

Understanding eating disorder susceptibility requires an integrated sociological, biological and genetic approach

By Dr Jessica K. Edwards

In 2015, Kristen Culbert, Sarah Racine and Kelly Klump compiled a Research Review on the underlying causes of eating disorders for the *Journal of Child Psychology and Psychiatry*. Their review identified variables that can be considered risk factors for eating pathologies and the critical areas for future research. Here, the researchers revisit their key findings and discuss how the field needs to progress in future years.

Eating disorders are severe psychiatric illnesses with an estimated lifetime prevalence of ~2.8-6.4% in US adolescents. Three primary categories of eating disorder have been recognized by the DSM-5: anorexia nervosa, bulimia nervosa and binge eating disorder. In addition, ~20-40% cases of eating pathology fall into “Other Specified or Unspecified Feeding or Eating Disorders” categories. Despite diagnostic distinctions between these categories, all are associated with negative medical, cognitive, emotional and social outcomes. As such, increasing our understanding of the factors that contribute to the development of an eating pathology is necessary for early intervention and prevention

In their review, Culbert and colleagues reinforce that no single factor accounts for the development of an eating disorder. “Risk for eating disorders involves a complex interplay between sociocultural, psychological and biological influences, but most research has examined biological and psychosocial risk factors in isolation”, explains Culbert. “Studies that examine factors across all domains are critical to fully determine the causes that contribute to the development of an eating disorder. Consequently, our review aimed to identify key risk factors that had been studied using integrative methods — i.e. approaches that captured both biological and environmental influences (e.g., twin studies) and/

or various levels of analysis, like the combination of biological and behavioural data (e.g., imaging analyses during cognitive testing)”.

The authors describe that over the course of the 20th century, the level by which women living in Western societies idealize being thin and the incidence of anorexia nervosa and bulimia nervosa has increased. Westernised cultures offer ample opportunity and exposure to pressures to obtain the “thin ideal”, which is considered to increase risk of developing an eating disorder in females. This effect has been exemplified in the case of bulimia nervosa: increased rates of bulimia nervosa (which also has a strong genetic element) have been observed in non-Western cultures following exposure to Western influences, such as Western television programs.

Culbert et al. identified that media exposure, perceived pressure to be thin, thin-ideal internalization, and an expectancy to gain life improvements from thinness can prospectively predict increased levels of disordered eating in adolescents and young adult women. As such, they claim that interventions that (i) reduce the extent to which an individual internalizes the thin-ideal as being important and (ii) that alter expectations that life will improve if thinness is achieved, have the potential to reduce the risk of developing disordered eating. One such intervention is the “Body Project”





— a body acceptance program that uses a cognitive dissonance technique to help school-aged girls and young women resist cultural pressures to pursue an unrealistic body image. Interestingly, the Body Project technique has been shown to alter neural responsiveness to thin-ideal media images and statements, thus highlighting the interplay between cognitive and behavioural processes that underlie biological change.

Given that only a minority of individuals are susceptible to thin-ideal sociocultural messages, and even fewer go on to develop an eating disorder, implies that individual susceptibility factors moderate the contribution of sociocultural effects on eating disorder risk. One of these individual factors may be personality traits, such as negative emotionality, perfectionism and a type of emotion-based impulsivity known as negative urgency. Longitudinal studies have consistently demonstrated that these traits can predict development of an eating disorder, suggesting that they may be risk factors for eating disorders.

The predominant biological risk factors identified thus far for eating disorders are genetic risk factors and ovarian hormone levels.

Full article is available to be viewed online at <https://bit.ly/2IAkOze>

Referring to:

Culbert, K.M., Racine, S.E. & Klump, K.L. (2015), *Research Review: What we have learned about the causes of eating disorders — a synthesis of sociocultural, psychological, and biological research.* *J Child Psychol Psychiatr*, 56: 1141-1164. doi:10.1111/jcpp.12441

Further reading:

Culbert, K. M., Burt, S. A., & Klump, K. L. (2017), *Expanding the developmental boundaries of etiologic effects: The role of adrenarche in genetic influences on disordered eating in males.* *J Abnorm Psychol*, 126, 593-606. doi:10.1037/a0000226

Stice, E., Marti, C.N. & Rohde, P. (2013), *Prevalence, incidence, impairment, and course of the proposed DSM-5 eating disorder diagnoses in an 8-year prospective community study of young women.* *J. Abnorm Psychol*, 122: 445-457. doi:10.1037/a0030679

www.bodyprojectsupport.org

Glossary:

***Anorexia nervosa (AN):** a disorder characterized by deliberate weight loss, induced and sustained by the patient. The disorder is associated with a specific psychopathology whereby a dread of fatness and flabbiness of body contour persists as an intrusive overvalued idea, and the patients impose a low weight threshold on themselves. There is usually undernutrition of varying severity with secondary endocrine and metabolic changes and disturbances of bodily function. The symptoms include restricted dietary choice, excessive exercise, induced vomiting and purgation, and use of appetite suppressants and diuretic.

***World Health Organization. 1992.** *The ICD-10 classification of mental and behavioural disorders: clinical descriptions and diagnostic guidelines.* Geneva: World Health Organization.

Binge eating disorder (BED): an eating disorder in which affected patients regularly eat an excessive amount of food over a short period of time and feel unable to stop during the eating episode; patients then typically experience feelings of upset and guilt

***Bulimia nervosa (BN):** a syndrome characterized by repeated bouts of overeating and an excessive preoccupation with the control of body weight, leading to a pattern of overeating followed by vomiting or use of purgatives. This disorder shares

many psychological features with anorexia nervosa, including an overconcern with body shape and weight. Repeated vomiting is likely to give rise to disturbances of body electrolytes and physical complications. There is often, but not always, a history of an earlier episode of anorexia nervosa, the interval ranging from a few months to several years.

***World Health Organization. 1992.** *The ICD-10 classification of mental and behavioural disorders: clinical descriptions and diagnostic guidelines.* Geneva: World Health Organization.

Cognitive dissonance: producing inconsistent or conflicting thoughts or attitudes to produce a feeling or discomfort and ultimately lead to an alteration of beliefs

Disordered eating: abnormal eating habits that although are similar in presentation to diagnosed eating disorders, do not warrant diagnosis usually due to the level of severity or frequency of the behaviour

Lifetime prevalence: the proportion of the population that at some point in their life time will experience a particular condition

Negative emotionality: the propensity to experience and react to stressful situations with negative emotions

Negative urgency: a tendency to engage in impulsive risky behaviour following intense negative emotion

Other Specified Feeding or Eating Disorder (OSFED) or Unspecified Feeding or Eating Disorder (UFED): diagnostic categories of eating disorders that include patients who do not entirely fulfil the expected symptoms of any of the three primary eating disorders.

Perfectionism: a personality trait by which an individual strives for flawlessness, and has high standards accompanied by critical self-evaluation

Thin ideal: the concept of the ideally slim body, commonly a slender figure with a small waist and little body fat

Thin ideal internalization: the degree by which individuals 'buy into' the importance of achieving the thin ideal