine the number of days each participant achieved their target heart rate and the number of days that you complete a strength workout. The entire interview should last approximately fifteen minutes but will not be limited to that time, so feel free to talk as much as you wish. Your consent to participate will authorize the researcher to access and use information in your Adult Fitness screening files only for purpose of this study.

Potential Risks and Discomforts

There are no foreseeable risks in participating in this study.

POTENTIAL BENEFITS TO SUBJECTS AND/OR TO SOCIETY

As a participant you will benefit from this research by becoming more aware of your current exercise behavior. You will also receive free counseling from an experienced exercise professional.

CONFIDENTIALITY

Any information that is obtained in connection with this study and that can be identified with you will remain confidential and will be disclosed only with your permission or as required by law. Confidentiality will be maintained by means of omitting names in the thesis, and participants files will be kept in a locked cabinet in the Adult Fitness Office. Only individuals working in the Adult Fitness Program and the Investigators will have access to the information.

The audio-tape will only be accessed by the investigators and will only be used for educational purposes. The audiotapes will be destroyed after the research has been completely finished.

PARTICIPATION AND WITHDRAWAL

Participation in this research study is voluntary and not a requirement or a condition for being the recipient of benefits or services from Eastern Illinois University or any other organization sponsoring the research project. If you volunteer to be in this study, you may withdraw at any time without consequences of any kind or loss of benefits or services to which you are otherwise entitled. You may also refuse to answer any questions you do not want to answer. There is no penalty if you withdraw from the study and you will not lose any benefits to which you are otherwise entitled.

IDENTIFICATION OF INVESTIGATORS

If you have any questions or concerns about this research, please contact:

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Mattoon, IL 61938
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Dr. Jeff Willardson
Lantz Arena
Charleston, IL 61920
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RIGHTS OF RESEARCH SUBJECTS

If you have any questions or concerns about the treatment of human participants in this study, you may call or write:

Institutional Review Board
Eastern Illinois University
600 Lincoln Ave.
Charleston, IL 61920
Telephone: (217) 581-8576
E-mail: eiurb@www.eiu.edu

You will be given the opportunity to discuss any questions about your rights as a research subject with a member of the IRB. The IRB is an independent committee composed of members of the University community, as well as lay members of the community not connected with EIU. The IRB has reviewed and approved this study.

I voluntarily agree to participate in this study. I understand that I am free to withdraw my consent and discontinue my participation at any time. I have been given a copy of this form.

Printed Name of Participant

Signature of Participant

Date

I, Stephanie James, have defined and fully explained the investigation to the above subject.

Signature of Investigator

Date

Appendix B
Questionnaire

Questionnaire

1. How long have you participated in the Adult Fitness program at Eastern Illinois University?
2. What other fitness programs have you been involved with in the past?
3. Did past programs you were involved with use a progress screening?
4. If yes, what method of assessing progress was used? Did the results of such screening change your exercise behavior?
5. Has the 12-week progress screen at Eastern Illinois University influenced your exercise behavior?
6. If yes, please explain.
7. What could be done differently to make Eastern Illinois University Adult Fitness program more enjoyable?
8. What could be done differently to motivate you in a more positive way?
9. Rate how enjoyable the Adult fitness program at Eastern Illinois University is to you:

1 not enjoyable 2 sort of enjoyable 3 mostly enjoyable 4 completely enjoyable
10. How often do you exercise (including light activity)?
11. What type of exercise (including daily physical activity) do you like to do (can include house and yard work and other non-conventional forms of physical activity)?