

EXPLORING THE ASSOCIATION BETWEEN SCHOOL NURSES' ANTI-FAT ATTITUDES AND THEIR ATTITUDES ABOUT THE PATHOLOGICAL WEIGHT CONTROL BEHAVIORS OF STUDENT-ATHLETES

Emily Kroshus, ScD MPH
Post-Doctoral Research Fellow,
Harvard School of Public Health

BACKGROUND

- ▶ Many health care professionals have negative attitudes about patients who are overweight or obese (Budd et al., 2011; Swift et al., 2013)
- ▶ These attitudes may impact:
 - ▶ Care seeking behaviors
 - ▶ Clinical care provided to patients (Brown, 2006)
- ▶ Even clinicians who treat eating disorder patients have biases against overweight individuals (Puhl et al., 2014)

BACKGROUND

- ▶ Prevention of eating and weight-related disorders important at both ends of the weight spectrum (Whiteford et al., 2013)
- ▶ Some populations are at heightened risk of eating disorders
 - ▶ Athletes in aesthetic, gravitational and weight-class sports (Bratland-Sanda & Sundgot-Borgen, 2013)
- ▶ Clinicians play a role in primary, secondary and tertiary prevention
- ▶ In the U.S. school setting school nurses are among the most widely accessible form of medical care

RESEARCH QUESTION

- ▶ Are high school nurses with greater anti-fat attitudes less likely to believe that pathological weight control behaviors are serious health concerns for student-athletes?
- ▶ Do nurses who themselves engage in compulsive over-exercising behaviors less likely to think that it is unhealthy for high school athletes to exercise excessively for weight control? Is a stronger anti-fat bias associated with a greater likelihood of engaging in obligatory exercise?

SAMPLE

- ▶ Random sample of 1000 U.S. high school nurses contacted via email
- ▶ 367 completed the voluntary, confidential, online survey
- ▶ Research approved by Harvard School of Public Health Institutional Review Board

MEASURES

- ▶ Anti-fat attitude scale (Morrison & Connor, 1999)
- ▶ Obligatory exercise questionnaire (Pasman & Thompson, 1988)
- ▶ Perceived seriousness of five pathological weight control behaviors (Sherman et al., 2005)

RESULTS: DEMOGRAPHICS

Variable	
Female (%)	98.8%
Age (mean, SD)	51.40 (8.60)
Years of experience as a nurse in a high school setting	9.26 (7.46)
Hours worked per week in a high school setting	29.06 (15.42)
Participated in organized sports in high school	53.8%
Participated in organized sports in college	17.3%

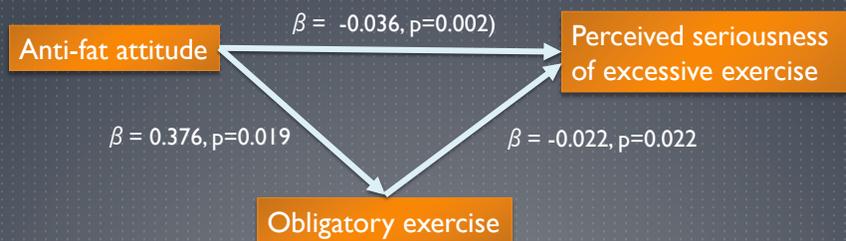
RESULTS: DESCRIPTIVE STATISTICS

Variable	Mean (SD)
Anti-fat Attitudes Scale	11.57 (3.23)
Obligatory Exercise Scale	39.35 (7.88)
<i>Perceived seriousness for the health of student-athletes of the following behaviors:</i>	
Fasting for an entire day	3.79 (0.50)
Self-induced vomiting	3.93 (0.29)
Laxative abuse (using more than directed)	3.91 (0.33)
Diuretic abuse (using more than directed)	3.90 (0.34)
Excessive exercise	3.50 (0.60)

RESULTS: LINEAR REGRESSION

DEPENDENT VARIABLE	β (SE)	P
MODEL 1. FASTING FOR AN ENTIRE DAY	-0.154 (0.062)	0.013
MODEL 2. SELF-INDUCED VOMITING	-0.141 (0.062)	0.023
MODEL 3. LAXATIVE ABUSE	-0.144 (0.062)	0.021
MODEL 4. DIURETIC ABUSE	-0.115 (0.062)	0.066
MODEL 5. EXCESSIVE EXERCISE	-0.168 (0.062)	0.007

RESULTS: STRUCTURAL EQUATION MODEL



RESEARCH QUESTIONS: SUMMARY

- ▶ Are high school nurses with greater anti-fat attitudes less likely to believe that pathological weight control behaviors are serious health concerns for student-athletes? ✓
- ▶ Do nurses who themselves engage in compulsive over-exercising behaviors less likely to think that it is unhealthy for high school athletes to exercise excessively for weight control? Is a stronger anti-fat bias associated with a greater likelihood of engaging in obligatory exercise? ✓

LIMITATIONS

- ▶ Explicit measure of weight bias and potential social desirability bias
 - ▶ → Include implicit measure in future work
- ▶ Response bias
- ▶ Generalizability to non-athlete patient populations, other clinicians and other settings

DISCUSSION

- ▶ Bias against overweight may impact clinical care across the weight spectrum
- ▶ Implications for policy and practice
 - ▶ Limit subjectivity of school nurse in prevention activities
 - ▶ In university training and continuing professional education:
 - ▶ Provide education for clinicians about disordered eating
 - ▶ Help clinicians understand their own explicit and implicit biases about weight

ACKNOWLEDGEMENTS

Collaborators:

S. Bryn Austin
Jeanne Nichols
Stacy Fisher

Funding:



Ellen Feldberg Gordon Fund for
Eating Disorders Research

emk329@mail.harvard.edu (Emily Kroshus)