Body Image Perception in Athletes versus Non-Athletes

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**Purpose**

The purpose of this study was to find if there was a relationship when measuring body image perception between athletes vs. non-athletes. We chose to study students on the University of Wisconsin-River Falls campus because we were interested in seeing body image perception in college students. There are many problems in our society today regarding poor satisfaction of one’s body type and appearance, and we were interested in seeing if there were any differences of a person’s self-perception when involved in an athletic sport compared to someone who isn’t involved in an athletic sport.

Our hypothesis simply stated that those who are involved in athletic sports would have a better body image perception than those who did not participate in athletic sports. The reason for this belief was because when a person is involved in an athletic sport, they are focused on the physical aspects of their body; the importance of being physically fit in order to succeed in sports such as basketball, hockey, soccer, etc. is critical. It is important to find out whether this hypothesis is correct. Should it be proven right more research would need to be done in order to find out why athletes have a better body image perception and then find a way for non-athletes to be given the opportunity to improve their perceived body image.

**Literature Review**

We review similar literature in order to help us create and support our hypothesis. We found no articles with the same question we had, however we did find similar research dealing with body image perception. The articles we reviewed were “A comparison of body size ideals, body dissatisfaction, and media influence between female track athletes, martial artists, and non-athletes”, “Self-Concept and Body Image of Turkish High School Male Athletes and Non-

The first study we reviewed was “A comparison of body size ideals, body dissatisfaction, and media influence between female track athletes, martial artists, and non-athletes”, researched by Viren Swami, Laura Steadman, and Martin J. Tovee. This study was similar to our study in that it compared athletes to non-athletes; however, it compared only female athletes in lean promoting sports to non-athletes. In this study an equal amount of women in track, Taek Won Do, and no sport at all were asked to complete self-reported measures of ideal body size, body dissatisfaction, and media influence. Body Mass Index was used in this study to control actual body image and rule this out as a possible reason for differences in results. This study was extremely interesting to compare with the present study because it concluded that females in lean promoting sports experienced greater body dissatisfaction than females in other sports or no sport at all. This study helped us to gage things from a female perspective, but we were interested in the difference between women in other sport and no sports at all. This study also left us wondering about males in sports.

The next research reviewed was the study of “Self-concept and body image of Turkish high school male athletes and non-athletes”, which was done by F. Hulya Asci, Hulya Gokmen, Gül Tiryaki, and Alper Asçi. In this study there were an equal number of high school male athletes and non-athletes. The researchers used a Harter Self-Perception Profile which consists of 45 items designed to measure global self-worth and eight specific self-concept domains—scholastic competence, social acceptance, athletic competence, physical appearance, job competence, romantic appeal, behavioral conduct, and close friendship. They also used a Body Image Questionnaire, created by Walster and Bohrnstedt for a different study, and asked each
student to complete both items at times when they were about to perform some type of physical activity to ensure similarity in environmental factors. The results of this study supported those of the present study in that the male athletes scored higher in physical appearance subscales and body satisfaction scales. This study was a good base for the present study in that it compared athletes to non-athletes, however still left room for change in that the present study focused on all athletes compared to non-athletes not separating by gender, and also focused solely on perceived body image instead of all aspects of self-worth. Lastly the limitations of this study included the fact that high school students were being studied and many high school students have not yet grown into their bodies, or don’t know their place in life yet which can alter their scored significantly.

The last study we used was “Development of a Culturally Relative Body Image Instrument among Urban African Americans” conducted by K. Pulvers, R.E. Lee, H. Kaur, M. Mayo, M. Fitzgibbon, S.K. Jeffries, J. Butler, Q. Hou and J. Ahluwalia. The objective of this study was to validate a culturally relevant body image instrument among urban African Americans through three distinct studies. This study provided us the tool to help measure body image perception of our subjects in the questionnaire we created. It consisted of nine male and nine female front-view drawings of incremental sizes, and was created so both hair and facial features of the figures were designed to resemble persons of multiethnic background. The figures spanned a BMI of roughly 16 to 40 in increments of three BMI points. The instrument was very helpful in our research and was a great addition to our questionnaire.
Methods

The process of this study began with the completion of an Institutional Review Board (IRB) application. This application was to be filled out and accepted by the board for the type of research we were conducting. After our application was accepted, we constructed a survey. The survey consisted of questions we felt prevalent and also included a photo of nine different size figures and questions regarding those figures which was used from another study. This survey was rewritten and reorganized twice before it was handed out for data collection.

The method of our data collection was a simple questionnaire we asked students to complete. We chose to distribute them in a variety of departments throughout campus to ensure we would be receiving data from a diverse selection of students. The general areas we included were whether the subject was male or female, if they were involved in an organized sport (e.g. UWRF Athletics, Club Sports, YMCA leagues, etc.), their height, and their weight (in ranges of 15lbs). The last two areas of our questionnaire included a question which inquired how satisfied they were with their current body image on a 5-point scale (1 being the lowest and 5 being the highest), and a section which had the subjects observe a table of nine figures (the first being extremely underweight and the last being extremely overweight); we had them select the figure which they believed most represented what they looked like, and which figure would they pick to have as their ideal body image.

The method of our data interpretation included using the subject’s height and weight to measure their Body Mass Index (BMI) to see if they were at a healthy BMI range; the BMI ranges were 1=underweight, 2=low-risk, 3=overweight, and 4=high-risk. In order to find the subject’s body image satisfaction, we used our 5-point scale.
**Results**

The perceived body image of athletes on average was 20% higher than that of non-athletes. On our 5-point scale of body image satisfaction, non-athletes averaged a 2.25/5; whereas athletes averaged a 3.25/5 (Graph 1).

**Body Image Perception and BMI in Athletes and Non-Athletes**

(Graph 1)

When comparing male athletes to male non-athletes, their BMI risk factor and body-image perception were fairly close in numbers. No underweight men were recorded in this study. Male athletes who were at a low risk BMI had a 5% better body-image perception compared to low risk non-athletes. Male athletes who were overweight had a 10% better body-
image perception compared to overweight non-athletes. Male athletes who were at a high risk BMI had a 5% lower body-image perception compared to high risk non-athletes (Graph 2).

**Body Image Perception and BMI in Male Athletes and Non-Athletes**

(Graph 2)

When comparing female athletes to female non-athletes, their BMI risk factor and body image perception were moderately different. There were only two underweight females that were recorded in this study; both were participants in college volleyball. Female athletes who were at a low risk BMI had a 10% better body-image perception compared to low risk non-athletes. Female athletes who were overweight had a 20% better body-image perception compared to overweight non-athletes. Female athletes who were at a high risk BMI had a 25% better body-image perception compared to high risk non-athletes. Both groups of females at a
high risk BMI had the lowest body image perception out of all the subjects in this study (Graph 3).

**Body Image Perception and BMI in Female Athletes and Non-Athletes**

(Graph 3)

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<thead>
<tr>
<th>Average Self-Image &amp; BMI Risk</th>
<th>Female Athletes vs. Non-Athletes</th>
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<tr>
<td>Self-Image (1-5 Scale)</td>
<td>Athlete Self-Image</td>
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<td>Non-Athletes Self-Image</td>
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<td>BMI Risk (1-4 Scale)</td>
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Of particular interest to the current study was the difference between body image perceptions in athletes versus non-athletes. Our expected outcome for this study was that athletes would have a better body-image perception compared to non-athletes. After analyzing the data collected we can conclude that this hypothesis is accurate for this study. The overall body image perception of athletes was better than non-athletes, despite similar BMI ranges. When separating male and female subjects it was determined that male athletes and non-athletes had similar body image perceptions in relation to their BMI risk factors; whereas female athletes and non-athletes had very different body-image perceptions in relation to their BMI risk factors.
Only at a high risk BMI did non-athletic males have a higher body-image perception than athletic males. In the female subjects of this study, all athletes had a better body-image perception regardless of BMI risk factors.

There was data that would have been beneficial to the study, but was unable to be collected. Knowing the body fat analysis of each client would be highly effective information. This information would be more informative than BMI in showing whether or not the subject is in fact overweight.

**Discussion**

The findings of this study tell us that athletes do have a better perceived body image than non-athletes. This tells us that more research needs to be done in order to determine the reason. The reason needs to be determined in order to provide the non-athletes with the same things the athletes are getting. This way they will have equal opportunity to have a healthier perceived body image.

There were certain limitations to this study. The survey asked whether or not the subject was in an organized sport. This was how a person was determined an athlete. It was not taken into consideration as to whether or not a person exercised regularly, worked with a personal trainer, has been involved in athletics in the past, etc. This information could lead to more precise results. Secondly, the easiest method of determining if our participants were at a healthy weight was by using the BMI scale. This is not always the best method of determining if a person is healthy because it excludes those that may be heavy in weight, but with a low percent of body fat which is a common characteristic in athletes. To get the most accurate measurements, you should use the skin-fold tests or hydrostatic body fat testing. Other
limitations were that the subjects consisted only of University of River Falls students and the sample size was small compared to the number of students that attend the University.

Overall our research has shown that students involved in athletics have a higher perceived body image than those students who are not involved in athletics. According to our study, we have ruled out a difference in actual body image between athletes and non-athletes as a factor of the difference in body image perception. We believe the reason for an increased body image perception in athletes is because of their knowledge and understanding of what it takes to be a healthy and fit individual due to the resources available to them as an athlete. Further research would need to be done in order to prove this hypothesis.

References
