



# Do weight perception & bullying victimization account for links between weight status & mental health among adolescents?

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# Aim & Hypothesis

- **AIM:** To explore whether associations between weight status & mental health persist when controlling for:
  - Perceptions of weight
  - Bullying victimization
- **Hypothesis:** Regardless of weight status, youth will have poorer mental health if they:
  - Perceive their weight to be overweight or underweight, &/or
  - Have experienced of bullying victimization

# Background

- ~1 in 3 & 1 in 7 youth are at risk for overweight or obesity, respectively (1).
- Obesity is associated with higher rates of anxiety & depression (2,3).
- Anxiety & depression are 2 of the most common mental disorders in adolescents (2).
- Given their prevalence & impact, obesity & mental health have been identified as global public health priorities.

## Links between obesity, stigma & mental health.

- Adverse consequences of obesity in youth are primarily psychosocial (e.g., low self-esteem, poorer social functioning, risk of depression & anxiety) (4,5).
- Weight stigma may account for psychosocial consequences of obesity (6,7).
- Weight stigma is the prejudice & discrimination of individuals because of their body size (6,7).
- Weight stigma is mainly experienced as weight-based bullying & teasing in adolescence (6).
- The experience of stigma, rather than weight itself, may be responsible for negative psychosocial outcomes.

Individuals who experience stigma may internalize negative stereotypes & apply them to themselves (8).

Adolescents who perceive themselves as overweight may internalize weight stigma & be at risk of negative psychosocial outcomes (8,9).

Stigma, weight perception & psychosocial effects

# Methods



**Sample: 57,059 grade 9-12 students** from 134 Canadian secondary schools that participated during the 2018/19 year of the COMPASS Study

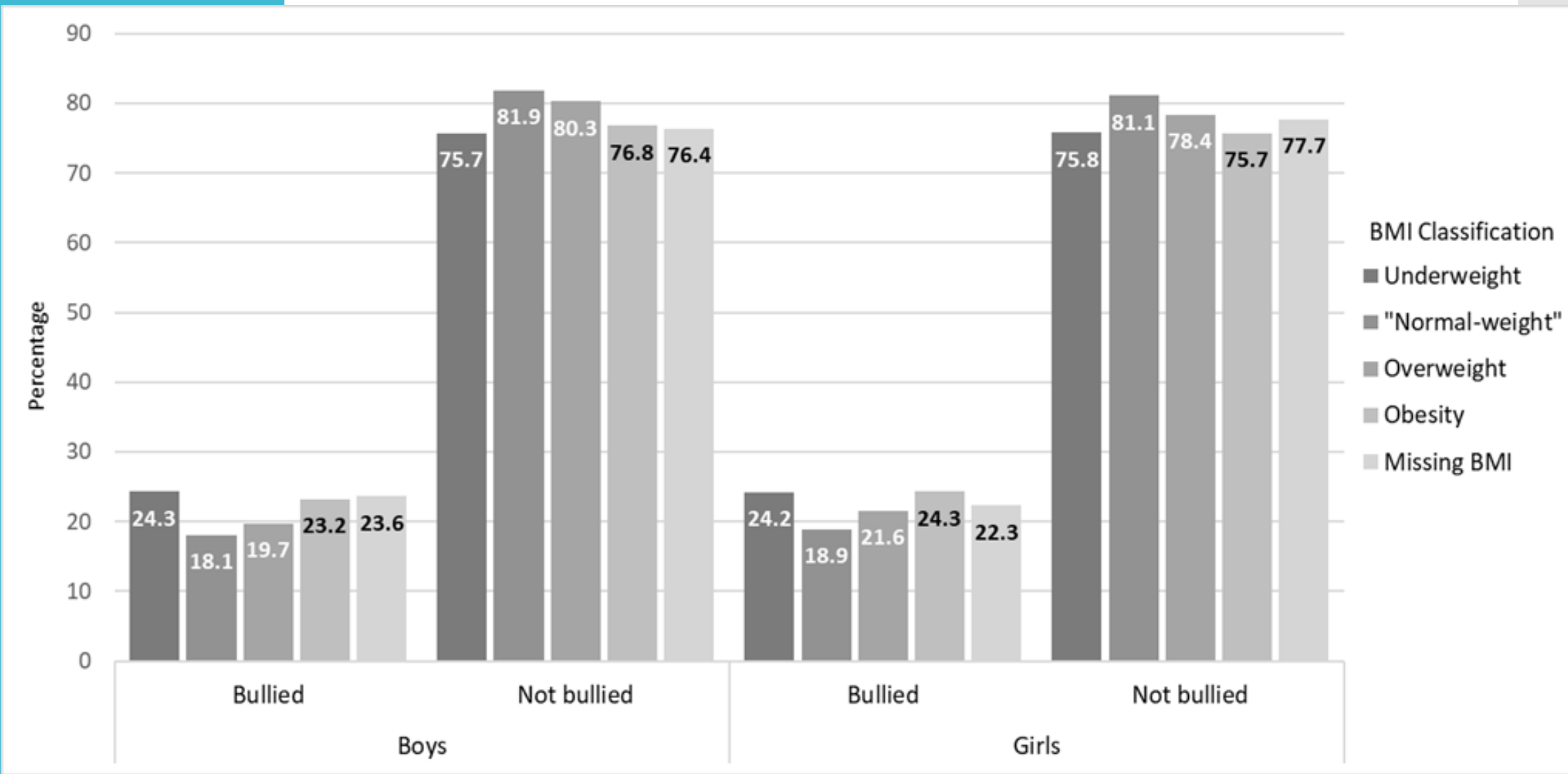
## Analysis:

1. Multiple regression models tested associations between body mass index (BMI) classification & mental health outcomes:
  - Anxiety symptoms [GAD-7]
  - Depression symptoms [CESD-10]
  - Psychosocial wellbeing [Diener's Flourishing Scale].
2. Weight perception & bullying victimization were added to the models.

Stratified by gender

Controlled for sociodemographic covariates (grade, SES, ethnicity) & school clustering.

# Bullying by BMI



## Main Findings

When weight perception & bullying victimization were added to the models, obesity BMI status was no longer associated with mental health outcomes, relative to normal-weight BMIs.

Underweight & overweight perceptions, & experiences of bullying victimization, were independently associated with:

- Higher anxiety symptoms
- Higher depressive symptoms
- Lower flourishing levels

...in comparison to students with “about right” weight perceptions & without experiences of bullying, respectively.

Results were consistent in boys & girls.



## Discussion

The mental health risks associated with overweight & obesity BMI were negated when controlling for weight perceptions & bullying victimization (10).

Deviations from “about right” weight perceptions in either direction (overweight *or* underweight perceptions) had detrimental associations with youth mental health.

# Implications

- Screening for depression & anxiety among youth who experience bullying.
- Importance of bullying prevention in mental health promotion & mental illness prevention.
- Targeting weight bias & promoting weight acceptance may prevent weight-based bullying & prevent negative psychosocial consequences associated with different body sizes.
- A more substantial impact will likely require upstream approaches to deconstruct the stigma surrounding body weight & obesity including the dominant narratives portrayed in public health, education, & the media (11,12).

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