

Effects of Health and Sports Science Classes on the Students' Body Image Perception and Behaviors

Allison Ladd, Emilia Porter, and Emily Harnen

¹DEPARTMENT OF HEALTH AND SPORT SCIENCE, UNIVERSITY OF DAYTON, OH

INTRODUCTION

There are a number of individual and personal factors that contribute to poor body image and corresponding health-related behaviors.¹ The influence of social media and Western culture on body image has been well examined; however, less is known about how the study of behavioral, dietary, and medical health interventions affects body image perception in health professionals.²

Purpose: To investigate the correlation between taking health-related classes and personal behavior and body image perception among students at a 4-year university.

METHODS

Participants

Inclusion

- Full-time undergraduate enrollment at the University
- Male and female students of sophomore standing or higher

Exclusion

- First year students
- Graduate students

Procedure

Survey was sent to students via google forms. Participation was voluntary and self-administered. Results were anonymous.

Measures

Demographic Information

Age, class standing, gender, major, and number of HSS classes the student has completed will be collected at baseline.

Body Image Score

Used the following previously validated questionnaires to guide the development of our survey questions:

- Body Dysmorphic Disorder Questionnaire (BDDQ)³
- Muscle Dysmorphic Disorder Inventory (MDDI)⁴
- Body Image Avoidance Questionnaire (BIA-Q)⁵

Analysis

Coding

Prior to our analysis, we needed to create a code book to code the responses. Each question was coded from 1-5 for, 1 signifying poorest body image and 5 being more positive. Most of our questions asked students if they exhibited a behavior or attitude that reflected negative body image. To accommodate for questions that asked about positive behaviors, we utilized reverse coding so that a score of 1 per our original code indicated most positive body image. This allowed us to format the data efficiently in order to create a total body image score.

Example Question

"I feel that I have a good relationship with food"

- Strongly disagree: 1
- Somewhat disagree: 2
- Neutral/ I have not thought about it: 3
- Somewhat agree: 4
- Agree: 5

RESULTS

We received a total of 62 responses, with 48 female and 14 male respondents. Of the 62 respondents, 35 students were Health Science majors and 27 were non-Health Science majors.

Descriptives

	Mean	Standard Deviation
Number of HSS classes taken	7	6.992
Body Image Score	62.6	14.712

Correlation

Variable	Test	Body Image Significance
Year	Sig. 1-tailed	0.015
Gender	Sig. 1-tailed	0.011
HSS classes	Sig. 2-tailed	0.895

CONCLUSIONS

Our results concluded that there is no significance between the number of HSS classes taken and body image score. These results indicate that the number of HSS classes taken is not a contributing factor to how students perceive their body image. However, there was significance between gender and body image score and year in school and body image score. Females had lower body image scores than male participants, which is consistent with the findings in current literature studies on body image.^{1,2} Underclassmen generally had more positive body image scores. Although the number of HSS classes taken does not affect body image perception, the results indicate that there may be other cultural factors at the university that are contributing to lower body image perception in upperclassmen. More studies would need to be conducted to identify these other factors.

REFERENCES

1. Stern, J. M. (2018). Transcultural aspects of eating disorders and body image disturbance. *Nordic Journal of Psychiatry*, 72(1), 23–26. <https://doi-org.libproxy.udayton.edu/10.1080/08039488.2018.1525642>
2. Cash, T. F. (2006). The influence of sociocultural factors on body image: Searching for constructs. *Clinical Psychology: Science and Practice*, 12(4), 438-442. doi:10.1093/clipsy.bpi055
3. Cash, T. F., Phillips, K. A., Santos, M. T., & Hrabosky, J. I. (2004). Measuring "negative body image": validation of the Body Image Disturbance Questionnaire in a nonclinical population. *Body Image*, 1(4), 363–372. <https://doi.org/https://doi.org/10.1016/j.bodyim.2004.10.001>
4. Zeeck, A., Welter, V., Alatas, H., Hildebrandt, T., Lahmann, C., & Hartmann, A. (2018). Muscle Dysmorphic Disorder Inventory (MDDI): Validation of a German version with a focus on gender. *PLOS ONE*, 13(11), e0207535. <https://doi.org/10.1371/journal.pone.0207535>
5. Rosen, J. C., Srebnik, D., Saltzberg, E., & Wendt, S. (1991). Development of a body image avoidance questionnaire. *Psychological Assessment: A Journal of Consulting and Clinical Psychology*, 3(1), 32-37. doi:10.1037/1040-3590.3.1.32

ACKNOWLEDGEMENTS

Special thanks to Dr. Cuy and the HSS department, as well as all of our participants.

INTRODUCTION

There are a number of individual and personal factors that contribute to poor body image and corresponding health-related behaviors.¹ The influence of social media and Western culture on body image has been well examined; however, less is known about how the study of behavioral, dietary, and medical health interventions affects body image perception in health professionals.²

Purpose: To investigate the correlation between taking health-related classes and personal behavior and body image perception among students at a 4-year university.

METHODS

Participants

Inclusion

- Full-time undergraduate enrollment at the University
- Male and female students of sophomore standing or higher

Exclusion

- First year students
- Graduate students

Procedure

Survey was sent to students via google forms. Participation was voluntary and self-administered. Results were anonymous.

Measures

Demographic Information

Age, class standing, gender, major, and number of HSS classes the student has completed will be collected at baseline.

Body Image Score

Used the following previously validated questionnaires to guide the development of our survey questions:

- Body Dysmorphic Disorder Questionnaire (BDDQ)³
- Muscle Dysmorphic Disorder Inventory (MDDI)⁴
- Body Image Avoidance Questionnaire (BIA-Q)⁵

Analysis

Coding

Prior to our analysis, we needed to create a code book to code the responses. Each question was coded from 1-5 for, 1 signifying poorest body image and 5 being more positive. Most of our questions asked students if they exhibited a behavior or attitude that reflected negative body image. To accommodate for questions that asked about positive behaviors, we utilized reverse coding so that a score of 1 per our original code indicated most positive body image. This allowed us to format the data efficiently in order to create a total body image score.

Example Question

"I feel that I have a good relationship with food"

- Strongly disagree: 1
- Somewhat disagree: 2
- Neutral/ I have not thought about it: 3
- Somewhat agree: 4
- Agree: 5

RESULTS

We received a total of 62 responses, with 48 female and 14 male respondents. Of the 62 respondents, 35 students were Health Science majors and 27 were non-Health Science majors.

Descriptives

	Mean	Standard Deviation
Number of HSS classes taken	7	6.992
Body Image Score	62.6	14.712

Correlation

Variable	Test	Body Image Significance
Year	Sig. 1-tailed	0.015
Gender	Sig. 1-tailed	0.011
HSS classes	Sig. 2-tailed	0.895

CONCLUSIONS

Our results concluded that there is no significance between the number of HSS classes taken and body image score. These results indicate that the number of HSS classes taken is not a contributing factor to how students perceive their body image. However, there was significance between gender and body image score and year in school and body image score. Females had lower body image scores than male participants, which is consistent with the findings in current literature studies on body image.^{1,2} Underclassmen generally had more positive body image scores. Although the number of HSS classes taken does not affect body image perception, the results indicate that there may be other cultural factors at the university that are contributing to lower body image perception in upperclassmen. More studies would need to be conducted to identify these other factors.