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Body Satisfaction and Sex Differences in Exercise Motivations

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Abstract

In this study we investigated body satisfaction and sex differences in exercise motivations. We used a questionnaire that assessed the exercise motivations: stress/anxiety, health/fitness level, mood/enjoyment, and appearance/body shape. We had 198 undergraduate participants, 114 females and 84 males between the ages of 18-23 from the University of New Hampshire, Durham campus. Self-objectification is relevant in this topic because males and females feel pressures from society to obtain the "ideal body type". We found that health/fitness goals are the primary motivators for both males and females. There were statistically significant differences between male and female exercisers desire to lose, gain weight, and be stronger. The majority of both males and females, regardless of exercise behavior, desire to have thinner bodies. The majority of exercising males report no discrepancy in their ideal and actual body types and the majority of exercising females report an ideal body type thinner than their own body.

Introduction

We were interested in looking into motivators of exercise, especially differences between males and females and between exercisers and non-exercisers. Our research questions asked: Is there a difference in significance between stress/anxiety motives, fitness/health motives, appearance/body shapes motives, and enjoyment/mood motives; is there a difference in motives between sexes; and is there a difference in body satisfaction between those who exercise and those who do not. We describe stress/anxiety motive as exercising in order to release tension or pressures. We describe fitness /health motive in the sense of their reasoning for exercise is to obtain better stamina, muscle tone, and overall fit persona. We describe mood/enjoyment motive as wanting to exercise to feel emotionally better. Lastly we describe appearance/body shape motive in the sense of exercising in order to be

thinner and overall more attractive. Based on the self-objectification theory, individuals make judgments of themselves as a result of influences by society and beliefs about how others seem them. This theory relates to our research questions as individuals may feel pressures by society to have an ideal body type, which can affect their exercise behaviors. One may feel that their body type is similar to the ideal and thus there is no need to exercise, where others feel they can obtain the ideal body type with excessive exercise. We hypothesize that there will be equal significance between each motivator; males will be more likely to exercise for health/fitness reasons and females more likely to exercise for appearance/body shape reasons; and lastly that those who exercise will have higher body satisfaction than individuals that do not exercise.

Literature Review

Fitness/Health

Strelan et al. (2003) discuss self-objectification in relation to exercise. Self-objectification refers to when "women come to see themselves as an object to be looked at and evaluated on the basis of appearance" (Strelan et al. 90). Results found that those who exercise for fitness/health reasons are more likely to have higher body satisfaction than those with other motivations, and also generally have significantly lower self-objectification (Strelan et al. 93). It is important to look at articles that study differences between males and females, as that is what we specifically want to research.

Tiggemann and Williamson (2000) find that health/fitness motives had the highest means among both young men and young women (Tiggemann and Williamson, 2000). Tiggemann and Williamson (2000) also find that in general, not taking gender into account, with a health/fitness motive the individual has higher self-esteem (Tiggemann and

Williamson, 2000). This supports results from Strelan et al. (2003) as self-esteem is similar to body satisfaction. A few years after Strelan et al. (2003) completed their study, the head author, Strelan, completed a separate study that focused on both males and females.

Strelan and Hargreaves (2005) look at both males and females, whereas Stelan et al. (2003) looks only at females. Supporting the findings from Tiggemann and Williamson (2000), they also find that the highest means for males and females reasons for exercise is health/fitness (Strelan and Hargreaves, 499). This study also finds that a health/fitness motive does not have a significant relationship with self-objectification for males, but in females has a significantly negatively correlation with self-objectification (Strelan and Hargreaves, 499).

McArthur and Raedeke (2009) found no difference between males and females in regard to their health/fitness reason to exercise (McArthur and Raedeke, 86). This study also found that students, who are regularly active, whether it is working out or participating in sports, are more likely to have a health/fitness motive (McArthur and Raedeke, 85). These students have a goal when exercising: to enhance their physical shape; many men believe that being in better physical shape means being more muscular.

Mood/Enjoyment

The mood/enjoyment motive sometimes gets over looked, as many individuals may think the only reasons for one to work out is for appearance or fitness/health level. Many use exercise as a stress reliever or a means to feel better about their selves. Exercising can ultimately increase or decrease the mood/enjoyment of the individual.

Strelan et al. (2003) also looked at mood and enjoyment motives. Stelan et al. (2003) found that there is a positive relationship between exercising for enjoyment and

satisfaction, body esteem, and self esteem; consequently there is a moderate negative relationship between the motive of mood/enjoyment and self-objectivity (Stelan et al., 2003:92). As these women are motivated to exercise by mood/enjoyment, they feel better about themselves before and after working out, and as these results show they are more likely to have lower self-objectification.

Tiggemann and Williamson (2000) separate mood and enjoyment into two categories to represent two different motives. Their data shows that young women's mood motive is greater than young men's mood motive, but their enjoyment motive is very similar (Tiggemann and Williamson, 2000:124). McArthur and Raedeke (2009) also found that male's enjoyment motive is greater than female's (McArthur and Raedeke, 85). Tiggemann and Williamson (2000) also finds that there is not a significant relationship between mood and enjoyment and body esteem and self esteem (Tiggemann and Williamson, 2000:124). Strelan and Hargreaves (2005) found supporting results in their study; mood/enjoyment is significantly positively correlated with self-objectification for females, yet is not significant for males (Strelan and Hargreaves, 499). The type of activity that one uses can affect their motive. It is important to look at how exactly one's mood/enjoyment motive can affect the individual.

Appearance/Body Shape

The appearance/body shape motive is very frequently talked about in not only the United States but also worldwide. This, most often, affects women, as the ideal body shape has morphed into one that is nearly unattainable. The media has a lot to do with this. There has been a substantial amount of emphasis on how men and women should look. Women should be thin and slender while men should attain a v-shape figure. We found that the

self-objectification theory was closely correlated with appearance. How an individual's perceptions of their appearance can ultimately affect their motivation to exercise. Pertaining to gender these motivations can be very different (Grossbard et al., 2009:200). According to Grossbard et al. (2009) sociocultural perspectives on body image propose that gender differences in body dissatisfaction likely represent different cultural standards for ideal body types: for females, a thin physique represents attractiveness and for males, a more muscular, mesomorphic build symbolizes power and success.

Strelan et al. (2003) found a significant positive association between appearance and self-objectification and a significant negative association between appearance and body satisfaction, body esteem, and self-esteem in women (Strelan et al., 92). This study also found that appearance has the highest mean compared to health/fitness and mood/enjoyment, meaning that it is the strongest motive in women (Strelan et al., 92). This finding contradicts one mentioned earlier that in Strelan and Hargreaves (2005) study, they found that health/fitness is the greatest motivator. Another contradicting finding from this same study shows that self-esteem in women is not significantly related to appearance, as it was found to be significant in Strelan et al. (2003) (Strelan and Hargreaves, 499). Comparing males and females, they found both sexes to have a positive significant correlation between appearance and self-objectification, which does support findings from the previous study (Strelan and Hargreaves, 499).

Tiggemann and Williamson (2000) and Strelan and Hargreaves (2005) found similar results in their studies, suggesting that there is no significant difference between males and females means for appearance motives. Tiggemann and Williamson (2000) refer to the appearance variable as attractiveness; it cannot be completely considered the same

as appearance, though it is very similar. Grossbard et al. (2009) found contradictory results of these two studies. This study refers to the appearance type motive as weight/body concerns, which can be compared with appearance. Weight/body weight is a very specific form of appearance. They find that weight/body weight concerns in females is much higher than males, yet both are significant (Grossbard et al., 202). McArthur and Raedeke (2009) found similar results to Grossbard et al. (2009), female's appearance motive is more significant than male's. It is hard to develop complete controversies in these studies because they all have a different way of defining the appearance motive (McArthur and Raedeke, 86).

Method

Participants

The participants in this study were compromised of a pilot group and a randomly selected group using a multi cluster sampling method. The pilot study included two undergraduate sociology classes at UNH Durham campus. Our random sample was selected using a random generator (random.org). Participants randomly sampled came from a mixture of classes: Youth Culture and Programs, Linguistic Field Methods, Introduction to Media Studies, Organization & Leadership Structure, and Sports Media Relations. We were able to combine the pilot study (N=66) and randomly selected participants (N=132) as data was similar for each group. These studies give a combined total of 198 participants, 114 females and 84 males. Ages ranged from 18 to 23 years.

Procedure

We obtained our pilot study by receiving permission from our advisor to sample two of her undergraduate sociology classes. For our random sample, we originally randomly sampled

10 undergraduate classes using a random generator (random.org) from 10 different departments; from each department we randomly selected a class in the Spring 2010 semester from the 400-799 level offered in the each department that was selected. Only 3 professors replied to our emails saying we could survey their classes. We had to go back and randomly sample 7 more classes from the same departments that we did not get responses from. After this, we were able to survey 2 more classes, and combined with our pilot study we had a total of 198 participants. We would have liked to survey more classes, yet with the time remaining we decided to stop at 198. We administered our surveys face-to-face to the 7 classes, with a 99% response rate, and everyone completing it within 10 minutes.

Measures

Exercise Participation

We measured whether the participant exercises or does not exercise at the gym by asking the first question: "do you exercise weekly at the gym?"; from there exercisers completed sections 1 and 3 and non-exercisers completed sections 2 and 3. Section 1 focused on questions about gym attendance and exercise motivators. Section 2 focused on health restrictions and comfort with the gym atmosphere. Section 3 included demographics and questions about body satisfaction.

Motivators

We measured each motivator by using a numerical ranking system, where participants ranked their motivators (relieve stress/anxiety, health/fitness, appearance, and enjoyment) from 1-4, with 1 being their top reason for exercise. This question was only asked to exercisers as it only pertains to them.

Perceptions of Body Satisfaction

Using YES/NO categories we were able to measure satisfaction with the body, desire to be healthier, desire to lose weight, desire to gain weight, desire to look better overall, and desire to be stronger. These questions were asked to both exercisers and non-exercisers in Section 3 of the survey.

Actual vs. Ideal Body Type

Using a diagram of body types/sizes of both males and females that rank from small to large (1-9) we were able to have participants rate what their actual body type is and what their ideal body type is. Using a compare variable in small Stata we were able to compare the two numbers to see whether their ideal was smaller, larger, or the same as their actual body type/size.

Results

Exercise Participation

Using small Stata we were able to determine with frequency and column percentages that 33% of participants were non-exercisers, and 67% were exercisers.

Motivators

As data in Table 1 shows, using sex as the independent variable, the majority of both males and females exercise for health/fitness reasons. The only statistically significant difference between males and females exercise motivators is enjoyment with a p-value of 0.009.

Table 1

	Stress/Anxiety	Health/Fitness	Appearance	Enjoyment
Females	14%	55%	27%	5%
Males	9%	42%	25%	25%

Perceptions of Body Satisfaction

Using chi-squared we were able to examine both non-exercisers and exercisers, with the independent variable as sex; As data in Table 2 shows there are statistically significant differences between exercising males and females and their desires to lose weight (p=0.001), gain weight (p=0.000), and be stronger (p=0.020). Although the differences between exercising males and females satisfaction with their bodies is not statistically significant, there is a visible difference. Between exercisers and non-exercisers there is also a visible difference between their satisfaction with their bodies, as exercisers, especially males, have a higher percentage than non-exercisers. Female exercisers and non-exercisers have almost identical percentages, with the exercisers 5% higher, whereas both male percentages are lower. This shows that exercising does not have a significant effect on female's desire to lose weight. Both exercising and non-exercising males have higher percentages in their desire to be stronger than their female counterparts, yet exercising males have a higher percentage than non-exercising males.

Table 2

	Non-Exercisers			Exercisers		
	Males	**Females**	**Total (M&F)**	**Males**	**Females**	**Total (M&F)**
Satisfied with body	58%	50%	53%	74%	62%	67%

Desire to be healthier	92%	90%	91%	84%	82%	83%
Desire to lose weight	54%	65%	61%	40%	69%	56%
Desire to gain weight	19%	10%	14%	38%	3%	18%
Desire to look better overall	73%	75%	74%	84%	80%	82%
Desire to be stronger	81%	68%	73%	91%	76%	82%

Actual vs. Ideal Body Types

Creating a variable to compare participants responses to the question of their actual and ideal body types we were able to generate percentages in each category (non-exercisers and exercisers) to see whether they felt they were heavier than their ideal body type (generates a positive number), at their ideal body type (generates zero), or thinner than their ideal body type (generates a negative number). Using Chi-Squared, Table 3 shows the percentages for each category. The majority of both male and female non-exercisers are heavier than their ideal body type. There is a great difference between males and females being at their ideal body type, with 23% of females and 0% of males. More males want to be heavier than their actual body type than females. The differences between male and female non-exercisers are statistically significant with a p-value of 0.041.

Using Chi-squared, Table 3 shows the differences of actual and ideal body types between male and female exercisers. The majority of males are at their ideal body type (34%), where the majority of females are heavier than their ideal body type (44%). A higher percentage of exercising males perceive themselves as thinner than their ideal body types (36%), but it is not significantly higher than females (31%). The differences between male and female exercisers actual vs. ideal body types are statistically significant with a p-value of 0.014.

Once again we see the pattern of the majority of both non-exercising and exercising females having heavier than ideal body types. It is also interesting to note that 0% of non-exercising males are at their ideal body type, where the majority of exercising males (34%) are at their ideal body type. There is a much lower percentage of non-exercising females (17%) compared to all other categories having real body types smaller than their ideal. The same percentage of non-exercising and exercising females feel they are at their ideal body type.

Table 3

	Real < Ideal	**Real = Ideal**	**Real > Ideal**
Non-Exercise Males	37%	0%	63%
Exercise Males	36%	34%	30%
Non-Exercise Females	17%	23%	60%
Exercise Females	31%	23%	44%

Discussion

Our data refutes our first hypothesis as each motivator did not have equal significance on individuals. Our second hypothesis was supported and our third hypothesis was refuted as the majority of both males and females are motivated by health/fitness reasons. Results are inclusive for our fourth hypothesis, as we found opposing results for two different variables testing for satisfaction of the body of both exercisers and non-exercisers.

Each exercise motivator had a different impact on males and females together and separately. In regards to the stress/anxiety motivator, both males and females had a low percentage. This could be because college students find other ways to relieve stress, such

as counseling, social activities with friends, or because they have a stronger reason for attending the gym besides stress/anxiety. Results from our data show that females have a higher percentage (14%) than males (9%) for this motivator; possible reasons for this could be that females may have more stress related issues than males related to friends, school, work, and others.

The majority of both males and females chose health/fitness as their highest motivator. Reasons for this could be the emphasis that media puts on being in shape and active, especially in today's culture there is a push for healthier eating and more active lifestyles. Literature supports this finding as both Tiggemann and Williamson (2000), and Strelan and Hargreaves (2005) found similar results. These studies are a few years old, showing that there is a current trend of being fit in the past decade. It is interesting to note that a higher percentage of females (55%) chose this motivator than males (42%), yet as McArthur and Raedeke (2009) found there was no difference in the percentages of males and females with this motivator. This could be because McArthur and Raedeke (2009) sampled participants in kinesiology classes, which is likely to contain students with similar perceptions on motivators regardless of sex. Although we have not researched media's influence thoroughly, females may be more persuaded than males by society in regards to health and fitness, which could be why their percentage was higher. Media also plays a role in the influence of appearance, which is also a motivator for exercisers.

Refuting what we believed, males and females have almost identical appearance motivators. Tiggemann and Williamson (2000) and Strelan and Hargreaves (2005) found similar results as they found no difference between males and females and their appearance motives. As discussed earlier, Strelan et al. (2003) found contradicting results,

as they found that appearance was the highest motivator for females. We thought that females and their self-objectification would make this motivator the most influential, however, results show differently. Female participants could have chose health/fitness over appearance if they are required to exercise for a sport or influenced by peers to have the same health/fitness level. Our results support the idea that females are motivated by appearance, yet health/fitness is more influential for this specific population. The motivator that has the least impact on females is enjoyment.

The greatest difference between males and females was found in their enjoyment motivator. Neither percentage is very high, yet the difference between the two is the most interesting, which supports the findings in Tiggemann and Williamson (2000) and McArthur and Raedeke (2009). We believe that females are highly influenced by others, including society, and their gym participation is due to pressure as opposed to desire, whereas males may be less pressured by others and attend the gym for personal pleasures. Females may feel obligated to attend the gym to have the perfect physique, and therefore do not attend the gym for sole purpose of enjoyment. Our data shows that enjoyment does have a small influence, but other motivators are more influential.

Our fourth hypothesis was inconclusive as we found different results within two questions. When asked if one was satisfied with their body, exercisers had a higher percentage of satisfaction than non-exercisers regardless of sex. When asked if their ideal body type was the same as their actual body type, there was a difference between exercising and non-exercising males but no difference between exercising and non-exercising females. We had hoped that these two questions would generate the same response, and since they do not it shows there is a lack of reliability in our study. Although

we cannot answer this research question, it is important to realize that the lack of reliability in our survey shows that our results may not be valid either. It is interesting to note that in both questions there was a difference in satisfaction between exercising and non-exercising males. More than half of the non-exercising males (58%) reported that they were satisfied with their bodies while 74% of exercising males were, but in the question of actual vs. ideal body types 0% of non-exercising males reported they felt that way. The majority of all categories said they were satisfied with their bodies but when asked if their ideal was equal to their actual not one category was above 35%.

This leads to where we can see future research. It is clear that when asked if one was satisfied with their body the majority was able to agree, but when asked if they were at their ideal body type the majority did not agree. This leads us to believe that asking "are you satisfied with your body" could be vague. We assumed that it would mean the same as real equaling ideal, but as our results show this is not true. We think it would be interesting to do a qualitative study where researchers ask subjects through interviews why or why not they are satisfied with their bodies, explaining beyond a YES/NO answer. It is also hard to generalize our results as our sample size was just below 200, and consisted of a larger percentage of females. Our study also lacked identifying reasons why individuals do not exercise, which is the area that we were originally interested in looking at. Our survey only asked a few questions to non-exercisers in regards to health restrictions, gym atmosphere, and disliking exercise in general. There is a lack of literature in this area as well, and would be very interesting in the future if it was the primary focus of either a qualitative or quantitative study, or both. A longitudinal study would also be effective as there would be the ability to see if females ever feel satisfied with their bodies, before, during, or after gym

use. A combination of all these studies would be incredible and could provide very interesting and helpful findings on this subject area.

Looking at the larger picture, our data supports the ideas that males and females, although they obviously have different feelings about their bodies, share the same main motivation for attending a gym. It is very important to note that females who exercise do not have very different feelings about their bodies than females that do not exercise, which brings us to ask is a continuous cycle, are females ever going to feel at their ideal body type, and is that even possible?

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