

## Introduction

- Body dissatisfaction has been estimated in 20-40% of women, and 10-30% of men (Quittkat, Hartmann, Düsing, Buhlmann, & Vocks, 2019)
- Those who experience body dissatisfaction, which is attributed to increased exposure to unrealistic body images on social media, may feel uncomfortable or ashamed about what they eat since they are dissatisfied with how they look (Satter, 2007)
- These negative body perceptions have contributed to an increase in disordered eating (MacCallum & Widdows, 2018), with dieting being the most common form (National Eating Disorders Collaboration, 2020)

## Purpose

- To assess perceptions related to body satisfaction and eating habits among students, staff, and faculty at Concordia College-Moorhead

## Materials and Methods

### Participants

- Male and female students, staff, and faculty, aged 18 years and older, at Concordia College in Moorhead, Minnesota

### Procedures

- Created an electronic survey using Qualtrics
- Concordia College Institutional Review Board approved study protocol
- College's Office of Marketing and Communication distributed the survey to potential participants' email address
- Consent form was read and accepted before participation

### Assessment Measures

- Survey featured 39 questions, including pre-existing tools to measure disordered eating, body satisfaction, and intuitive eating, demographic questions, and product interest questions
- Variables included body satisfaction, disordered eating, intuitive eating, time spent on social media per day, and perceived relationship with food
- The Disordered Eating Attitude Scale (DEAS), which contains 25 items including yes/no questions, scale questions, and multiple-choice questions, was used to assess disordered eating. The four subscales of the DEAS utilized in this study were relationship with food, concerns about food or weight gain, restrictive and compensatory practices, and feeling toward eating
- The Intuitive Eating Scale-2 is a 23-item scale that contains four subscales, but only two (eating for physical rather than emotional reasons subscale and reliance on hunger and satiety cues subscale) were included within the survey. Higher scores on the Intuitive Eating Scale-2 indicate higher intuitive eating
- Body satisfaction was assessed using the Body Areas Satisfaction Scale; participants are asked to rate nine different areas of the body. A score of one indicates *very dissatisfied* and a score of five is *very satisfied*

### Data Analysis

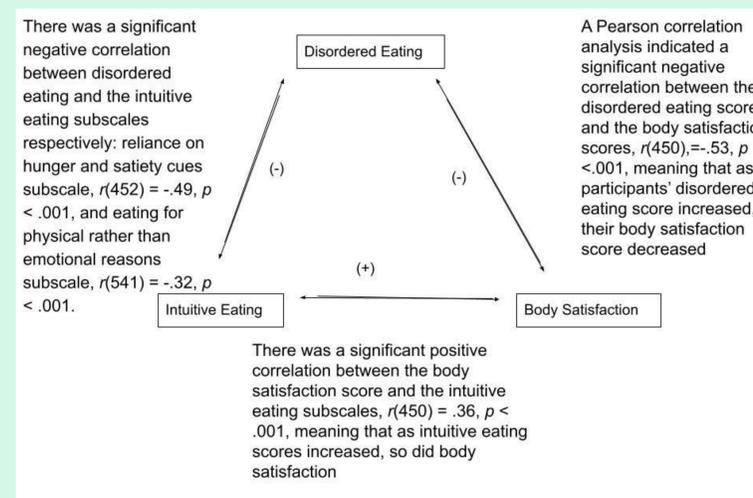
- Descriptive statistics were utilized for data pertaining to relationship with food and factors influencing eating patterns
- One-way analysis of variance and Pearson correlation were used to assess relationships and correlations between participants' relationship with food, disordered eating, body satisfaction, intuitive eating, and time spent on social media per day

## Results

- A total of 4,416 potential participants were contacted via their college-issued email; 558 responded to the survey and data from 452 of those surveys were included in analysis ( $N = 452$ ), which presents a 10.2% response rate
- 74% were female; mean age was 31 years; 94% were Caucasian

Factors Influencing Eating Patterns	Number of Participants	
Psychological Factors	37%	(n = 168)
Social Factors	24.5%	(n = 110)
Biological Factors	17.5%	(n = 79)
Attitudes and Beliefs	7%	(n = 33)
Economic Reasons	4%	(n = 18)
Physical Reasons	3.5%	(n = 15)
Missing Answers/ No Responses	6.5%	(n = 29)

- Approximately 46% ( $n = 210$ ) of participants reported having a positive relationship with food, 36% ( $n = 162$ ) felt they had a neutral relationship with food, and 17.5% ( $n = 79$ ) felt they had a negative relationship with food
- Compared to participants who perceived a neutral or positive relationship with food, participants who perceived a negative relationship with food:
  - Had a lower body satisfaction score,  $F(3,446) = 38.13, p < .001$
  - Had a higher disordered eating score,  $F(3,445) = 74.43, p < .001$
  - Had a lower intuitive eating score,  $F(3,448), p < .001$
  - Spent more time on social media per day,  $F(3,448) = 23.97, p < .001$
- A significant negative correlation existed between time spent on social media and body satisfaction,  $r(450) = -.27, p < .001$



## Discussion

### Body Satisfaction & Eating Behaviors

- Dieting frequency, a sign of disordered eating (Ackard, Croll, & Kearney-Cooke, 2002), was positively associated with body dissatisfaction. According to Heinicke and colleagues (2007), body dissatisfaction is predictive of low self-esteem, unhealthy weight loss behaviors, and symptoms of eating disorders
- Alternatively, intuitive eating is negatively associated with body dissatisfaction (Cadena-Schlam, & Lopez-Guimera, 2015). With intuitive eating, there is less emphasis on appearance and internalizing the "thin ideal", and more focus on body acceptance. Eating patterns can be indicative of how one feels about their body shape or weight

### Social Media

- A strong relationship between upward appearance comparisons and body dissatisfaction has been well documented as resulting from use of social media (Saunders, & Eaton, 2018)
- As visual images have become more prevalent on social media platforms, exposure to images of thin bodies has increased, which is concerning because of the relationship between exposure to the "thin ideal", is associated with increases in eating disorders (Sindani et al., 2016)

## Conclusions

- Overall, the majority of participants reported having either a positive or neutral relationship with food, although 17.5% felt they have a negative relationship with food
- Those with a negative relationship to food were not as satisfied with their bodies, were more prone to disordered eating behaviors, engaged in fewer intuitive eating practices, and spent more time on social media than those with a positive or neutral relationship with food
- Positive and negative correlations between relationship with food and body satisfaction, disordered eating, time spent on social media, and intuitive eating were significant, suggesting a need for an intervention aimed at addressing all these variables
- The desire for relationship building, intuitive eating, and body positivity products was significant when looking at participants' body satisfaction scores, disordered eating scores, and the intuitive eating sub-scores
- Resources that were most desired among participants included those focused on intuitive eating, supporting body positivity, and building a positive relationship with food
- Overall, results indicate a need for an intuitive eating program aimed at improving individuals' relationship with food

## References

- Ackard, D., Croll, J., & Kearney-Cooke, A. (2002). Dieting frequency among college females: association with disordered eating, body image, and related psychological problems. *Journal of Psychosomatic Research*, 52, 129-136.
- Cadena-Schlam, L., & Lopez-Guimera, G. (2015). Intuitive eating: an emerging approach to eating behavior. *Hospital Nutrition*, 31(3), 995-1002. doi:10.3305/nh.2015.31.3.7980
- Heinicke, B., Paxton, S., McLean, S., & Wertheim, E. (2007). Internet-delivered targeted group intervention for body dissatisfaction and disordered eating in adolescent girls: a randomized controlled trial. *Journal of Abnormal Child Psychology*, 35, 379-391. doi:10.1007/s10802-006-9097-9
- MacCallum, F., & Widdows, H. (2018). Altered Images: Understanding the Influence of Unrealistic Images and Beauty Aspirations. *Health care analysis : HCA : journal of health philosophy and policy*, 26(3), 235-245. https://doi.org/10.1007/s10728-016-0327-1
- National Eating Disorders Collaboration. (n.d.). Disordered Eating and Dieting. National Eating Disorders Collaboration. Retrieved 12 01, 2020, from https://www.nedc.com.au/eating-disorders/eating-disorders-explained/disordered-eating-and-dieting/
- Quittkat, H., Hartmann, A., Düsing, R., Buhlmann, U., & Vocks, S. (2019). Body dissatisfaction, importance of appearance, and body appreciation in men and women over the lifespan. *Frontiers in Psychiatry*, 10(864), 1-12. doi: 10.3389/fpsy.2019.00864
- Satter, E. (2007). Eating competency: definition and evidence for the satter eating competence model. *Journal of Nutrition Education Behavior*, 39, S142-S153. doi:10.1016/j.jneb.2007.01.006
- Saunders, J., & Eaton, A. (2018). Snaps, selfies, and shares: how three popular social media platforms contribute to the sociocultural model of disordered eating among young adults. *Cyberpsychology, Behavior, and Social Networking*, 21(6), 343-354. doi:10.1089/cyber.2017.0713
- Sidani, J., Shensa, A., Hoffman, B., Hanmer, J., & Primack, B. (2016). The association between social media use and eating concerns among U.S. young adults. *Journal of the Academy of Nutrition and Dietetics*, 116(9), 1465-1472. doi:10.1016/j.jand.2016.03.021

## Acknowledgments

Thank you to Concordia College for allowing me to survey the students, faculty, and staff in order to obtain the data presented.