

Effects of Exercise Motivation and Frequency on Mental Health in Women and Men

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Abstract: It has been widely known that exercise can improve physical health by decreasing the probability of certain illnesses, such as cardiovascular diseases and diabetes. There are fewer experiments substantiating the correlation between exercise and mental health though. This article focuses on analyzing gender differences in motivation and frequency in popular team sports through qualitative analysis and literature review, as well as the influences of these differences on mental health. There are experiments on similar topics, but few literature reviews compare motivation and frequency between genders in exercise while applying the difference to mental health. Therefore, this article focuses on using multiple conclusions from previous research and analysis for a deeper application and meaning. Ultimately, this paper concludes that women are more likely to exercise for health, fitness, and weight loss, while men are more likely to exercise for health, fitness, and enjoyment. There is not a significant difference between women and men in terms of frequency of exercise, but women in general have a lower degree of satisfaction with their quality of life than men do.

Keywords: Motivation, frequency, exercise, gender, health

1. Introduction

Exercising has become a very important part of life. It is much more prevalent in comparison to the past, because more people have realized the benefits of exercising, such as a reduced risk of cardiovascular diseases, stroke, and diabetes [1]. Chekroud used a cross-sectional study of a large sample to conclude that those who engage in exercise have 43.2% fewer days of poor mental health in the past month than those who do not engage in exercise [2]. More specifically, Chekroud found that the association between exercise and improved mental health is stronger if people participate in popular team sports, such as cycling, aerobic, and gym activities [2].

The approach adopted in this paper is to find multiple experimental results from other sources and to then use a literature review to analyze the gender and age differences in exercise motivation and frequency to finally determine how the factors affect mental health. The purpose of this paper is to comprise and summarize multiple sources into one for more convenient navigation. This article may also assist in understanding gender and age differences in exercise motivation and frequency, as well as the mindset that leads to poor mental health issues. Moreover, this paper might also assist specific jobs, such as personal trainers to better understand their clients, so they can better help achieve goals.

2. Motivation

2.1. Women

2.1.1. Motivation - Health and Fitness

The overall motivation pattern for women in exercising is health, fitness, and weight loss. Almost everyone, both men and women, who participates in aerobic exercise or any other type of exercise wishes to be more healthy. However, women are especially focused on achieving both a better body shape and a lower weight.

Davis and Cowles conducted a lifestyle questionnaire that included 112 women and 88 men who regularly participated in aerobic exercises [3]. From the survey, Davis and Cowles find that most females wish to lose weight by exercising [3]. In fact, 80% of women under 24 and 70% of women over 24 years old wish to lose weight, in comparison to only 8% of young women and 3% of older women who wish to gain weight [3]. The large percentage gap between women who wish to lose weight and those who wish to gain weight may indicate that women, in general, believe they are overweight and are somewhat dissatisfied with their current weight. Gray also supports the finding that women tend to perceive themselves as being heavier than their actual weight [4]. The fact that there is not much difference between younger women and older women may mean that the relationship between exercise motivation and weight loss is not affected by age. Women in general may be more willing to start exercising if personal trainers and coaches tell female clients how much weight they will lose in the future. Females may be even more motivated to continue exercising if they see an actual weight loss.

Comparing the exercising motivation between men and women, Davis and Cowles find that women report having higher body dissatisfaction than men do [3]. More specifically, more women than men believe that exercising for weight-related reasons and toning is more important. Women also score lower on body esteem level for appearance and weight in comparison to men [5]. It may be hypothesized that the reason women focus on body appearance and shape more than men is that according to evolution, women need to attract men with their femininity. Therefore, it may also be hypothesized that female clients are more likely to start exercising or continue exercising if they can have an attractive and model-like body shape.

Overall, prevalent incentives for women to exercise are for health and fitness, but more importantly, it is for weight loss. Regardless of the age difference, all women consider weight loss as one of the most important goals when they begin exercising, and it is a very motivating factor for them to continue exercising. In practice, when facing female clients, personal trainers and coaches can emphasize more on helping them to achieve a better body shape and to lose weight.

2.1.2. Stress and Exercise

There are many benefits to exercising, and women can alleviate many mental health issues and dissatisfactions through regular exercise. Davis and Cowles demonstrated that women in general are dissatisfied with their body image and appearance, which affects their well-being and even mental health [3]. Therefore, many women choose to exercise to feel better both mentally and physically. It can be hypothesized that women can feel better through weight loss and a better body shape as well as improve their well-being through releasing their negative emotions and self-doubt when exercising. In general, body satisfaction and self-esteem are factors that affect women's well-being when they believe they have an imperfect body.

2.1.3. Satisfaction and Exercise

Craft used questionnaires to analyze the exercise habits and quality of life of 108 women and 72 men. The result shows that the women's reasons for exercising are more predictive of quality of life than their exercise outcome [6]. Moreover, Craft strengthens that most women exercise for weight loss, mood improvement, health reasons, and body toning, which at the same time strongly predicts women's quality of life [6].

However, the correlation between the quality of life and exercise is weak. Women have a lower quality of life score when exercising for weight loss or body toning reasons, but women have a higher quality of life score when exercising for health and mood improvement reasons. Quality of life is a very important predictor of a person's mental health. It can be hypothesized that women exercising with different intentions will result in different quality of life and stress levels. The reason exercising for weight loss and body toning correlates with a lower quality of life may be that women continuously compare their bodies to others, and the comparison itself may become a chronic stressor.

Furthermore, losing weight and toning the body takes time, and people do not see immediate results from exercise. The inability to see exercise feedback may be another stressor. Moreover, from surveying regular exercise participants, Davis et al. concluded that those who engage in regular exercise may be causally related to excessive concern with weight and dieting [7]. Applying the concept to real life, trainers and coaches can ask their female clients what motivates them to exercise. More importantly, trainers should help female clients to understand that exercising to lose weight and have a perfect body shape is unhealthy and results in greater mental stress. They can also give their clients the right perspective that exercising is not only for weight loss, and that dieting is not necessarily healthy.

2.1.4. Self-esteem Level and Exercise

Self-esteem from exercise is also an important predictor of one's psychological well-being. Tiggeman used questionnaires to survey 252 participants on the amount of exercise, reason for exercise, body satisfaction, and self-esteem level [8]. The study found that exercising for health and fitness reasons is correlated with higher self-esteem levels, and exercising for weight loss and body toning is associated with lower self-esteem levels for both men and women. This means that if people focus on having better health from exercising or simply for fitness itself, then they will have higher self-esteem, which may result in better psychological well-being. However, women score significantly lower on body satisfaction and self-esteem [8]. It can be hypothesized that women place a greater focus on weight loss and body toning out of the four reasons for exercise, so they have lower self-esteem scores.

Between men and women, females have a greater degree of body esteem differentiation than males do [9]. In other words, the self-esteem level for women is affected by many factors and changes more frequently than that of men. There is also a difference between younger women and older women in terms of self-esteem and exercise reasons. First of all, younger people (both men and women) scored lower on self-esteem. This may be due to their excessive focus on body appearance. Appearance is very important for young people, because they are more compelled by the need to attract the attention of others with their appearance. Therefore, self-consciousness may make young people score lower on self-esteem in general.

More specifically, there is a negative relationship between the amount of exercise and body satisfaction and self-esteem scores for young women. In other words, when young women exercise more, they have lower self-esteem and they are less satisfied with their bodies. An explanation for this conclusion may be that women are more conscious about their appearance than men are. The

more young women exercise, the more they think they are imperfect. The continuous expectations and stress may lead to low self-esteem and worse mental health.

2.2. Men

Men have similar reasons for exercising, but the main difference is that men focus less on losing weight and toning their body shape in comparison to women. In fact, Davis and Cowles found that within their men's sample, there is an even split between those who wish to gain weight and those who want to lose weight [3]. Craft also supports his survey finding that men endorse exercising for health, fitness, and enjoyment reasons [6]. Therefore, instead of focusing on losing a few pounds from exercising, men place more importance on the enjoyment and fun they receive from exercising. It can be hypothesized that men believe building bigger muscles and being stronger is more important than being skinny and having fewer pounds on the scale. According to evolutionists, men needed to hunt and protect their families, so there may be an innate desire in men to build muscles and gain weight for more masculinity.

2.2.1. Motivation of between Ages

The motivation between men and women differs, and the motivation between younger men and older men also differs [3]. They first split their sample group into two categories: a group of older men aged 25 and above, and a group of younger men aged below 25. Davis and Cowles find that 61% of older men wish to lose weight, in comparison to only 33% of young men wish to lose weight [3]. There are 19% of older men who wish to gain weight, in comparison to 47% of young men who wish to gain weight. The data also suggests that there is a trend of younger men wanting to gain weight and older men wanting to lose weight.

Davis and Cowles further explained that they found older men feel much heavier than their desired amount of fat, because statistics show that older men have a significantly greater percent of body fat in comparison to younger men [3]. This problem is not found in women. A possible explanation is that as people become older, there is more body fat built and stored and the basal metabolism level is lower, so older men wish to lose weight through exercising.

It is unknown why older women do not have a higher percentage of body fat than younger women. However, it can be hypothesized that women in general focus on weight loss and maintaining a good body shape, so women would start exercising at a young age and pay close attention to their body image and weight control. Therefore, even when women become older and have a lower basal metabolism level, they are less likely to have much more body fat than younger women.

According to the concepts, trainers and coaches can first determine the age range of their clients to determine what the best plan is. With older male clients, trainers can help clients understand the health benefits of exercising. Trainers can also focus more on improving their health through specific food intake instructions while helping them lose weight through cardio during the exercise sessions. With younger male clients, trainers can help build more muscle and focus on becoming more fit.

2.2.2. Body Satisfaction

In terms of mental health and stress levels in exercise, there is a positive relationship between the amount of exercise and body satisfaction and self-esteem for all ages of men. Specifically, Davis and Cowles find that young men have greater body satisfaction if they have higher exercise participation, and more body focus is also correlated with an increased level of exercise [3]. In other words, more exercise for men has much more benefits and is a positive cycle. An important note is that for young men, exercising is beneficial even if they focus on their body, because their goal is more focused on having a good body shape instead of losing weight. However, when women focus on their bodies too

much, they may become less satisfied and have lower self-esteem because they focus extensively on losing weight while expecting to have a great body shape. Weight loss may be the key determinant of the difference between men and women.

3. Frequency

3.1. Overall Frequency Pattern Comparing Men and Women

Frequency is another factor that affects one's exercise mental health, which differs between men and women. Craft conducted a questionnaire asking about the exercise frequency, duration and intensity of exercise for the 180 participants [6]. The frequency is recorded as "often", "sometimes" and "never/rarely". The duration is reported as a weekly span. The intensity is separated into three categories: strenuous, such as running or vigorous swimming; moderate, such as fast walking or easy swimming; and light, such as yoga or easy walking. Craft found that women have a significantly higher energy expenditure level than men do in both moderate and light activities [6]. It can be hypothesized that women have different motivations and goals in comparison to men, so women focus more on higher overall energy expenditure on moderate and light activities. Men may be stronger physically, so they engage in high-intensity activities.

Craft also studied that men and women reported having similar frequency patterns with 38-49% reporting exercising "often", 39-43% "sometimes", and 19% "never/rarely" [6]. In other words, women and men do not differ much in terms of exercising frequency, and most people regardless of their gender, engage in exercise activities "often" and "sometimes" weekly.

Combining the two conclusions, it can be hypothesized that women tend to engage in moderate and light activities with higher total energy expenditure. However, men tend to engage in fewer moderate and light activities and instead engage in strenuous activities, and they have lower energy expenditure than women. Personal trainers or coaches should know that women prefer less intensive workouts than men do, but have higher energy expenditure for exercising than men do.

3.2. Possible Frequency that May Cause Stress - Comparing Men and Women

Exercise frequency can be closely related to one's quality of life and mental health. Lustyk studied the influence of frequency on quality of life, which is assessed in 16 domains, such as health, work, and recreation [10]. Lustyk found that participants who have high-frequency exercise habits have a significantly higher health-related quality of life (QOL) than people who participate in medium or low exercise frequencies [10]. In other words, it can be hypothesized that exercise can directly improve health, which indirectly improves one's quality of life. Lustyk also found that participants engaging in high-frequency exercise habits have higher scores in the helping and community domains [10]. It may be hypothesized that by spending more time exercising, people become happier, which in turn leads them to be more helpful and focus on their community. In other words, the relationship between the community domain and exercise frequency is not straightforward, but the correlation may indirectly influence each other.

Another finding is that people who engage in low-frequency exercise habits score higher in the money domain than people who engage in medium or high-frequency exercise habits. Lustyk explains this finding with the time and money trade off [10]. When one has time to engage in more exercise, he may have less time to earn money and vice versa.

In terms of the volume factor, Lustyk studied that people with a heavy volume of exercise have a higher quality of life than the lower volume group [10]. In other words, the more work one does during exercise, the higher their quality of life rating is. Trainers or coaches, therefore, should increase the exercise volume for clients while adjusting the frequency according to the needs and goals of the clients to provide them with the highest quality of life and mental health.

4. Conclusion

In this article, the analyzed conclusions state that women are more likely to exercise for health, fitness, and weight loss reasons. Men are more likely to exercise for health, fitness, and enjoyment reasons. In exercise, women generally score lower in life satisfaction and quality of life ratings than men. In terms of frequency, both men and women are similar.

The limitations of this article are that no investigations or experiments were conducted to test the inferences. The information and summaries obtained so far are inferred based on data from other experiments. With the update of the epidemic situation and social situation, this paper does not add social environmental factors to the influencing factors, so there will be a phenomenon of missing information.

In the future, a questionnaire or survey, or even an experiment could be done to improve the validity of the article's content. Another direction would be to study a new domain of related topics to add new information to this field. A possible topic may be to study the exercise frequency difference between men and women and how this impacts mental health specifically.

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