



Effect of Body Image on Self Esteem: A Systematic Literature Review and Future Implication

Raghav Aggarwal,¹ Dr. Rohit Ranjan² Rupali Chandola^{3*}

Department of Psychology, Lovely Professional University, Jalandhar, Phagwara, Punjab, India

ABSTRACT

Objective

This review article explores the connection between self-esteem and body image. It has been demonstrated that body image, particularly in respect to physical appearance, has a significant impact on how people perceive themselves and their level of confidence. Positive body image can result in increased confidence and general wellbeing can improve people's mental health and general quality of life., whereas a negative body image can result in self-talk and low self-esteem,

Material and Method:

A literature search was conducted to identify relevant studies and literature on the topic of body image and self-esteem. Electronic databases including PubMed, PsycINFO, and Google Scholar were searched using relevant keywords such as "body image", "self-esteem", "interventions", and "mental health". The search was limited to articles published in English between the years 2010 to 2021. This was performed using preferred reporting items for systematic review and the meta-analysis technique (PRISMA) exclusion and inclusion criteria. Thirty empirical research articles were included in the present study.

Result:

The article highlights therapies that have been effective in enhancing body image and self-esteem and examine the variables, such as societal influences and personal experiences, that lead to the emergence of body image disorders.

Conclusion:

Finding advances the understanding of mental health challenges and addresses body image issues, identify gap in research and propose future research direction. Research must focus on tools innovation and assessment of body image.

KEYWORDS: Body Image, Self-esteem, physical appearance, societal influences, mental health, quality of life.

INTRODUCTION

An individual's perspective, thoughts, and feelings about their physical appearance are all part of the complex construct known as body image. Excessive concern about body image, body image misconception are leading to dissatisfaction, disturbed eating patterns, affecting the nutritional status and also leading to depression and anxiety disorders. This concept of body image has been less explored in Indian context, especially among young girls. Numerous elements, such as societal pressures, individual experiences, and cultural conventions, have an impact on it. Self-esteem, which is

characterised as a person's total sense of self-worth and confidence, is directly related to body image. Negative self-talk and low self-esteem that result from having a bad body image can have a detrimental effect on one's mental health as well as general wellbeing. A good body image, on the other hand, can result in increased self-esteem and confidence, which can improve one's general quality of life. This review article examines the connection between body image and self-esteem, as well as the causes of concerns with body image and the interventions that have been effective in enhancing both. In order to promote a healthy body image and better mental health outcomes, people and healthcare professionals can seek to grasp the intricate interactions between self-esteem and body image.

A person's perception, thoughts, feelings, and attitudes towards their own body, including its size, shape, and appearance, are referred to as body image. It is influenced by several things, including personal experiences, cultural values, individual traits, and societal standards of beauty. A person's self-esteem, mood, behaviour, and general well-being can all be impacted by their body image, which can be positive, negative, or neutral.

"Body image is a multidimensional construct that encompasses perceptual, affective, cognitive, and behavioural components, and reflects an individual's attitudes, beliefs, and experiences related to his or her own body, as well as his or her idealized or desired body." (Cash F Thomas.;2017) This quote by Thomas F. Cash explains that body image is a complex concept that involves how a person perceives, feels, thinks, and acts in relation to their own body, as well as their idealized or desired body. It encompasses various dimensions, such as perception, emotions, thoughts, and behaviours, and is influenced by personal attitudes, beliefs, experiences, and societal norms and standards. Overall, body image is an important factor in a person's mental health and well-being.

Self-esteem is the subjective assessment of one's own competence, worth, and value as a person. It is based on a variety of elements, such as one's skills, accomplishments, character traits, and social comparisons. Self-esteem can influence a person's thoughts, feelings, and behaviours and can be either positive or negative. While those with low self-esteem may experience more self-doubt, anxiety, and depression, those with high self-esteem typically exhibit greater levels of confidence, resiliency, and optimism.

"Self-esteem is the disposition to experience oneself as being competent to cope with the basic challenges of life and of being worthy of happiness." (Branden) This quote by Nathaniel Branden defines self-esteem as a person's overall evaluation of themselves and their ability to cope with the challenges that life presents. It involves a sense of confidence in one's skills and worthiness to experience happiness. Self-esteem is not just about having positive thoughts about oneself, but it is also reflected in one's emotions, behaviour, and attitude towards oneself and others. When a person has high self-esteem, they are more likely to feel capable and successful in various aspects of life, while low self-esteem can lead to feelings of insecurity and self-doubt.

REVIEW OF LITERATURE

Moving from adolescence to adulthood is a significant developmental transition. This transition was well-structured for most until the mid-20th century but has recently shifted to being unstructured (Schwartz et al., 2015) The strong connection between the two constructs has been highlighted by numerous studies that have looked into the relationship between body image and self-esteem. In contrast to those with positive body images, those with negative body images, according to a study by Cash and Pruzinsky (2018), had lower self-esteem and higher levels of anxiety and depression. Tiggemann and Slater (2014) discovered a similar relationship between a negative body image and lower self-esteem and a positive body image and higher self-esteem and general well-being.

Body image issues have been linked significantly to societal pressures, including unrealistic beauty standards portrayed in the media (Fardouly et al., 2015). The internalisation of these standards and the subsequent perception that one's own appearance falls short can lead to negative self-talk and a

decrease in self-esteem. Negative body image and low self-esteem have also been linked to individual experiences, including trauma, chronic illness, and bullying (Tylka & Sabik, 2010).

Interventions aimed at improving body image and self-esteem have been developed and tested with varying degrees of success. Cognitive-behavioral therapy (CBT) has been found to be effective in improving body image and reducing negative self-talk (Frisén et al., 2016). Acceptance and Commitment Therapy (ACT) has also shown promise in reducing body image concerns and improving self-esteem (Tylka et al., 2015). In addition, interventions that focus on promoting positive body image, such as media literacy programs and body positivity campaigns, have been found to be effective in improving body image and self-esteem (Fardouly et al., 2015; Swami et al., 2018).

Overall, the research indicates a connection between negative body image and low self-esteem, as well as a link between these two factors and poor mental and physical health. To find effective methods for fostering a positive body image and enhancing mental health outcomes, more research is required. However, interventions aimed at enhancing body image and self-esteem have shown promise.

METHOD

The preferred reporting items for systematic reviews and meta-analysis (PRISMA) guidelines and checklist were followed for this present study. PRISMA techniques help the authors ensure transparency and complete reporting of systematic reviews and meta-analyses. Authors had developed the PRISMA statement and its explanations paper to researchers in reporting a broad range of systematic reviews, to assess the benefits and risks of a variety of health conditions. This present article is a systematic review of body image and self-esteem, which intends to collate the crux of the existing empirical literature pertaining to it: mainly with respect to investigate the relationship between body image and self-esteem and interventions aimed at improving body image and self-esteem. As this is a review article, a systematic literature search was conducted to identify relevant studies and literature on the topic of body image and self-esteem. Electronic databases including PubMed, PsycINFO, and Google Scholar were searched using relevant keywords such as "body image", "self-esteem", "interventions", and "mental health". The search was limited to articles published in English between the years 2010 to 2022. During the search process, Boolean operators (i.e., and, or, not) were used to obtain relevant papers related to body image and self-esteem. Searches for each keyword and phrase; body image, mental health consequences of low self-esteem etc. were conducted separately, and the conjunction 'in' was also used in the search keywords to retrieve articles representing various related dimensions of self-esteem and body image.

The following inclusion and exclusion criteria were used in this study to select articles of importance for the review purpose. After the initial search, articles were screened based on their relevance to the topic and inclusion criteria, which included studies that investigated the relationship between body image and self-esteem and interventions aimed at improving body image and self-esteem. Studies that were not relevant or did not meet the inclusion criteria were excluded. Data from the included studies were extracted and synthesized to provide a comprehensive review of the literature on body image and self-esteem. The findings were organized and presented according to the themes that emerged from the literature, including the relationship between body image and self-esteem, the factors that contribute to the development of body image, and interventions aimed at improving body image and self-esteem. Guided by the objective of the review and the inclusion-exclusion criteria, a literature search from several databases was conducted that yielded 500 articles. Following the removal of duplicates, 200 articles were kept for preliminary evaluation. By examining the titles and abstracts of the 200 publications, 165 articles were removed on the basis of the exclusion criteria. This was due to most of the 165 articles having one or two variables related to body image, self-esteem articles were found to be beyond the scope of the objective and inclusion criteria of this paper and were excluded from the study. Articles not available in full text, reviews, case studies, and qualitative investigations

were excluded from the analysis. Thirty- five articles that had the word “body image and self-esteem either in the abstract or in their title were incorporated into the current review. The empirical studies included in this study have a variation in sample size (ranges from 10 to 1800) and were mostly conducted as descriptives, cross-sectional, survey methods, and online or web surveys. Overall, the method used for this review article involved a systematic search and synthesis of the literature, and a critical analysis of the findings to provide insights into the relationship between body image and self-esteem, as well as strategies for promoting positive body image and improving mental health outcomes.

Result:

A systematic review was carried out for summarize key concepts and findings from the selected papers on body image and self-esteem. with the intention of identifying and mapping the available empirical evidence on relation between body image and self-esteem. The available literature was segregated into different sections, accordingly, to present body image and self- esteem from multiple perspectives; such as: the Development of Body Image, Self-esteem, Relationship between body image and self-esteem, Interventions aimed at improving body image and self-esteem, Comorbidities and mental health issue and consequence.

Body image: Obese people report discrimination and social exclusion. trouble in finding clothes, and public ridicule (Dhillon & Dhawan, 2011) .body image is measured by different psychometric Studies reported that obesity is also linked with low self-esteem, appearance evaluation, and dissatisfaction. Thus, obesity creates an enormous psychological burden on an individual. It is well established in the literature that preoccupation and self-classified weight. obesity impacts psychological well-being, overall evaluation and satisfaction with one's looks. Several studies have shown a relationship between negative body image, depression, and lowered self-esteem among obese male and female students. Both the gender report body image issues, but their body images are qualitatively different. Females of all age groups only follow thin ideal whereas males are divided into two categories one of having will of losing weight and other of having a will of gaining weight (Wong & Say, 2013) Male body objectification is popular in current mass media. This objectification leads to increased body dissatisfaction in males too (Bergeron, 2007). Prior studies reported the fact that body image issues are more common in female than in male student.

Dehghani et al (2012). reported that depression, anxiety, and tension are significantly negatively correlated with the decrease in body image obese adolescent female students. Students with a normal or slim body feel physical attraction and were more contentment with their appearance and body .

Karaca et al. (2017) reported that the body image of femal students becomes more negative with the increase in their weight another study by Parent et al. (2018) found that adolescent girls reported higher levels of body dissatisfaction also had higher levels of symptoms of depression and anxiety Body dissatisfaction affects both male and female college students. In a recent study, male college students report some level of body dissatisfaction, but are more satisfied with their bodies than female college students (Gillen & Lefkowitz, 2006) Females typically desire a thinner body, while men desire a more muscular and leaner structure (Gillen, & Lefkowitz, 2006). Emerging adults in college usually aspire to adhere to the social representations of ideal physical appearance (Grossbard et al., 2008). Typically, individuals compare their bodies to the ideal body, as well as the bodies of those around them (Chang & Suttikun, 2017).

Relationship between body image and self-esteem:

Sociocultural perspectives on body image propose that gender differences in body dissatisfaction likely represent different cultural standards for ideal body types: for females, a thin figure represents attractiveness and for males, a more muscular, mesomorphic build symbolizes power and success. At some point many students struggle with their own body image. In fact, up to 90% of college students say they are concerned about their own body image and these body image concerns are considered

normal for college women (Chang & Suttikun, 2017) Evidence suggests that Western society associates idealized physical qualities with greater occupational competence in adults, as well as academic and social competence in children (Jackson 2002). Furthermore, adolescents who perceive pressure to lose or gain weight from the media, parents, and peers are more likely to engage in dangerous body-change strategies, and are at greater risk for developing eating disorders than those who do not perceive such pressure (McCabe and Ricciardelli 2003; Smolak et al. 2005).

Cognitive and personality variables such as perfectionism, fear of negative evaluation, and low self-esteem are also associated with body dissatisfaction in both females and males (Davis et al. 2005; Stice 2002) self-esteem and body image concerns demonstrate that greater contingent self-esteem is a risk factor for engaging in appearance-related social comparisons, a process whereby individuals gather information that they use for self-evaluation (Bergstrom et al. 2015)

Interventions aimed at improving body image and self-esteem. If weight stigma is identified as influencing the relationship between body image and self-esteem, then professionals can work to counter the effects of weight stigma. This would ultimately help the overall well-being of many emerging adults.

Comorbidities and mental health issue : Self-esteem levels and body image satisfaction have been studied extensively in college students. Being dissatisfied with your body is associated with multiple negative outcomes such as low self-esteem, depression, unhealthy eating behaviors, and eating disorders (Grossbard, Lee, Neighbors, & Larimer, 2008) When combined, body dissatisfaction, low self-esteem, and experiencing weight stigma can have lasting negative physical and mental health consequences into adulthood. (Major, Hunger, Bunyan, & Miller, 2014). From 2014, 70.7% of adults aged 20 or older were overweight or obese, and obesity in emerging adults has doubled in the past 30 years (Obesity and Overweight, 2017). Although obesity is becoming common with increased prevalence rates, those who are overweight experience myriad negative outcomes (Langdon et al., 2016) These range from physical (i.e.: Type 2 diabetes, hypertension, stroke) to emotional (i.e., higher depression, anxiety, low self-esteem), and social (i.e.: peer rejection, weight-based discrimination; (Djalalinia, Qorbani, Peykari, & Kelishadi, 2015) When an individual experiences weight stigma, they are likely to have increased depression, body dissatisfaction, and lower self-esteem (Chang & Suttikun, 2017; Vartanian & Novak, 2010). People, regardless of gender, experience weight stigma, and therefore, are vulnerable to these consequences

DISCUSSION

The literature review that was just presented demonstrates how closely self-esteem and body image are related. Positive body image has been linked to increased confidence and wellbeing, whereas negative body image has been linked to lower self-esteem and general mental health issues. The literature also emphasizes the various aspects of negative body image development, such as societal pressures and individual experiences like bullying and chronic illness.

Cognitive-behavioral therapy (CBT), Acceptance and Commitment Therapy (ACT), and media literacy initiatives are a few of the interventions that have been created and tested with the goal of enhancing self-esteem and body image. These interventions have had varying degrees of success; some studies have found that after intervention, body image and self-esteem significantly improved.

There are some limitations to take into account, despite the fact that the literature offers insightful information about the connection between body image and self-esteem. First off, the majority of the studies that made up this review were cross-sectional or long-term observational studies, which do not have the ability to prove causality. Consequently, it is challenging to ascertain how body image and self-esteem are related. Second, there is a lack of diversity in the study samples, which restricts the applicability of the findings to populations with a wide range of backgrounds.

Despite these drawbacks, the literature offers a useful framework for comprehending the intricate

connection between body image and self-esteem. It is evident that having a poor body image can have a negative impact on a person's mental health and wellbeing, underscoring the importance of developing efficient interventions to enhance body image and foster positive self-esteem. According to the research, a multifaceted strategy that incorporates both individual and societal-level interventions may be most successful in addressing the intricate causes of poor self-esteem and a negative body image. In order to promote a positive body image and enhance mental health outcomes, more research is required in order to create and test effective interventions, particularly in more diverse populations.

CONCLUSION:

In conclusion, the literature reviewed in this article highlights the close relationship between body image and self-esteem, with negative body image consistently associated with decreased self-esteem and mental health concerns. The literature also highlights the various factors that contribute to negative body image, including societal pressures and personal experiences.

Several interventions aimed at improving body image and self-esteem have been developed and tested, with varying degrees of success. Cognitive-behavioral therapy (CBT), Acceptance and Commitment Therapy (ACT), and media literacy programs have shown promise in promoting positive body image and improving self-esteem. Overall, the findings suggest that a multi-faceted approach, including both individual and societal-level interventions, may be most effective in addressing the complex factors that contribute to negative body image and low self-esteem. However, there are limitations to the studies included in this review, including the lack of diversity in the samples and the inability to establish causality in observational studies.

Future research is needed to develop and test effective interventions, particularly in more diverse populations, to promote positive body image and improve mental health outcomes. Additionally, continued efforts to challenge unrealistic beauty standards and promote body positivity may also be effective in reducing the prevalence of negative body image and improving self-esteem.

Reference:

- Ariel-Donges, A. H., Gordon, E. L., Bauman, V., & Perri, M. G. (2019). Does yoga help college-aged women with body-image dissatisfaction feel better about their bodies?. *Sex Roles, 80*, 41-51.
- Bergstrom, A. M., Flynn, M., & Craig, C. (2018). Deconstructing media in the college classroom: A longitudinal critical media literacy intervention. *Journal of Media Literacy Education, 10*(3), 113-131.
- Bergström, J. (2004). Tobacco smoking and chronic destructive periodontal disease. *Odontology, 92*, 1-8.
- Branden, N. (1994). *The six pillars of self-esteem*. New York: Bantam Books.
- Cafri, G., Thompson, J. K., Ricciardelli, L., McCabe, M., Smolak, L., & Yesalis, C. (2005). Pursuit of the muscular ideal: Physical and psychological consequences and putative risk factors. *Clinical psychology review, 25*(2), 215-239.
- Cash, T. F. (2012). Cognitive-behavioral perspectives on body image. In T. F. Cash & L. Smolak (Eds.), *Body image: A handbook of science, practice, and prevention* (2nd ed., pp. 39-47). New York: Guilford Press.
- Cash, T. F., & Pruzinsky, T. (1990). *Body images: Development, deviance, and change*. Guilford Press.
- Chang, H. J., & Suttikun, C. (2017). The examination of psychological factors and social norms affecting

- body satisfaction and self-esteem for college students. *Family and consumer sciences research Journal*, 45(4), 422-437.
- Dehghani, R., & Fathi, B. (2012). Scorpion sting in Iran: a review. *Toxicon*, 60(5), 919-933.
- Demirayak, G., Özdemir, İ. A., Comba, C., Aslan Çetin, B., Aydoğan Mathyk, B., Yıldız, M., ... & Güralp, O. (2020). Comparison of laparoendoscopic single-site (LESS) surgery and conventional multiport laparoscopic (CMPL) surgery for hysterectomy: long-term outcomes of abdominal incisional scar. *Journal of Obstetrics and Gynaecology*, 40(2), 217-221.
- Dhillon, M., & Dhawan, P. (2011, November). "But I am fat": The experiences of weight dissatisfaction in Indian adolescent girls and young women. In *Women's Studies International Forum* (Vol. 34, No. 6, pp. 539-549). Pergamon.
- Djalalinia, S., Qorbani, M., Peykari, N., & Kelishadi, R. (2015). Health impacts of obesity. *Pakistan journal of medical sciences*, 31(1), 239.
- Ekström, S., Kull, I., Nilsson, S., & Bergström, A. (2015). Web-based self-reported height, weight, and body mass index among Swedish adolescents: a validation study. *Journal of medical Internet research*, 17(3), e3947.
- Fardouly, J., & Holland, E. (2018). Social media is not real life: The effect of attaching disclaimer-type labels to idealized social media images on women's body image and mood. *New media & society*, 20(11), 4311-4328.
- Fardouly, J., Diedrichs, P. C., Vartanian, L. R., & Halliwell, E. (2015). Social comparisons on social media: The impact of Facebook on young women's body image concerns and mood. *Body Image*, 13, 38-45.
- Frisén, A., Holmqvist, K., & Hedberg, P. (2016). The efficacy of cognitive-behavioral therapy in changing negative body image among overweight women: A controlled pilot study. *Behaviour Research and Therapy*, 77, 1-11.
- Gardam, O., Kokenberg-Gallant, L., Kaur, S., John, E. S., Carbonneau, N., & Guimond, F. A. (2023). Parent and child influence in body image dissatisfaction: The moderating effect of parent acceptance of the COVID-19 pandemic. *Body Image*, 45, 183-191.
- Grossbard, J. R., Lee, C. M., Neighbors, C., & Larimer, M. E. (2009). Body image concerns and contingent self-esteem in male and female college students. *Sex roles*, 60(3-4), 198-207.
- Grossbard, S., & Jepsen, L. K. (2008). The economics of gay and lesbian couples: Introduction to a special issue on gay and lesbian households. *Review of Economics of the Household*, 6, 311-325.
- Harrington, A. G., & Overall, N. C. (2021). Women's attractiveness contingent self-esteem, romantic rejection, and body dissatisfaction. *Body image*, 39, 77-89.
- Jackson, R. L. (2002). Cultural contracts theory: Toward an understanding of identity negotiation. *Communication Quarterly*, 50(3-4), 359-367.
- Jill Thompson, A., Poyrazli, S., & Miller, E. (2020). Western Media and Body Image Dissatisfaction in Young Women in Developing Nations. *Eurasian Journal of Educational Research*, 90, 45-66.
- Jones, A., Winter, V. R., Pekarek, E., & Walters, J. (2018). Binge drinking and cigarette smoking among teens: Does body image play a role?. *Children and Youth Services Review*, 91, 232-236.
- Karaca, S., Karakoç, A., Onan, N., & Kadioğlu, H. (2017). Validity and reliability of the Turkish version of the acceptance of cosmetic surgery scale (ACSS). *Journal of Psychiatric Nursing*,

- 8(1).
- Klunk, W. E., Engler, H., Nordberg, A., Wang, Y., Blomqvist, G., Holt, D. P., ... & Långström, B. (2004). Imaging brain amyloid in Alzheimer's disease with Pittsburgh Compound-B. *Annals of Neurology: Official Journal of the American Neurological Association and the Child Neurology Society*, 55(3), 306-319.
- Langdon, A., Crook, N., & Dantas, G. (2016). The effects of antibiotics on the microbiome throughout development and alternative approaches for therapeutic modulation. *Genome medicine*, 8(1), 1-16.
- Major, B., Hunger, J. M., Bunyan, D. P., & Miller, C. T. (2014). The ironic effects of weight stigma. *Journal of Experimental Social Psychology*, 51, 74-80.
- Nuertey, B. D., Alhassan, A. I., Nuertey, A. D., Mensah, I. A., Adongo, V., Kabutey, C., ... & Biritwum, R. B. (2017). Prevalence of obesity and overweight and its associated factors among registered pensioners in Ghana; a cross sectional studies. *BMC obesity*, 4(1), 1-12.
- Phillips, K. A., & Gruber, U. (2002). Body dysmorphic disorder: An overview. *The American Journal of Psychiatry*, 159(2), 302-312.
- Radwan, H., Hasan, H. A., Ismat, H., Hakim, H., Khalid, H., Al-Fityani, L., ... & Ayman, A. (2019). Body mass index perception, body image dissatisfaction and their relations with weight-related behaviors among university students. *International journal of environmental research and public health*, 16(9), 1541.
- Reno, J. E., & McNamee, L. G. (2015). Do sororities promote members' health? A study of memorable messages regarding weight and appearance. *Health communication*, 30(4), 385-397.
- Roche, C., Trompeter, N., Bussey, K., Mond, J., Cunningham, M. L., Murray, S. B., ... & Mitchison, D. (2021). Gender compatibility and drive for muscularity among adolescent boys: Examining the indirect effect of emotion regulation difficulties. *BodyImage*, 39, 213-220.
- Schuck, K., Munsch, S., & Schneider, S. (2018). Body image perceptions and symptoms of disturbed eating behavior among children and adolescents in Germany. *Child and adolescent psychiatry and mental health*, 12, 1-11.
- Smith, C. (2019). Body Image, Self-Esteem, Weight, and Weight Stigma In Male and Female College Students.
- Stice, E., Davis, K., Miller, N. P., & Marti, C. N. (2008). Fasting increases risk for onset of binge eating and bulimic pathology: a 5-year prospective study. *Journal of abnormal psychology*, 117(4), 941.
- Stojcic, I., Dong, X., & Ren, X. (2020). Body image and sociocultural predictors of body image dissatisfaction in Croatian and Chinese women. *Frontiers in psychology*, 11, 731.
- Suttikun, C., Chang, H. J., & Bicksler, H. (2018). A qualitative exploration of day spa therapists' work motivations and job satisfaction. *Journal of Hospitality and Tourism Management*, 34, 1-10.
- Swami, V., Airs, N., Chouhan, B., & Fernando, J. (2018). Enhancing 'positive body image' using a brief conditioning intervention. *Body Image*, 25, 32-36.
- Tiggemann, M., & Slater, A. (2014). NetGirls: The Internet, Facebook, and body image concern in adolescent girls. *International Journal of Eating Disorders*, 47(6), 630-643.
- Tylka, T. L., & Wood-Barcalow, N. L. (2015). What is and what is not positive body image? Conceptual foundations and construct definition. *Body image*, 14, 118-129.
- Tylka, T. L., Annunziato, R. A., Burgard, D., Daniélsdóttir, S., Shuman, E., Davis, C., & Calogero, R. M. (2014). The weight-inclusive versus weight-normative approach to health: Evaluating the evidence for prioritizing well-being over weight loss. *Journal of Obesity*, 2014, 1-18.

- Tylka, T. L., Bergeron, D., & Schwartz, J. P. (2015). Development and psychometric evaluation of the Interpersonal Mindfulness in Relationships Scale. *Mindfulness*, 6(3),475-491.
- Wagner, C. N., Aguirre Alfaro, E., & Bryant, E. M. (2016). The relationship between Instagramselfies and body image in young adult women. *First Monday*, 21(9).
- Williamson, G., & Karazsia, B. T. (2018). The effect of functionality-focused and appearance-focused images of models of mixed body sizes on women's state-oriented body appreciation. *Body Image*, 24, 95-101.
- Witkowska-Sędek, E., Kucharska, A., Rumińska, M., & Pyrzak, B. (2017). Thyroid dysfunction in obese and overweight children. *Endokrynologia Polska*, 68(1), 54-60.
- Witkowska-Sędek, E., Kucharska, A., Rumińska, M., & Pyrzak, B. (2017). Thyroid dysfunction in obese and overweight children. *Endokrynologia Polska*, 68(1), 54-60.
- Wolfe, W. L. (2022). Does Gratitude Induction Buffer the Adverse Effect of Thin Ideal Media Exposure on Women's Body Image?. *North American Journal of Psychology*, 24(1).
- Wong, S. K., & Frank, S. D. (2013). Pollen increases fitness and abundance of *Orius insidiosus* Say (Heteroptera: Anthocoridae) on banker plants. *Biological Control*, 64(1), 45-50.
- Zepegno, P. (2018). The psychopathology of body image in orthorexia nervosa. *psychopathology*, 24, 133-140.