Running head: TEASING, IMPULSIVE COPING, AND LOSS OF CONTROL EATING		
Weight-Releated Teasing, Impulsive Coping, and Loss of Control Eating in Young Adult Men		
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Abstract

Background: A sense of loss of control (LOC) over the amount or type of food an individual consumes is the hallmark symptom of binge eating disorder and is associated with obesity and metabolic dysfunction. Theoretical models indicate that negative affect is a common precipitant to LOC eating. Data from adolescents and young women indicate that weight-releated teasing is positively associated with LOC eating. This association has not been evaluated in young men. Young men who report weight-releated distress may engage in more frequent LOC eating, particularly if they tend to cope impulsively when experiencing negative affect.

Methods: The current study included 1011 racially/ethnically diverse young men (18-30y, M_{age}).

= 23.9, SD = 3.6 years; 25.7% non-Hispanic White; 24.7% Black/African American; 24.7% Hispanic/Latino; 25.0% Asian/Asian American; 44% overweight or obese) who completed online surveys all over the country. This cross-sectional study evaluated the association between the distress felt over weight-releated teasing and LOC eating frequency and additional analysis evaluated moderating effects of impulsive coping on this association.

Results: After controlling for age, race, and body mass index, a negative binomial regression indicated that there was a positive association between distress over weight-releated teasing and LOC eating frequency Exp(B) = 1.46, 95% CI 1.40-1.54, p<.001. Furthermore, impulsive coping significantly moderated this association, Exp(B) = .962, 95% CI .926-.999, p = .047.

Conclusions: Like adolescents and women, men who reported experiencing distress related to weight-releated teasing also endorsed more frequent LOC eating. This is particularly true for men who tend to cope with their distress by engaging in impulsive action. Although prospective data are needed to clarify the temporal nature of these variables, these findings underscore the need to reduce weight-related discrimination.

Introduction

Diagnostic criteria for binge eating disorder (BED) includes recurrent episodes of eating an amount of food much larger than someone else would typically consume in the same setting, with such episodes marked by a sense of distress and a loss of control (LOC) over the amount or type of food consumed (American Psychiatric Association, 2013). While these episodes, known as objective binge eating (OBE), are the hallmark symptom of BED (American Psychiatric Association, 2013), a sense of LOC while eating has also been reported alongside eating episodes which would not typically be viewed as objectively large, and are referred to as subjective binge eating (SBE) episodes (Fairburn & Cooper, 1993). Importantly, OBEs and SBEs are associated with equivocal levels of devepressive symptoms, eating disorder pathology, post-meal distress, and other associated psychological and medical comorbidities among men and women (Goldschmidt et al., 2015; Kelly, Cotter, et al., 2018; Palavras et al., 2013)

Data from community and college-based samples indicate that rates of LOC eating are comparable for men and women (Striegel-Moore et al., 2009), with young men in some samples reporting slightly higher rates compared to women, 25% and 21.3%, respectively (Lavender et al., 2010; Luce et al., 2008). Likewise, cross-sectional data suggest that LOC eating has similar levels of comorbid clinical impairment for both men and women as well as significantly greater impairment when compared to men and women who do not LOC eat (Striegel et al., 2012). Notably, one study demonstrated that the impairment on health-related quality of life associated with LOC eating is significantly higher for men than for women (Mitchison et al., 2013). Yet, there is a lack of research examining correlates of LOC eating among men, undermining a comprehensive understanding of this disordered eating behavior.

Theoretical models for LOC eating propose that this behavior emerges from negative affect (Polivy & Herman, 1993). More specifically, the act of LOC eating enables an individual to narrow their focus to their immediate environment, allowing them to escape negative selfimage and awareness (Escape Theory; Heatherton & Baumeister, 1991). Negative self-image could be due, in part, to highly demanding societal expectations related to appearance. Messages which communicate the value of particular body types are particularly evident in instances of weight-releated teasing, when individuals are told that having a larger body size is unacceptable and, in fact, "bad". Weight-releated teasing can prompt an array of negative affective experiences; women with a history of weight-releated teasing produce greater startle responses when shown pictures of themselves morphed to appear larger (Spresser et al., 2011). These experiences, in turn, increase risk for LOC eating. Indeed, weight-related teasing is associated with LOC eating in adult women and adolescent boys and girls (Calogero et al., 2009; Haines et al., 2006; Libbey et al., 2008; Rojo-Moreno et al., 2013). Yet, the nature of the association between weight-releated teasing and LOC eating has not been thoroughly clarified among young adult men.

Inherent to the Escape Theory of disordered eating behaviors is the way in which individuals cope with and regulate negative affect. One affect regulation strategy that may be particularly relevant to LOC eating is negative urgency, which refers to the tendency to engage in impulsive behavior when distressed (Cyders & Smith, 2008). Indeed, negative urgency has been linked to multiple disinhibited behaviors, and may also play a role in LOC eating (Cyders & Smith, 2008; Fischer et al., 2007, 2008, 2013; Kelly et al., 2014; Smith et al., 2019). In the context of weight-related teasing, individuals high in negative urgency may be more likely to engage in LOC eating to escape the aversive self-image and awareness made salient by verbal

harassment (Smith et al., 2019). Prior research on impulsive coping as it relates to LOC eating suggests that the tendency to cope with impulsive action strengthens the link between distressing emotions and LOC eating among women (Fischer et al., 2013; Smith et al., 2019); however, these associations have not been examined in men. As such, the primary objective of this study was to examine the association between weight-related teasing and LOC eating in a sample of young adult men. Impulsive coping was also examined as a potential moderator. It was hypothesized that distress from weight-related teasing would be positively associated with LOC eating frequency. We further expected that the link between weight-related teasing distress and LOC eating frequency would be stronger among those who tend to cope impulsively under emotional distress.

Methods

Participants and procedures:

Participants were recruited for this cross-sectional online survey study using Qualtrics Panels as part of a larger study collecting data on young men's disordered eating behaviors and cognitions (Kelly, Cotter, et al., 2018; Kelly, Smith, et al., 2018). Qualtrics Panels primarily uses market research panels and social media for recruitment from around the country. Respondents were men aged 18-30 years old due to the evidence of LOC eating being especially prevalent in this subpopulation (Lavender, De Young, & Anderson, 2010; Nicdao, Hong, & Takeuchi, 2007; Udo et al., 2013). Participants were also required to be living in the U.S., understand English, and identify as White/Caucasian, African American, Hispanic/Latino, or Asian/Asian American. This study oversampled young men from diverse ethnic/racial backgrounds. Consent was provided via a radial button and the original study was approved by the Institutional Review Board at the University of Oregon.

Measures

Demographics. Self-report questions assessed age, race/ethnicity, height and weight.

Reported height and weight were used to determine body mass index (BMI) (kg/m²).

Weight-related teasing. Weight-related teasing was measured with the Perceptions of Teasing Scale, which was developed from previous work using the Physical Appearance Related Teasing Scale (Thompson et al., 1995). Both frequency of and distress related to weight-related teasing were measured on a five-point scale; average distress was used in the current study. Test-retest reliability score for the weight-teasing distress subscale is good (r=.85) (Thompson et al., 1995). Items demonstrated good estimated internal consistency in the current study (a = .89).

Impulsive Coping. Impulsive coping when distressed was measured with the 3-item Impulse Control Difficulties subscale of the 18-item Difficulties in Emotion Regulation Scale (DERS; Gratz & Roemer, 2003). The DERS has high estimated internal consistency (a=.93) for both men and women (Gratz & Roemer, 2003) with our scale showing good internal consistency (a=.87).

Loss of control (LOC) eating. LOC eating was measured with two items assessing SBEs and two items assessing OBEs from the Eating Disorder Examination Questionnaire (Fairburn & Beglin, 1994) assessing binge eating episodes in the past 28 days. Consistent with prior research measuring LOC eating (Kelly et al., 2015), items assessing SBEs and OBEs were combined to calculate a total LOC eating frequency. Use of this measure to conceptualize LOC eating has been supported by latent class analysis (Williamson et al., 2002) and has been shown to correlate with scores acquired using the Eating Disorder Examination, an interview-based assessment of eating disorder symptoms (Berg et al., 2012). Test-retest reliability for LOC eating over a two-week period is good (r=.68).

Data Analytic Plan

Descriptive statistics of key variables indicated an over dispersion of zeros observed in the dependent variable, LOC eating frequency. As such, a negative binomial regression model was used to assess the association between reported distress from weight-related teasing and frequency of LOC eating. Negative binomial models include a random component that accounts for over dispersion while preventing an incorrect assumption that differences between subjects are equal (Elhai et al., 2008). To examine the proposed moderation of impulsive coping on the association between weight-related teasing distress and LOC eating, means of both weight-related teasing and impulsive coping were first centered around zero. A second negative binomial regression model was conducted with the centered terms and an interaction term. All analyses adjusted for age, BMI, and race/ethnicity as these have been shown to have significant associations with LOC eating (Haines et al., 2006; Kelly, Cotter, et al., 2018; Kelly et al., 2015) All analyses were run using SPSS v. 24 for MacOS and were considered significant at p < .05.

Results

Participants. A total of 1114 participants enrolled in the current study. The weight-related teasing measure was added to this study shortly after recruitment began, resulting in a total sample size of 1011 ($M_{\rm age} = 23.9$, SD = 3.6 years; $M_{\rm BMI} = 25.38$, SD = 6.23 kg/m²) for the current study's analyses. The sample included young men with diverse sociodemographic factors (see Table 1) 51.8% of the sample reported LOC eating with a range of 0.0-56.0 episodes.

Primary analyses. After adjusting for age, BMI, and race/ethnicity there was a positive association between weight-related teasing distress and LOC eating frequency, Exp(B) = 1.46, 95% CI 1.39-1.53, p < .001. Furthermore, impulsive coping significantly moderated this association, Exp(B) = .962, 95% CI .926-.999, p = .047. As demonstrated in Figure 1, impulsive

coping exacerbates the positive association between weight-related teasing distress and LOC eating, particularly as distress related to teasing increases. Based on visual inspection of the graphed moderation, those who experience low levels of distress from weight-releated teasing and low impulsive coping experience one episode of LOC eating fewer than those who experience low levels of weight-releated teasing and high impulsive coping. As distress from weight-releated teasing increases the difference observed in LOC eating episodes increases to two episodes between low and high levels of impulsive coping. In other words, as weight-releated teasing increases, episodes of LOC eating will increase with this association particularly strong for those individuals who cope with distress using impulsive behavior.

Discussion

LOC eating is associated with numerous physical and psychosocial symptoms which can significantly impair quality of life (Hart et al., 2020). Some research suggests that this impairment may be greater in men than in women (Mitchison et al., 2013). Few studies on LOC eating include males even though young adult men are experiencing the behavior at the highest rate (Lavender et al., 2010).

Results from the current study show that distress from weight-related teasing has a significant positive association with an increase in LOC eating frequency. The current study also demonstrated that impulsive coping exacerbates this positive association. The link between LOC eating and weight-releated teasing is consistent across the research on adolescents and women (Haines et al., 2006) indicating a broad experience of teasing throughout the life cycle and across gender lines. This study, taken with past research on the association between weight-releated teasing and LOC eating confirm the notion that weight-releated teasing may be one potential source of negative affect consequentially causing LOC eating as a means of escaping negative

self-image awareness, and acting as a means of coping suggested in theoretical models (Heatherton & Baumeister, 1991; Polivy & Herman, 1993). Results from this study are inconsistent prior research which indicate that weight-releated teasing is not significantly associated with LOC eating in young men (Goldschmidt et al., 2015; Puhl et al., 2017). The difference in results may be observed due to the difference in age, the use of both SBEs and OBEs combined to measure LOC eating in this study, and diversity of race/ethnicity prevalent in the sample, as race/ethnicity and perceived discrimination have been shown to have significant associations with disordered eating behaviors (Kelly, Smith, et al., 2018).

Impulsive coping exacerbated the positive association between weight-releated teasing and LOC eating. This is consistent with negative affect theoretical models (Polivy & Herman, 1993) and emerging research on negative urgency and the association between it and disinhibited behavior, including LOC eating (Cyders & Smith, 2008; Fischer et al., 2013; Smith et al., 2019). Research on the link between negative urgency and impulsive action has only been done on women, but theory suggests negative urgency and impulsive action are used to temporarily escape negative affect, narrowing focus to one's immediate environment and disinhibiting goal-directed behavior (Smith et al., 2019), does not need to apply to women only, and research consistent with these theories of emotion regulation show evidence of an association between poor emotion regulation skills and LOC eating in men (Kukk & Akkermann, 2019; Leehr et al., 2015). This may be a specific place for clinical implications and targeted interventions.

Limitations of this study were the use of self-report variables, creating potential bias from retrospective recall and its cross-section design. Men also self-selected into the survey and there was a limited age range, limiting the generalizability of the results. Results from this study on frequency of LOC eating were also higher than reported norms for this age group (Lavender et

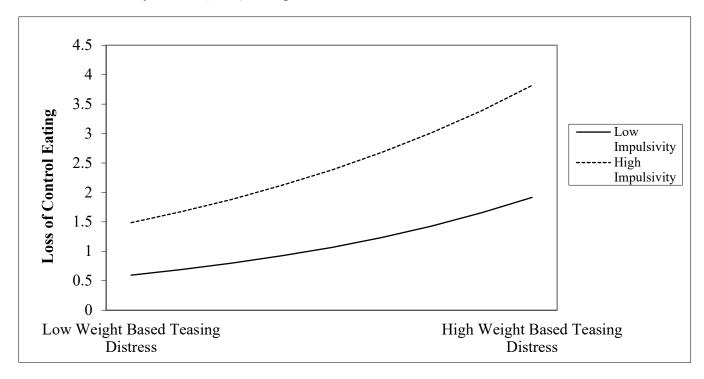
al., 2010) which may be due in part to the method of data collection. Perhaps online surveys may be more anonymous and those completing these surveys are less inclined toward response desirability bias. Strengths of the study include the racially and ethnically diverse sample as well as its contribution to the field of disordered eating behaviors in men. Male stereotypes may reinforce overlooking the problems with these behaviors in men and results from this study clearly show a need for reduction in gender bias among disordered eating research. Future research should consider the source of teasing as there is evidence to suggest that peer based rather than family based teasing predicts different outcomes (Puhl et al., 2017), however this must not discount the role that a general weight-stigmatizing environment has on this behavior. Distress tolerance, as it relates to impulsive coping, negative urgency, and disordered eating behaviors has variable evidence with mixed samples showing significant results (Anestis et al., 2007), however female only samples are inconsistent (Kelly et al., 2014), highlighting again the need for further research on these coping strategies for men. The results of this study; the positive association between weight-releated teasing and LOC eating in men, which is particularly true for those who cope using impulsive behavior, emphasizes the need for reduction in weight-releated bias and discrimination and intervention aimed at more adaptive distress coping strategies.

Table 1. Demographic and descriptive information for entire sample

	Full Sample (<i>N</i> =1011)
Age (y)	23.9±3.6
BMI $(kg/m^2)**$	25.3±6.2
Geographic region (%)	
Urban	45.7%
Suburban	41.2%
Rural	13.1%
Education (%)**	
≤ High school	32.5%
Some college	35.2%
≥ 4-year college degree	32.3%
School status (%)	
In school	37.5%
Not in school	62.5%
Marital Status (%)	
Single	81.3%
Married	17.1%
Other	0.6%
Employment status (%)	
Disability	3.8%
Unemployed	28.3%
Employed part-time	24.5%
Employed full-time	43.4%
Annual Income (%)**	
< \$19,999	25.7%
20,000-29,999	16.5%
30,000-39,999	10.4%
40,000+	47.4%
Not born in U.S. (%)**	20.4%
Heterosexual (%)	88.8%
% with LOC eating	51.8%
LOC eating frequency	2.5±4.5
Range of LOC eating	0.0-56.0
frequency	W/L'4. (C
Ethnic Identity (%)	White (Caucasian) (25.7%)
	African American
	(24.7%)
	Hispanic/Latino
	(24.7%)
	Asian/Asian American (25.0%)

^{**}p<.001; BMI = body mass index; LOC = loss of control

Figure 1. Moderation effect of impulsive coping on relationship between weight-related teasing distress and loss of control (LOC) eating.



References

- American Psychiatric Association. (2013). DSM 5. In *Arlington*. https://doi.org/10.1017/CBO9781107415324.004
- Anestis, M. D., Selby, E. A., Fink, E. L., & Joiner, T. E. (2007). The multifaceted role of distress tolerance in dysregulated eating behaviors. *International Journal of Eating Disorders*, 40(8), 718–726. https://doi.org/10.1002/eat.20471
- Berg, K. C., Peterson, C. B., Frazier, P., & Crow, S. J. (2012). Psychometric evaluation of the eating disorder examination and eating disorder examination-questionnaire: A systematic review of the literature: Psychometrics of the EDE and EDE-Q. *International Journal of Eating Disorders*, 45(3), 428–438. https://doi.org/10.1002/eat.20931
- Calogero, R. M., Herbozo, S., & Thompson, J. K. (2009). Complimentary Weightism: The Potential Costs of Appearance-Related Commentary for Women's Self-Objectification.

 *Psychology of Women Quarterly, 33(1), 120–132. https://doi.org/10.1111/j.1471-6402.2008.01479.x
- Cyders, M. A., & Smith, G. T. (2008). Emotion-based dispositions to rash action: Positive and negative urgency. *Psychol Bull.*, *134*(6), 807–828. https://doi.org/10.1037/a0013341.
- Elhai, J. D., Calhoun, P. S., & Ford, J. D. (2008). Statistical procedures for analyzing mental health services data. *Psychiatry Research*, *160*(2), 129–136. https://doi.org/10.1016/j.psychres.2007.07.003
- Fairburn, C. G., & Beglin, S. J. (1994). Assessment of eating disorders: Interview or self-report questionnaire? *The International Journal of Eating Disorders*, *16*(4), 363–370.

- Fairburn, C. G., & Cooper, Z. (1993). The Eating Disorder Examination (12th ed.). In C. G.Fairburn & G. T. Wilson (Eds.), *Binge eating, nature, assessment and treatment* (pp. 317–360). Guilford.
- Fischer, S., Peterson, C. M., & McCarthy, D. (2013). A prospective test of the influence of negative urgency and expectancies on binge eating and purging. *Psychology of Addictive Behaviors*, 27(1), 294–300.
- Fischer, S., Smith, G. T., Annus, A., & Hendricks, M. (2007). The relationship of neuroticism and urgency to negative consequences of alcohol use in women with bulimic symptoms.

 *Personality and Individual Differences. https://doi.org/10.1016/j.paid.2007.03.011
- Fischer, S., Smith, G. T., & Cyders, M. A. (2008). Another look at impulsivity: A meta-analytic review comparing specific dispositions to rash action in their relationship to bulimic symptoms. In *Clinical Psychology Review*. https://doi.org/10.1016/j.cpr.2008.09.001
- Goldschmidt, A. B., Wall, M. M., Loth, K. A., & Neumark-Sztainer, D. (2015). Risk Factors for Disordered Eating in Overweight Adolescents and Young Adults: Table I. *Journal of Pediatric Psychology*, 40(10), 1048–1055. https://doi.org/10.1093/jpepsy/jsv053
- Gratz, K. L., & Roemer, L. (2003). Multidimensional Assessment of Emotion Regulation and Dysregulation: Development, Factor Structure, and Initial Validation of the Difficulties in Emotion Regulation Scale. *Journal of Psychopathology and Behavioral Assessment*, 14.
- Haines, J., Neumark-Sztainer, D., Eisenberg, M. E., & Hannan, P. J. (2006). Weight teasing and disordered eating behaviors in adolescents: Longitudinal findings from Project EAT (Eating Among Teens). *Pediatrics*, 117(2), e209–e215.
 https://doi.org/10.1542/peds.2005-1242

- Hart, L. M., Gordon, A. R., Sarda, V., Calzo, J. P., Sonneville, K. R., Samnaliev, M., & Austin,
 S. B. (2020). The association of disordered eating with health-related quality of life in
 U.S. young adults and effect modification by gender. *Quality of Life Research: An*International Journal of Quality of Life Aspects of Treatment, Care and Rehabilitation.
 https://doi.org/10.1007/s11136-019-02396-2
- Heatherton, T. F., & Baumeister, R. F. (1991). Binge eating as escape from self-awareness. *Psychological Bulletin*. https://doi.org/10.1037/0033-2909.110.1.86
- Kelly, N. R., Cotter, E., & Guidinger, C. (2018). Men who engage in both subjective and objective binge eating have the highest psychological and medical comorbidities. *Eating Behaviors*, *30*, 115–119. https://doi.org/10.1016/j.eatbeh.2018.07.003
- Kelly, N. R., Cotter, E. W., & Mazzeo, S. E. (2014). Examining the role of distress tolerance and negative urgency in binge eating behavior among women. *Eating Behaviors*, *15*(3), 483–489. https://doi.org/10.1016/j.eatbeh.2014.06.012
- Kelly, N. R., Cotter, E. W., Tanofsky-Kraff, M., & Mazzeo, S. E. (2015). Racial variations in binge eating, body image concerns, and compulsive exercise among men. *Psychology of Men & Masculinity*, 16(3), 326–336. https://doi.org/10.1037/a0037585
- Kelly, N. R., Smith, T. M., Hall, G. C. N., Guidinger, C., Williamson, G., Budd, E. L., & Giuliani, N. R. (2018). Perceptions of general and postpresidential election discrimination are associated with loss of control eating among racially/ethnically diverse young men.
 International Journal of Eating Disorders, 51(1), 28–38.
 https://doi.org/10.1002/eat.22803

- Kukk, K., & Akkermann, K. (2019). Emotion regulation difficulties and dietary restraint independently predict binge eating among men. *Eating and Weight Disorders: EWD*. https://doi.org/10.1007/s40519-019-00791-9
- Lavender, J. M., De Young, K. P., & Anderson, D. A. (2010). Eating Disorder Examination

 Questionnaire (EDE-Q): Norms for undergraduate men. *Eating Behaviors*, 11(2), 119–
 121. https://doi.org/10.1016/j.eatbeh.2009.09.005
- Leehr, E. J., Krohmer, K., Schag, K., Dresler, T., Zipfel, S., & Giel, K. E. (2015). Emotion regulation model in binge eating disorder and obesity—A systematic review.

 Neuroscience and Biobehavioral Reviews, 49, 125–134.

 https://doi.org/10.1016/j.neubiorev.2014.12.008
- Libbey, H. P., Story, M. T., Neumark-Sztainer, D. R., & Boutelle, K. N. (2008). Teasing, disordered eating behaviors, and psychological morbidities among overweight adolescents. *Obesity (Silver Spring, Md.)*, *16 Suppl 2*, S24-9. https://doi.org/10.1038/oby.2008.455
- Luce, K. H., Crowther, J. H., & Pole, M. (2008). Eating Disorder Examination Questionnaire (EDE-Q): Norms for undergraduate women. *International Journal of Eating Disorders*. https://doi.org/10.1002/eat.20504
- Mitchison, D., Mond, J., Slewa-Younan, S., & Hay, P. (2013). Sex differences in health-related quality of life impairment associated with eating disorder features: A general population study. *International Journal of Eating Disorders*, 46(4), 375–380. https://doi.org/10.1002/eat.22097
- Nicdao, E. G., Hong, S., & Takeuchi, D. T. (2007). Prevalence and correlates of eating disorders among Asian Americans: Results from the National Latino and Asian American Study.

- *The International Journal of Eating Disorders*, *40*(S3), S22–S26. https://doi.org/10.1002/eat.20450
- Palavras, M. A., Morgan, C. M., Borges, F. M. B., Claudino, A. M., & Hay, P. J. (2013). An investigation of objective and subjective types of binge eating episodes in a clinical sample of people with co-morbid obesity. *Journal of Eating Disorders*, *I*(1), 26. https://doi.org/10.1186/2050-2974-1-26
- Polivy, J., & Herman, C. P. (1993). Etiology of Binge Eating: Psychological Mechanisms. In New York: Gilford Press (Vol. 80, Issue 2).
- Puhl, R. M., Wall, M. M., Chen, C., Bryn Austin, S., Eisenberg, M. E., & Neumark-Sztainer, D. (2017). Experiences of weight teasing in adolescence and weight-related outcomes in adulthood: A 15-year longitudinal study. *Preventive Medicine*, 100, 173–179. https://doi.org/10.1016/j.ypmed.2017.04.023
- Rojo-Moreno, L., Rubio, T., Plumed, J., Barberá, M., Serrano, M., Gimeno, N., Conesa, L., Ruiz,
 E., Rojo-Bofill, L., Beato, L., & Livianos, L. (2013). Teasing and Disordered Eating
 Behaviors in Spanish Adolescents. *Eating Disorders*, 21(1), 53–69.
 https://doi.org/10.1080/10640266.2013.741988
- Smith, K. E., Mason, T. B., Crosby, R. D., Engel, S. G., & Wonderlich, S. A. (2019). A multimodal, naturalistic investigation of relationships between behavioral impulsivity, affect, and binge eating. *Appetite*, *136*(January), 50–57. https://doi.org/10.1016/J.APPET.2019.01.014
- Spresser, C. D., Keune, K. M., Filion, D. L., & Lundgren, J. D. (2011). Startle as an objective measure of distress related to teasing and body image. *The International Journal of Eating Disorders*, 44(1), 58–64. https://doi.org/10.1002/eat.20774

- Striegel, R. H., Bedrosian, R., Wang, C., & Schwartz, S. (2012). Why men should be included in research on binge eating: Results from a comparison of psychosocial impairment in men and women. *International Journal of Eating Disorders*. https://doi.org/10.1002/eat.20962
- Striegel-Moore, R. H., Rosselli, F., Perrin, N., DeBar, L., Wilson, G. T., May, A., & Kraemer, H. C. (2009). Gender difference in the prevalence of eating disorder symptoms.

 International Journal of Eating Disorders. https://doi.org/10.1002/eat.20625
- Thompson, J. K., Cattarin, J., Fowler, B., & Fisher, E. (1995). The perception of teasing scale (POTS): A revision and extension of the physical appearance related teasing scale (PARTS) (Vol. 0367, Issue 813, pp. 146–157).
- Udo, T., McKee, S. A., White, M. A., Masheb, R. M., Barnes, R. D., & Grilo, C. M. (2013). Sex differences in biopsychosocial correlates of binge eating disorder: A study of treatment-seeking obese adults in primary care setting. *General Hospital Psychiatry*, *35*(6), 587–591. https://doi.org/10.1016/j.genhosppsych.2013.07.010
- Williamson, D. A., Womble, L. G., Smeets, M. A. M., Netemeyer, R. G., Thaw, J. M., Kutlesic, V., & Gleaves, D. H. (2002). Latent structure of eating disorder symptoms: A factor analytic and taxometric investigation. *The American Journal of Psychiatry*, 159(3), 412–418. https://doi.org/10.1176/appi.ajp.159.3.412