

Eating Competence of Sexual Minority College Students

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Introduction

In Spring 2019, 20% of U.S. college students reported that their sexual orientation was something other than heterosexual.¹ While research in this group is limited, there is consistent evidence that sexual minority groups have higher rates of:

- Diagnosed eating disorders²
- Unhealthy weight control behaviors³
- Obesity in some subgroups⁴

Research in this population often reports on prevalence but does not look at driving factors for these health disparities or how they change someone's eating behavior.

What is Eating Competence?

The Satter Eating Competence Model is one way to quantify someone's relationship with food and eating.⁵ Someone who is considered eating competent is characterized as being "positive, comfortable, and flexible with eating and is matter-of-fact and reliable about getting enough to eat of enjoyable and nourishing food."⁶ Past research has shown that lower eating competence was associated with:

- Higher rates of eating disorders⁷
- Greater stress⁸
- Higher BMI^{5,9}
- Greater desire to lose weight⁹
- Being female³⁻⁹

Because sexual minority groups are more likely to have factors that have been linked to low eating competence, this is an area of concern and more research is needed to fill the current gap in the literature.

Objectives

1. To assess differences in eating competence scores between sexual minority and heterosexual college students
2. To assess the percentage of heterosexual and sexual minority students that are meeting the dietary recommendations from the 2015-2020 Dietary Guidelines for Americans (DGA)

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Participant Characteristics and Eating Competence Scores By Sexual Orientation

| | Heterosexual N=1967 | Sexual Minority N=66 | P |
|---------------------------------|------------------------|----------------------------|------|
| Characteristics | | | |
| Sex | | | |
| Male (n [%]) | 677 (34.5) | 17 (25.7) | 0.19 |
| Female (n [%]) | 1290 (65.5) | 49 (74.2) | 0.19 |
| Age (years) | 19.0 ± .03 | 19.24 ± .17 | 0.04 |
| BMI (kg/m ²) | 23.6 ± .09 | 24.9 ± .75 | 0.08 |
| Pell Grant Recipient (%) | | | |
| Yes | 22.1 | 30.3 | 0.09 |
| No | 60.1 | 60.6 | 0.09 |
| I do not know | 17.8 | 9.1 | 0.09 |
| Eating Competence | | | |
| Total Score (0-48) | 33.6±0.2 | 31.5±1.0 | 0.06 |
| Eating Attitude (0-18) | 13.3±0.9 | 12.2±0.5 | 0.02 |
| Food Acceptance (0-6) | 5.3±0.1 | 5.6±0.3 | 0.30 |
| Internal Regulation (0-6) | 4.2±0.3 | 3.9±0.2 | 0.13 |
| Contextual Skills (0-15) | 10.8±0.1 | 9.8±0.4 | 0.02 |

Continuous variables are presented as mean ± standard error.

Methods

Data were collected between 2015-2018 as part of an on-going cross-sectional study, College Health and Nutrition Assessment Survey (CHANAS). Students in the introductory nutrition course are recruited in the Fall and Spring semester and informed consent is provided (UNH IRB #5524).

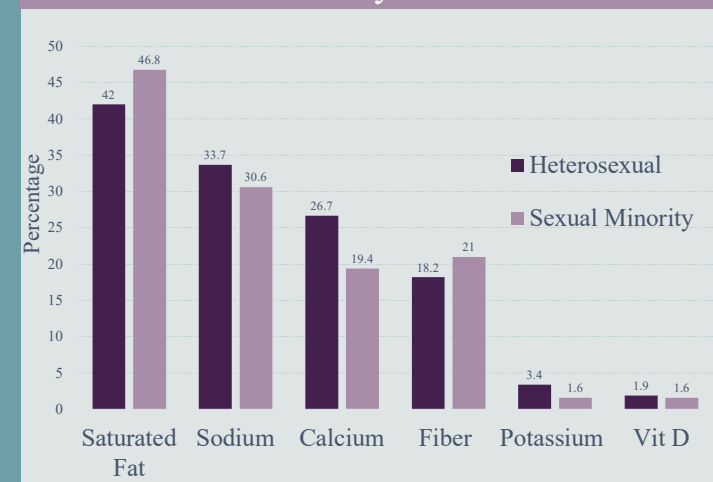
Data Collection:

- Participants (n=2033) completed the Eating Competence Satter Inventory (ecSI 2.0TM) and self reported sexual orientation through an online questionnaire
- Possible ecSI scores range from 0-48, with eating competence defined as ≥32¹⁰
- Three-day food records were analyzed by Diet and Wellness+ software
- Participants' diets were assessed on if they met the 2015-2020 Dietary Guidelines for Americans (based on age and sex) for saturated fat, sodium, calcium, fiber potassium, and vitamin D

Data Analysis:

- Descriptive statistics were used to evaluate group demographics and characteristics
- Mean differences in ecSI scores between heterosexual and sexual minority students were evaluated via ANCOVA, using gender, dining hall usage, and BMI as covariates.

Percent of Students that Met Nutrient Recommendations by Sexual Orientation



Results

- No significant differences were found in total ecSI scores between students that identify as a sexual minority compared to their heterosexual counterparts
- Sexual minority students did have significantly lower scores for the Eating Attitudes and Contextual Skills subscales
- Heterosexual participants tended to be considered eating competent compared to sexual minority students (60% vs 50%, p=.10).
- The majority of participants were not meeting the DGA recommendations, but there were no significant differences between the two groups

Broader Context

To our knowledge, this is the first time that eating competence has been looked at in the context of sexual orientation. As sexual minority populations continue to be an underrepresented population in research, our work will assist health professions develop targeted and affirming evidence-based resources and standards of care. Further research from diverse campuses are needed to appropriate target nutrition education and support for a diverse student body.

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