

**Male Youth with Eating Disorders: Clinical Features and Treatment Outcome**  
(project no. 40-14)

**Authors**

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**Introduction**

The majority of research on eating disorders includes samples that are predominantly female. However, there is increasing attention in the literature in the field to the marginalization of males with eating disorders (see e.g., Murray et al., 2017). As a result, it is critical to consider potential sex and gender differences in eating disorder presentation and treatment response. Two studies were conducted to assess the clinical and medical characteristics of male youth with eating disorders. Study 1: A retrospective chart review was conducted to examine clinical characteristics of male youth with eating disorders, and assess sex differences in clinical presentation. Study 2: A prospective study was conducted to assess changes in eating pathology and psychological and physical well-being over the course of treatment in male youth with a matched female comparison group. Interviews were also incorporated at post-treatment to understand the perceptions of treatment experiences in youth and their parents.

**Methods**

**Study 1:**

A retrospective chart review was conducted, with 71 male youth identified who had received treatment at the study sites between 2003-2015. Sex differences were assessed between males who were treated between 2010-2015 (n = 41) and a group of females treated during the same period (n = 251).

**Study 2:**

Males between the ages of 8 and 25 who were admitted to a specialized eating disorder treatment program at BC Children's Hospital or the Looking Glass Residence between July 2015 and May 2019 were recruited. A female match was identified for each male participant based on age and eating disorder symptomology. We also opened recruitment to transgender youth (given that some youth who were assigned female sex at birth identified as male). Transgender youth were part of a case series, with no matching process for this subgroup.

Youth were asked to complete a battery of measures assessing eating-related concerns at admission, discharge, and 3-month follow-up. Physical indicators of recovery were also tracked. Parents/caregivers of participants were also invited to complete questionnaires assessing family functioning and parental self-efficacy. Qualitative data collection occurred

in the form of exit interviews ascertaining youth and caregivers' perspectives on their treatment experiences.

## **Results**

### **Study 1:**

Male youth were on average 14.8 years of age (SD = 2.8) upon admission to specialized eating disorder treatment, with a median duration of symptoms of 11 months. Male youth were moderately underweight, with a mean of 87.5% median Body Mass Index at admission.

Several sex differences emerged in the analyses of the subset of male youth treated between 2010-2015 in comparison to female youth. Males were younger than females, and had a younger age of onset. Males were less likely than were females to be diagnosed with anorexia nervosa or bulimia nervosa.

### **Study 2:**

A total of 61 youth were recruited (28 male, 28 female, and 5 transgender youth) for the longitudinal study. Youth recruited represented a transdiagnostic sample, with participant diagnoses including anorexia nervosa, bulimia nervosa, avoidant/restrictive food intake disorder, and other specified feeding/eating disorder. Preliminary analyses on the sample available as of August 2019 were conducted to examine sex differences between male and female youth. These analyses suggest that eating pathology (as measured with the Eating Disorder Examination – Questionnaire; adapted version of Mond et al., 2014) decreased from admission to discharge for both males and females, with no significant interaction effects between time and participant sex. However, an interaction emerged for the Male Body Attitude Scale (Ryan et al., 2011), with male youth (but not female youth) reporting a decrease in body image concerns on this measure (which assesses concerns about male-relevant concerns, including muscularity and height). We are still awaiting discharge and follow-up data for a small group of participants, which are expected by the end of 2019; results from this study will subsequently be published.

Twenty-eight youth (13 male, 12 female, and 3 transgender youth) completed interviews upon treatment completion. Ten parents also completed exit interviews. Themes explored in interviews with youth included their experiences with their first contact with health professionals, their treatment experiences in a specialized eating disorders program, and their transition back to services in their community upon discharge. Parents were also asked to reflect on major milestones in their child's treatment journey, with preliminary analyses suggesting themes of parental anxiety about accessing treatment, as well as experiencing delays in accessing treatment for their child. Further analysis will be conducted to extract major themes across youth and parent/caregiver treatment experiences; results from this study are in preparation for publication.

## **Discussion**

Preliminary results suggest differences between male and female youth with eating disorders in both clinical presentation, as well as treatment response. It is critical for clinical researchers to select eating disorder assessment measures that are relevant

across the gender spectrum, and include consideration of eating disorder symptoms such as muscularity, which are not directly assessed in many of the measures that have been validated with female samples. Increased knowledge regarding the clinical presentation of youth with eating disorders across the gender spectrum will support clinicians in considering the role of sex and gender in eating disorder treatment.

## **Project Output**

### *Publications (Study 1)*

Coelho, J.S., Lee, T., Karnabi, P., Burns, A., Marshall, S., Geller J. & Lam, PY. (2018). Eating disorders in biological males: clinical presentation and consideration of sex differences in a pediatric sample.

*Journal of Eating Disorders*, 6: 40 . <https://doi.org/10.1186/s40337-018-0226-y>

### **Presentations**

Coelho, J.S., Suen, J., Lee, T., Burns, A., Lam PY, Marshall S., & Geller J. Eating disorder symptoms in children and adolescents: Consideration of sex differences. Poster Presentation. Annual meeting of the Eating Disorders Research Society, Sydney, October, 2018.

Coelho, J.S., Suen, J., Burns, A., Lam PY, Marshall S., & Geller J. The role of sex and gender in pediatric eating disorders: Symptom presentation and treatment outcome in male and female youth. Oral Presentation. Biennial meeting of the Eating Disorders Association of Canada, Ottawa, October 2018.

Coelho JS, P Karnabi, A Burns, PY Lam, S Marshall & J Geller. Eating Disorders in pediatric and transition age settings: Clinical Presentation of males. Poster Presentation. Annual meeting of the Eating Disorders Research Society. Leipzig, German, September 2017.

Coelho JS, M. Robertson, PY Lam, S Marshall & J Geller. Characteristics and treatment outcome in male youth with eating disorders. Poster Presentation. Biennial conference of the Eating Disorders Association of Canada, Winnipeg, September 28-29 2016.

Coelho, JS. Breaking down stereotypes: Eating Disorders across the gender spectrum. Kelty Mental Health Centre Professional Development Series, February 2016.

## **References**

Mond, J., Hall, A., Bentley, C., Harrison, C., Gratwick - Sarll, K., & Lewis, V. (2014). Eating - disordered behavior in adolescent boys: Eating disorder examination questionnaire norms. *International Journal of Eating Disorders* , 47 (4), 335-341.

Murray, S. B., Nagata, J. M., Griffiths, S., Calzo, J. P., Brown, T. A., Mitchison, D., ... & Mond, J. M. (2017). The enigma of male eating disorders: A critical review and synthesis. *Clinical Psychology Review* , 57 , 1-11.

Ryan, T. A., Morrison, T. G., Roddy, S., & McCutcheon, J. (2011). Psychometric properties of the revised Male Body Attitudes Scale among Irish men. *Body Image*, 8 (1), 64-69.

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