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Getting with the Program: Incorporating Gender Issues into Exercise Adherence Theory

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Introduction

With the variety of self-help books and magazines in circulation and the overload of information about the benefits of a healthy lifestyle, it is perplexing that most people do not take better care of themselves. Approximately 30% of Americans do not engage in any physical leisure time activity, (such as walking the dog, playing frisbee, etc.) and only 9% are active at an intensity and frequency recommended for enhancing cardiovascular fitness (Caspersen & Merritt, as cited in American Council on Exercise Personal Trainer Manual, 1996). Are humans inherently lazy? Are people either born with the motivation to exercise or not? Is change impossible? Perhaps the increasing rates of obesity are not so surprising when one considers the mounting societal obligations and psychological stresses facing humans today. Women, especially, are facing relatively new social conflicts when trying to blend the roles they want to take in life with what society expects of them. Turning to food and a sedentary lifestyle is possibly comforting in a not-so comfortable world. How can these challenges be successfully overcome to adopt a healthy lifestyle? More specifically, why do women have trouble maintaining an exercise program- are there gender-specific issues related to the problem?

After taking a broad look at the exercise adherence theoretical research, I examine how these theories and ideas apply to women based on research and my own experiences working as a personal trainer in a fitness center setting. In addition, I examine how the unique life experiences of women affect their exercise habits and how it can be paralleled to the present-day position of women in athletics.
Review of the Literature

Exercise adherence is not a new topic of research. Perhaps initial research began in the hospital setting, testing whether patients complied with medical treatment (Biddle & Mutrie, 1991). This research eventually evolved into a fitness setting, attempting to find the core characteristics of exercise adherers and non-adherers and the different reasons why some choose to make exercise a part of their lifestyle and others do not. Exercise adherence can be defined as, “the ability to maintain a regular exercise regimen, which includes: three exercise/physical activity days per week, 20 minutes per session, and at least six months of continuous participation” (Farquar & Dishman as cited in Reese, 1999 p.6).

Personal investment theory. Several theories were developed attempting to define specific characteristics and factors predicting exercise adherence. The Personal Investment Theory was developed by Maehr and Braskamp in 1986 and encompasses many of the same ideas as several other exercise adherence related theories. The Personal Investment Theory focuses on what meaning the person attaches to a situation or activity and proposes that this subjective meaning is the main factor in determining the amount of time invested by the person into the activity or situation.

For example, if given the choice of going to the movies or going for a run, most people would opt for the former. Why? Perhaps it is because the two activities carry completely different associations and meanings. The movies might equal fun, no work, and entertainment. Running, on the other hand, is associated with work, sweating, and possible fatigue. Which activity is actually better the person in the long haul is irrelevant; for example, although the movies are fun, one might spend a lot of money on tickets,
food, etc., and the activity could contribute to a growing waistline. On the other hand, running would probably make the person feel good about him or herself, could possibly be more of a spiritual experience, and will certainly cost less.

According to the Personal Investment Theory, the subjective meaning of an activity is comprised of three basic, interrelated parts: personal incentives, sense of self, and perceived options (Tappe, Duda & Menges-Ehrnwald, 1990). The personal incentives component incorporates the motivational focus of an activity, or reasons why one engages in an activity. These reasons or incentives can include health benefits, competition, stress management, and physical strength improvements. Sense of self refers to a person’s thoughts, perceptions, beliefs and feelings related to who he or she is. These perceptions include one’s sense of competence, self-reliance, goal directedness and social identity (Tappe, Duda & Menges-Ehrnwald, 1990). Most of these perceptions are fairly self-explanatory. The social identity perception basically encompasses one’s entire social network, including friends, spouses, and family.

However, social identity also includes the values that this social network places on activities and goals. For example, if one’s family and peers regard exercise as a vital component of life, then chances are that person will think it is important as well. In addition, a mother who views exercising as time away from her children as opposed to being good for herself, might feel guilty for being at the gym.

The third component of the Personal Investment Theory is perceived options, which in the context of exercise is more correctly thought of as perceived barriers (Tappe, Duda & Menges-Ehrnwald, 1990). For an adult, these can include physical barriers such as distance and transportation to the gym; mental barriers could include
one’s ability to tolerate the discomfort of exercise. Perhaps the most common and significant barrier is a lack of time to exercise.

**Social cognitive theory.** On a more cognitive track, Albert Bandura’s Social Cognitive Theory places high emphasis on perceived self-efficacy or a person’s judgment of his or her capability to organize and execute courses of action required to attain designated types of performances (Bandura, 1986). Basically, self-efficacy is a person’s judgement of his or her ability to *do* something. Bandura proposes that perceived self-efficacy can be used to determine how well one performs an activity partially independent of his or her actual skills to do that activity. For example, say that I have not been regularly lifting weights for several months and someone challenges me to curl a twenty-pound dumbbell twenty times. If I go into the activity confident that I can perform the total number of repetitions, chances are high that I will indeed curl the weight twenty times (regardless that I may end up ripping a muscle doing so.) However, if I begin curling the weight with the thought in my head that there is no chance on earth of getting twenty reps out, I doubt I will push out ten. This idea can be applied to almost any situation, whether it be believing in success on an exam, or beating a friend at a game of checkers.

However, there is a certain limit to self-efficacy. I can whole-heartedly believe that I can bench 300 pounds, but I will probably crush my thorax in trying to do so. Bandura expresses this as: “Physical and psychological well-being is better served by action based on self-appraisal of efficacy than by mindless leaps into action without regard to one’s capabilities” (Bandura, 1986, p. 392).
Transtheoretical model of stages of change. The Transtheoretical Model of Stages of Change Theory was developed by Prochaska after studying the treatment of smokers trying to quit. These describe the different stages a person passes through when making a lifestyle change, how they pass through each stage and what stage they reach as predictors of success. The stages include: precontemplation, contemplation, preparation, action, maintenance, and termination.

A person in the precontemplation stage is unaware of having an addictive habit or problem and is not seriously considering changing (Prochaska, 1984). Perhaps he or she would join a fitness center due to pressure from others; however, he or she would not be seriously intending to change. The contemplation stage includes a change in thought about the problem, plans to possibly change within the next six months, and a willingness and interest to know more about the benefits of change. The preparation stage signifies that change is planned within the next thirty days and some activity has possibly been started already. The action stage means that change has begun for less than six months and behavior techniques are being learned; perhaps this includes starting an exercise program and learning how to keep a food log. Maintenance signifies that change has been maintained for longer than six months; in the maintenance stage, boredom and shift of focus can become problems (Prochaska, Norcross, & Diclemente as cited in Rakow, 2001). For instance, the first couple of weeks or months of an exercise program can be exciting as the weight drops off and new exercise techniques are learned. However, a plateau in weight loss may occur and the person may drift away from the exercise program. When a person reaches the termination stage, these plateaus are not so devastating; this stage signifies that there are no worries about relapses. It is likely that
relapses will occur, but the person knows he or she will be able to deal with them successfully when they strike.

The termination stage is really the ideal stage to reach; at this point, behavior change is successful and complete. However, most travel through the Stages of Change in a circular fashion. For example, a woman might get started on an exercise program, but then has an injury and has to abandon her regimen. When she recovers from her injury, she may have to start all over again (although she may be starting from a different level in the stages, perhaps in the action stage). Also, many become stuck in the various stages, especially the precontemplation and contemplation stages. It is very common to hear an overweight person talk for years about wanting to lose weight, yet he or she may never reach the preparation or action stages and take the steps to do so.

In summary, there are a couple of basic components underlying most theories related to predicting adherence. These include goal setting and confidence in one’s abilities.

**Current and Future Directions**

I initially attempted to study how emotions affected the exercise programs of five females, but eventually changed focus. I distributed the Exercise-Induced Feeling Inventory (Gauvin & Rejeski, 1993) once a week to the clients for three weeks after a mixture of cardiovascular and weight training activity lasting more than thirty minutes. The inventory contained twelve words that captured four basic categories or feeling states: revitalization, tranquility, positive engagement, and physical exhaustion. Beside each word, were levels of feeling ratings from “0” (Do not feel) to “4” (Feel very strongly). Ultimately, I ceased the distribution of these surveys for two reasons: I did not
feel they were useful indicators of adherence, and I could not keep track of clients who I was no longer training (i.e., women that came in on their own). However, I did feel that the surveys were useful in making the clients aware of how exercise was making them feel, which was normally good.

From this, I believe it would be useful to study how emotions and depression affect female adherence. Major depression is twice as common among females as it is among males ("Depression: Definitions, Facts, and Statistics," 2001); it seems that this must have some significant affect on adherence. I would also be curious to see how these theories apply to low-income women. One woman who I trained for a few weeks was in the lower-income, relatively uneducated bracket. She came on her own possibly twice after our initial free sessions, despite my offer to train her one or two times more for free. A few weeks later, she was in collections, meaning that she could not pay her monthly account for the fitness center. Another lower income female I trained stopped coming to the fitness center shortly after our sessions; however, she also had severe emotional problems, was on medication, and had apparently been institutionalized at one point.

**Practical Significance to Me As a Personal Trainer**

There are differences in the way most men and women live their lives, whether genetically inherent or socially constructed. Society has changed drastically from one or two hundred years ago; women are granted entrance into almost any profession, and can attend almost any school they so desire. However, there are still changes to be made. Exercise is an arena in which men and women can differ in thought and action, in addition to where gender power structures can be observed. Although the two genders share many traits in terms of exercise adherence and non-adherence, there are vast
differences in why women and men choose to exercise and what restricts them when they do not.

My fitness center. I work at a fitness facility where the average use of the facility is 7000 members in a one-month period. Ethnicity and gender breakdowns were not available, but the members are primarily Caucasian. The fitness center has proved to be an excellent setting to observe both genders, their workout habits, and reasons why they are there in the first place. In this project, I looked primarily at Caucasian women, in the age range of 25-50, most in middle- to upper-middle class income range. Most were in the beginnings of their exercise programs, with one or two nearing a stage of maintenance (Prochaska, 1984). There was a mixture of single and married women, some with children.

Reasons for participation. Several publications have mentioned the different reasons the genders partake in physical activity. Males have been found to work out or participate in sports to improve their appearance, flexibility and experience competition (Tappe, Duda & Menges-Ehrnwald, 1990) in addition to achieving excellence, learning new skills, and experiencing excitement (Biddle & Mutrie, 1991). Women, on the other hand, participate in physical activity mainly to improve their appearance, to increase their strength and manage their weight (Tappe, Duda & Menges-Ehrnwald, 1990). Interestingly, nowhere in these studies were competition and/or learning new skills mentioned as reasons women exercise. Women seem to place more emphasis on overall appearance, namely weight loss and reaching a specific weight number on the scale.

In addition, there are differences among the genders in terms of appearance goals. When I ask women at the fitness center what their primary goals are, the word “toned” is
usually mentioned and the fear of becoming “bulky” or appearing too “muscular” as a result of weight training. In contrast, I have never heard any male express this fear. The emphasis in women’s fitness has shifted towards developing strength and competence and the muscular look has become more acceptable; however, much if not most of the female population is still focused on achieving the traditional ideals of being thin and sexually attractive to men (Coakley, 1998).

Aside from reasons to exercise, barriers to exercise are also different among genders. The ability of a female to bear a child perhaps accounts for one of the most significant differences in males and females in terms of adherence or even beginning an exercise program at all. For example, an injury might be a reason one must exit from the action Stage of Change and possibly reenter at a later time. For women, it seems that having and caring for a child could be a major factor in keeping up with any stage beyond contemplation (Prochaska, 1984). Perhaps weight loss seems like an unachievable goal when starting out so far behind; the additional weight left on a mother after pregnancy may perhaps place a seed of doubt into her abilities of returning to previous fitness levels. Her self-efficacy (Bandura, 1986) has been damaged. Caring for a child may also be a barrier to exercise in a Personal Investment Theory context (Tappe, Duda, & Menges-Ehrnwald, 1990), not to mention the cause of exercise taking on a whole new meaning. There seems to be a tendency toward guilt when mothers choose to exercise and take an hour or two for themselves. One woman told me that she will not go to the gym when she has a long shift at work (which is often) because that would be additional time away from her three children. In addition, her diet was horrible because she did not want to have to fix separate, low-fat meals for herself since fixing them for the whole family
would deprive them of "taste and real nutrients." Exercise, for many mothers, loses its meaning of feeling good and healthy and instead may turn into feelings of guilt.

Spousal support also affects exercise adherence and has been found to be one of the most important factors in adherence (Annesi, 2001). Do women tend to have less support from their husbands than men do from their wives? In the fitness center where I work, I have heard several women mention restrictions on exercise time imposed on them by their husbands. One woman expressed, "My husband doesn't like it when I am away so I can only come when he is at work." Another mentioned, "My husband likes me to be at home when he is there, so I can only be here a few mornings a week." I have never heard a man in the gym express his lack of attendance due to his wife's impositions. More often, their wives call the gym to talk to them or stop by the gym to see them while they are working out. Perhaps the women I talked to allow their husbands to impose restrictions whereas the men went to exercise whether their wives liked it or not. Do women possess an extra "need to please" that many males do not? Possibly, but not very likely. Rather, it seems that women are held to a more caring and nurturing role that has been established for them. Many women may feel obligated to fulfill every need of their husband, including emotional needs.

Perhaps many of these differences and the greater difficulties women often face with fitness are not so surprising when placed into the same context of society's view of women in athletics. Regardless of the progress that has been made, such as for example, the passage and eventual enforcement of Title IX and the existence of such organizations as the Women's National Basketball League, the ball is still in the man's court, so to speak. Men still serve as the standard from which women are judged. M. Ann Hall
writes: "Therefore, women are seen as deviating from a standard of normal behavior, namely men's" (Messner & Sabo, 1990, p. 230).

Evidence of this standard can be seen in almost every aspect of society, but especially in aspects of sport and fitness. The WNBA is alive and kicking, but coverage of the games is significantly less than that of the NBA. At the University of Tennessee and at many other Southern schools the female teams must have the label "Lady" in front of the mascot such as Lady Vols. The types of sports women play are still different from men's. Even though contact games such as soccer and basketball are popular women's sports, females trying out for high school football teams still make headlines since there are no football teams set up for women. Rugby, a sport that has been compared to football, has slowly grown in popularity among women in the past few years; however, the women that play rugby are often stereotyped as being unfeminine. Even sports literature about women is differentiated from the norm; why must there be a *Muscle and Fitness Hers* magazine when there already exists a *Muscle and Fitness*? Or why have a *Sports Illustrated for Women* when *Sports Illustrated* is already in wide circulation? In addition, these magazines never focus entirely on athletics; there must always be a section for fashion and athletic attire.

From a cultural studies perspective, "play, games and sports ... are considered to be real social practices" (Messner & Sabo, 1990), meaning that what goes on in sports is a reflection of what goes on in society and vice versa. Women are receiving conflicting messages about who they are supposed to be. For example, it seems that society praises the "perfect" mother that can do it all while remaining thin; yet that same society chastises a mother for spending time away from her children. Basically, mothers are
being told to be the nurturers for their families and to be around for all of their families’ needs; yet she must still find the time to remain thin and sexually attractive to her husband while not appearing to have abandoned her family.

**Conclusions.** Theories that lay down guidelines for predicting adherence are useful only if they take into account the different life experiences and role expectations that the genders face from society. Dishman (1994) writes:

> Because physical activity is a biologically based behavior, it is especially important to understand the role of genetic and biological influences (e.g., maturation during childhood) on physical activity because these factors may interact with, or modify, social and psychological determinants (p. 1385).

Professionals in the fitness industry must also take gender issues into account when designing and implementing fitness programs. It seems that most fitness professionals, if not people in general, jump to the conclusion that gender differences are genetically inherent; in a fitness center setting, it is dangerous to assume that a woman or man can only do what her gender “guidelines” expect of him or her. On the other hand, when the fitness professional is cognizant of gender issues and society’s power structure, it can be frustrating to realize that the client may not be nor care to be. Sometimes I wonder what a client’s true goals would be if he or she did not believe that his or her body needed to fit into a prototype established by society. I have discovered that when most learn about such issues, they may agree that it is not equal nor ideal; but they believe that they cannot change the world in a day and that it is easier to go along with the game.
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Appendix E - UNIVERSITY HONORS PROGRAM
SENIOR PROJECT - APPROVAL

Name: Lori Funderburg

College: Arts & Sciences Department: College Scholars

Faculty Mentor: Dr. Leslee Fisher

PROJECT TITLE: Getting with the program
Incorporating Gender Issues into exercise adherence theory

I have reviewed this completed senior honors thesis with this student and certify that it is a project commensurate with honors level undergraduate research in this field.

Signed: Leslee A. Fisher, Faculty Mentor

Date: 12/10/01

General Assessment - please provide a short paragraph that highlights the most significant features of the project.

Comments (Optional):
Getting with the Program: Incorporating Gender Issues into Exercise Adherence Theory

With the overload of information concerning the benefits of a healthy lifestyle, it is often perplexing why most people are not taking care of themselves. Women specifically are facing a unique set of challenges when it comes to maintaining a regular exercise program. What are the differences among genders when it comes to exercise adherence? Do modern exercise adherence theories apply to women? This paper explores the applicability of three popular adherence theories, the Personal Investment Theory, the Social Cognitive Theory, the Transtheoretical Model of Stages of Change). In addition, the gender power structure is examined in a fitness center setting and paralleled to that of the athletic arena in attempts to understand what different barriers the genders face in terms of exercise adherence.