BODY DISSATISFACTION, SOCIAL APPEARANCE ANXIETY AND SELF-OBJECTIFICATION: A NARRATIVE REVIEW OF DISORDERED EATING

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Abstract: Humans form opinions about their bodies at a very early age, and children as young as 3 years old displayed body confidence issues. The likelihood of experiencing body dissatisfaction increases across childhood and into adolescence. Body mass index (BMI) is an important predictor of body dissatisfaction, and BMI is associated with body satisfaction across cultures. Studies on disordered eating and body dissatisfaction were predominantly conducted in Western countries. However, several recent studies suggested that women in Asian countries were vulnerable to disordered eating, similar to their Western counterparts. In Malaysia, negative body image perceptions, weight obsession and disordered eating were usually identified in adolescents with peer and emotional problems. Having a negative body image is associated with social appearance anxiety. The fear of evaluation by oneself and others is often associated with body image disturbance which is a key risk factor for the development of eating disorder symptoms among adolescents. Social appearance anxiety and eating disorders are highly comorbid. Women diagnosed with an eating disorder tend to have higher levels of BMI, drive for thinness, and body dissatisfaction. Objectification theory could explain the relationship between body image dissatisfaction and disordered eating. Objectification theory has linked self-objectification to negative emotional experiences and disordered eating behaviour in cultures that sexually objectify the female body. High levels of disordered eating attitudes and behaviours are often associated with greater objectification of their bodies.

Keywords: Body Image; Body Dissatisfaction; Ideals of Thinness; Self-Objectification; Eating Disorders; Anxiety

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Over time, opinions about the "perfect" body have changed. Women experienced dissatisfaction with their body sizes and shapes separate from being generally discontent with their weights as they are more exposed to appearance-focused social media content (Schreurs & Vandenbosch, 2022), which positively relates to body dissatisfaction among young people (Holland & Tiggemann, 2016).

Indeed, body image dissatisfaction has been demonstrated to predict eating pathology. Obesity and being overweight or underweight influenced body image perception among adolescents, and pubertal development increases the risk of disordered eating (Tajik et al., 2016). Studies have shown that boys and girls who mature earlier have significantly more dietary restraint, show more body shape and weight concerns, and display a trend toward significantly more eating concerns (Tajik et al., 2016). Indeed, many adolescents attempting to achieve an ideal body shape indulge in fad diets and health-compromising behaviors (Tiggemann, 2001).

WHAT TRIGGERS BODY IMAGE DISSATISFACTION?

Psychological stress could contribute to disordered eating in individuals with already high body dissatisfaction, and it could intensify already existing body dissatisfaction (Ball & Lee, 2002). Two important predictors of body dissatisfaction include body weight and body mass index (BMI), and males and females with higher BMIs were more dissatisfied with their bodies (Radwan et al., 2019; Gardner et al., 2012). The positive correlation between BMI and body dissatisfaction was similarly observed among Chinese men and women (Xu et al., 2010). Despite the cultural differences across studies, and it is notable that in these studies, the overweight women showed significantly higher body dissatisfaction than did the men. Poorer overall eating behaviour was observed among overweight and obese respondents (Zuraida et al., 2013). Eating behaviour was measured by an eating behaviour scale that included negative emotion, poor impulse control, social cues, snacking and early meals (Zuraida et al., 2013).

Females and males who are exposed to the 'ideal' and 'sexualised' body images by Western popular culture at an early age could lead to internalization of rarely attainable body types and shapes as attractive ideals (Chrisler, 2010). In turn, the images in fashion magazines, television shows, and other forms of popular culture correlate with body dissatisfaction, concerns about weight, self-consciousness, and disordered eating behaviours (Grabe et al., 2008). Women frequently compare themselves to models, actresses, and other celebrities who are comparatively thinner than they are (Homan et al., 2012), but because the figures in these images are often unrealistic and nearly impossible to achieve, the comparisons may lead to unhealthy emotional and behavioural consequences (Tiggemann & McGill, 2004). These unrealistic and unattainable body images in addition to comparing one's physical appearances with friends and models as portrayed on the Internet, as well as new trends viralling on social media, further drove vulnerable women to continue idealising and even idolizing thinness or a toned body (Cataldo et al., 2021).

Additionally, women tend to associate physical appearance, often in measures of body size and shape, with being successful, powerful, and happy (Strahan et al., 2006) as pictures of successful women portrayed in media are portrayed by thin women. Therefore, to ensure a certain social position and societal advantages, dieting and constantly attempting to lose weight are perceived as a must (Conley & Boardman, 2007; Gatward, 2007). Dieting and continuously engaging in weight loss activities such as excessive or intense workout routines are deemed necessary to achieve desirable social positions and advantages (Conley & Boardman, 2007; Gatward, 2007).

For many years, studies on disordered eating and body dissatisfaction were predominantly conducted in Western countries. These issues initially were addressed as cultural specific as the Western standards of beauty may not be idealized in non-Western cultures (Nasser & Malson, 2009). Females of Asian heritage are generally perceived as being smaller and slimmer compared to White Westerners, and thus were assumed to have experienced less body dissatisfaction and disordered eating (Cho & Lee, 2013). However, recent studies have challenged this assumption. Korean and Chinese college women had greater body dissatisfaction as compared to college women in the United States (Jung & Forbes, 2006), and Korean college women reportedly have greater body dissatisfaction as compared to college women in the United States (Jung et al., 2009). The prevalence of eating disorders among young Chinese women in metropolitan areas is

similar to the prevalence observed in Western regions and the prevalence of eating disorders in China steadily increases over the past 40 years (Chen et al., 2021).

SOCIAL MEDIA, CYBERBULLYING AND BODY IMAGE DISSATISFACTION

Unable to conform to society's beauty ideals, individuals who had been bullied believed that they are unacceptable to peers due to how their body looks (Webb & Zimmer-Gembeck, 2014). Those who are overweight or obese regardless of their gender, are more likely to be victims of bullying as compared to their normal-weight peers (Van Geel et al., 2014; Janssen et al., 2004). If not properly or adequately addressed, this situation might cause a lasting effect in the victim's life as both males and females who had been victimised when they were young were already overweight and were more likely to be obese in their adulthood (Mamun et al., 2013). Victimisation has been suggested to mediate the relationship between BMI and psychological distress in both physical bullying and cyberbullying (Lee et al., 2018).

On the Internet, adolescents are exposed to the so-called "beauty ideals" which promotes 'thinspiration' and 'fitspiration' (Rodgers & Melioli, 2016). Instagram, a highly visually-oriented social media platform, is one of the main contributors to internalising the 'ideal' sociocultural appearance of being thin for women and muscular for men (Kim, 2021). Body-themed bullying not only takes place in real world settings but also in online communities. The impact of social medial bullying is not just contained in the virtual world but also impacts the real world (Xu et al., 2012). In fact, the frequent use of social networking sites in general is associated with poorer body image (Holland & Tiggemann, 2016).

The exponential increase of social media use over the years has contributed to an equally alarming increase in cyberbullying incidents globally. In a study comprising of 6,026 adolescents aged between 10 to 20 years old, 10.9% of the participants reported being involved in cyberbullying. Moreover, 47.9% of them reported being involved in bullying in a weekly or monthly basis, taking up either roles as a victim, a bully and/or a bully-victim. The study revealed that females were usually cybervictims and most of the cyberbullies and cyberbully-victims were males (Carvalho et al., 2021). An online study revealed that a shocking

61.5% (277/450) of the participants have experienced cyberbullying at least once in the month prior to responding to the survey; 30.2% (136/450) had exhibited cyberbullying behaviours and 29.3% (132/450) were bullies and victims (Karaman & Arslan, 2020). The study also revealed that adolescents' social appearance anxiety levels positively correlated with levels of exposure to cyberbullying (Karaman & Arslan, 2020).

Cyberbullying is an emerging concern as it has been associated with many negative effects, such as lower self-esteem and self-worth (Patchin & Hinduja, 2010), increased prevalence of depression, stress and anxiety (Selkie et al., 2015; Singh et al., 2020), feeling helpless and an increased probability of hurting one-self, and the worst, having suicidal thoughts (Bauman et al., 2013). Victims of appearance-related cyberbullying were more likely to suffer from body-related concerns and have a poorer view of their overall appearance and body weight. They reported having low body image dissatisfaction, and they were more likely to engage in dieting behaviors (Frisén & Berne, 2020). Body weight and physical appearancethemed bullying could lead to mental and psychological destruction for the victims. If not identified in time, it could lead to a decision to end one's life. A study on how body image perception might lead to suicide shared a real life example depicting a 19-year-old girl from Texas, United States who shot her own chest in the room and in front of her parents after being cyberbullied on social media for a long time and was called "fat" and "ugly" (Fitriyah & Rokhmawan, 2019).

One of the more common body-themed cyberbullying tactics is body shaming or commenting on a person's less-than-ideal appearance on social media platforms. The common form of body shaming is usually on a person's body size and shape, weight and height, and skin colour, and the most common type of body shaming is "fat shaming". Those who had experienced body shaming reported to have felt depressed, down and burdened (Almas et al., 202), and individuals who experienced weight-related bullying appeared to struggle with low body image dissatisfaction (Malinowska-Cieślik et al., 2022). Individuals who have been teased about their body's physical appearance through social media and online messages reported to experience poor body image and weight problems (Berne et al., 2014) and they seem to be more dissatisfied with their body image as well as appearance (Frisén & Berne, 2020). It is comforting though, that improving one's body image may be an effective measure to

prevent cyberbullying among adolescents as those who are satisfied with their bodies are less likely to be at risk of cyberbullying (Malinowska-Cieślik et al., 2022).

There is a lack of studies related to cyberbullying and body image dissatisfaction in Malaysia. Mustafa and colleagues (2022) reported that cyberbullying cases in Malaysia usually went unreported as they involved a long legal process and so, victims usually endured the cyberbullying. The study also revealed that most youths were aware of what body shaming was, and they reported depression, body dysmorphia and low self-esteem as the top three impacts of body shaming (Mustafa et al., 2022). A recent systematic review on the factors driving university students in Malaysia towards cyberbullying revealed that experiencing emotional problems including depression, anxiety, and stress was a major factor of cyberbullying (Shaikh et al., 2020). Although this was a comprehensive review on factors contributing to cyberbullying, it did not focus on the relationship between social appearance anxiety, body image dissatisfaction and cyberbullying.

DISORDERED EATING IN MALAYSIA AND ASSOCIATED MENTAL HEALTH

Research in rates of disordered eating and the relationship between body image dissatisfaction and anxiety in Malaysia is limited. A cross-sectional survey among 732 adolescents between 14 and 18 years of age in Terengganu observed that 30.1% of them reported disordered eating. Female adolescents in this sample engaged in higher rates of disordered eating (18.5%) compared to their male counterparts at 11.9% (Mazubir et al., 2020). Among 816 children between 10 to 11 years of age from Selangor, 30.8% reported disordered eating (Chong et al., 2017) and 18.5% adolescents in Sarawak (Cheah et al., 2017) reported disordered eating. Malaysian adolescents are concerned about their body sizes and reported dissatisfaction with their bodies even when they are of normal, healthy weight (Pon et al., 2004). A total of 87% out of 2,050 adolescents aged 11 to 15 years old in Kedah and Penang reportedly were concerned about their body shape (Khor et al., 2009) A study observed that 87.3% of 189 girls from 15 to 17 years of age were dissatisfied with their current body size; 36% were dieting and 35.4% reported binge eating (Soo et al., 2008). Females in Malaysia expressed more dissatisfaction of their body parts and weight as compared to males (Cheah et al., 2017) and they displayed significantly higher mean body dissatisfaction scores than males, which revealed their preference for a slimmer body shape (Khor et al., 2009) Overweight female adolescents compared themselves more with others and showed greater body weight and shape dissatisfaction and anxiety, while overweight male adolescents expressed significantly less confidence and satisfaction with their body shapes and weight than did young men of normal weight. They also experienced significantly greater anxiety and a preoccupation with body weight and shape (Khor et al., 2009)

In a study that investigated the relationships between BMI, body dissatisfaction, body change behaviors and mental health problems amongst a sample of 513 Malay, Indian and Chinese adolescent males and females, gender differences and ethnic group differences in levels of body dissatisfaction and types of strategy engagement in losing weight were not apparent (Mellor et al., 2010). Although female participants in the study reported more emotional problems compared to their male counterparts, higher BMI was associated with strategies to lose weight in all ethnic groups (Mellor et al., 2010).

Epidemiological studies consistently estimate that 2% of women worldwide suffer from binge eating. In Malaysia, one out of five individuals suffers from a weight problem and/or obesity and about 43% of obese patients who seek treatment have a binge eating disorder (Omar & Che Bakar, 2008) It is reported that 15.2% female and 12.5% male Malaysian adolescents engaged in moderate to severe binge eating behaviour (Gan et al., 2018). Adolescents with emotional and peer problems are vulnerable to developing disordered eating due to negative body image perceptions and weight obsession (Mazubir et al., 2020). Additionally, body dissatisfaction and self-esteem were significantly related to binge eating (Soo et al., 2008).

Body dissatisfaction is also related to psychological factors including distress, depression, and anxiety. In general, male and female patients with binge eating disorder had similar rates of reported concurrent depression (Fontenelle et al., 2003; Barry et al., 2002) and research suggested that depression is often associated with disordered eating behaviors (Fink et al., 2013; Gadalla, 2008). Additionally, females who have higher BMI tend to report more depressive symptoms (Liechty & Lee, 2013). In turn,

high depressive symptoms and body dissatisfaction, poor family ties, and low self-esteem contributed substantially to binge eating behavior (Liechty & Lee, 2013). Obese patients with binge eating disorder are more likely to have depression compared to individuals without such disorders. particularly atypical depression associated with hyperphagia, hypersomnia, reduced activity, and weight gain as well as anxiety symptoms (Omar & Che Bakar, 2008). In Malaysia, approximately 18% of school-going adolescents and about one in five late adolescents and early adults have depressive symptoms (Tajik et al., 2016). Obesity increases the risk of depression through a response called emotional eating. Some people will turn to eating 'comfort food' which are usually unhealthy, when they experiences negative emotions as a coping mechanism. As these food are usually high in sugar or salt, it will cause a person to gain weight if not the intake of comfort food is not controlled well.

SOCIAL APPEARANCE ANXIETY AND DISORDERED EATING

Social appearance anxiety (SAA) is the fear or apprehension of negatively evaluated by others because of one's appearance (Hart et al., 2008) and is associated with social anxiety and negative body image (Claes et al., 2012). SAA is not solely dissatisfaction stemming from individual assessments of one's own body but is also influenced by the fear of negative evaluation by others ((Koskina et al., 2011). The anxiety of negative evaluation by others is related to body image disturbance and maladaptive appearance schemas, particularly disordered behaviours and excessive workout routines (Coles et al., 2006). SAA is a key risk factor for the development of eating disorder symptoms and may explain the high comorbidity of social anxiety and eating disorder symptoms (Levinson & Rodebaugh, 2012). Specifically, the fear of negative evaluation of one's appearance in SAA is a shared risk factor between social anxiety and eating disorder symptoms, whereas fear of negative evaluation was a risk factor only for social anxiety symptoms (Levinson et al., 2013) suggesting that SAA is a unique construct of social anxiety beyond negative body image, depression, personality and affect (Hart et al., 2008; Levinson & Rodebaugh, 2012).

SAA and depression are important predictors of women at risk for eating disorders, but not men (Turel et al., 2018). Some scholars argue that SAA reinforces a negative body image perception (Turel et al., 2018). When a

person compares his or her body image with others, those who do not have a positive perception about their body will be negatively affected and this is also found to be associated with body dissatisfaction (Sorensen, 2021). A person who already has a negative body image perception might become anxious when comparing their bodies to other people in social settings. Some argued that SAA, which often co-occurred with an eating disorder, as a significant cause for body image dissatisfaction and concerns about body size and weight. The relationship between BMI and SAA is mediated by body image dissatisfaction, and SAA appears to be higher in females with higher BMI compared to social anxiety in general (Titchener & Wong, 2015). SAA and fear of being evaluated negatively predicted a significant amount of variance in weight, shape, and eating concerns. Furthermore, appearance anxiety very likely increased one's concerns of overall appearance, especially body image, and seeking out methods to reduce the anxiety by changing their appearance, which may lead to disordered eating (Levinson & Rodebaugh, 2012).

Women diagnosed with an eating disorder exhibited levels of SAA that are positively related to body mass index (BMI), drive for thinness, and body dissatisfaction (Claes et al., 2012; Turel et al., 2018) Individuals diagnosed with bulimia nervosa had significantly higher levels of SAA compared to those who without the disorder (Koskina et al., 2011) A structural equation modelling study suggested that SAA mediated the relationship between perfectionism, measured as concern over mistakes, and binge eating across six months. The best-fit model revealed that SAA could better predict risk of binge eating than dietary restraint, suggesting SAA as a significant contributor of binge eating (Brosof & Levinson, 2017).

SELF-OBJECTIFICATION AS AN EXPLANATION FOR THE RELATIONSHIP BETWEEN BODY DISSATISFACTION AND DISORDERED EATING

Objectification theory proposed that self-objectification could explain negative emotional experiences and disordered eating behaviour in cultures that sexually objectify the female body (Calogero et al., 2005). Self-objectification is a form of self-consciousness that involves frequent monitoring of one's external appearance (body surveillance), and it has many negative effects on women (Calogero et al., 2005). Self-objectification partially mediated the relationship between internalized

appearance ideals and drive for thinness (Tylka & Hill, 2004), and internalized appearance ideals continued to be an independent predictor of variance in self-objectification (Calogero et al., 2005).

Objectification theory could allude to causes of eating disorders and depression in women. The theory suggests two potential mechanisms, poor interoceptive awareness of hunger and emotions and social anxiety, as both were observed as significant mediators in the relationship between self-objectification and eating disorder symptoms and depression (Peat & Muehlenkamp, 2011). One with poor interoceptive awareness of hunger is not sensitive or aware of sensations of hunger and so may ignore physiological signs that seek food to replenish energy levels to sustain healthy functioning of the body (Spoor et al., 2005). A woman is at a higher risk for disordered eating when she is unable to identify and appropriately respond to emotional states and it gets worse when combined with a self-objectifying view of the body (Sim & Zeman, 2004). At the same time, a woman's risk of being depressed will increase if she is unable to consistently recognise and regulate negative emotional experiences over a long time as she may believe she has neither control over her emotions nor the ability to change them (Honkalampi et al., 2000).

The helplessness in striving to achieve ideals of thinness is a contributing factor to depression among women with eating disorders, as they struggled with persistent feelings of body shame and anxiety associated with self-objectification (Tiggemann & Kuring, 2004). Feeling shameful of one's body and anxious about one's appearance mediated the relationship between self-objectification and disordered eating (Griffin, 2021; Tiggemann & Lynch, 2001). The habitual monitoring of oneself and internalizing other people's perspectives leads to more experiences of shame and anxiety related to one's body and appearance, as the pervasiveness of sexual objectification increasingly socializes women and girls to internalize observers' perspectives on their physical selves, eventually perceiving themselves as objects to be looked at, and evaluate themselves based on their appearances (Tiggemann & Kuring, 2004).

A recent meta-analysis suggests that greater objectification of one's body is related to higher levels of disordered eating attitudes and behaviours (Schaefer & Thompson, 2018). The reported effect size was comparable to effect sizes observed in other meta-analyses examining established risk

factors of disordered eating, including perceived pressures for thinness, and thin ideal internalization (Stice, 2002) tendency for appearance comparisons (Menzel et al., 2010; Myers & Crowther, 2009) and being teased about their body weight (Menzel et al., 2010). Being teased related to appearance and body weight, both verbally or non-verbally, has been to have led to body image dissatisfaction and eating disorders, especially during childhood and adolescence (Menzel et al., 2010) Women displayed a stronger relationship between self-objectification and disordered eating compared to men. Interestingly, self-objectification appeared to mediate the relationship between age and symptoms of disordered eating among women. Their level of body dissatisfaction may remain constant, but the importance of body shape and image decreases as they get older (Sorensen, 2021).

For those who have been cyberbullied for their appearances, the scrutiny posted by others might cause them to take an observer's perspective on their bodies and thus, objectify themselves. In the long run, this self-objectification might cause victims of cyberbullying to feel shameful for not achieving the society's beauty ideals (Frisén & Berne, 2020).

CONCLUSION

Humans begin developing perceptions about their bodies at a tender age and a distorted perception of body image often led to unhealthy physical psychological consequences. Social anxiety, eating disorders, and depression typically began during adolescence and early adulthood, a time when self-objectification began to take form particularly among females, given the significant pubertal and develop mental changes that occur during this time (Slater & Tiggemann, 2002). There is more research and a greater understanding in body dissatisfaction and disordered eating in Western cultures compared to non-Western cultures. In Malaysia, there are limited studies on body dissatisfaction and disordered eating. The available studies mainly focused on how body dissatisfaction led to disordered eating and if not treated in time, will cause eating disorder in a long run (Menzel et al., 2010). There are to date, no studies on SAA and very limited study on self-objectification in the Malaysian population. Only one study considered objectification theory in explaining the relationship between body dissatisfaction and media consumption, body mass index and self-esteem among college women in Malaysia.

Addressing fears of negative appearance evaluation could reduce eating disorder and SAA (Levinson et al., 2013). Interventions targeting SAA may be vital in treating and preventing binge eating (Brosof & Levinson, 2017) and interventions that address self-objectification could be a practical and promising approach in reducing eating disorder among adolescents as strategies of prevention and awareness. Targeting both self-objectification and socially anxious behaviours and cognitions could significantly reduce one's risk in developing disordered eating (Peat & Muehlenkamp, 2011).

The ideals of beauty seem to converge globally as increasingly more countries consume Western pop culture media, and young impressionable minds idealize thinness as standards of beauty. There should be more studies in the Asian context, where individuals are of a smaller frame, to identify if the same anxiety features and self-objectification perspectives underlie the mechanisms of body dissatisfaction and disordered eating.

Conflict of interest

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REFERENCES:

- Almas, I., Khan, Y., Hassan, T., Maqbool, F., Ali, N., & Khalid, T. (n.d.). *Dilemma of Body Image & Bullying: Experience of Teenagers Girls*. http://www.webology.org
- As, Z., Basri R, M., & Ce, H. (n.d.). An Evaluation of Eating Behavior, Psychosocial Status and Body Mass Index among Adolescents in Malaysia.
- Ball, K., & Lee, C. (2002). Psychological stress, coping, and symptoms of disordered eating in a community sample of young Australian women. *International Journal of Eating Disorders*, 31(1), 71–81. https://doi.org/10.1002/eat.1113
- Barry, D. T., Grilo, C. M., & Masheb, R. M. (2002). Gender differences in patients with binge eating disorder. *International Journal of Eating Disorders*, *31*(1), 63–70. https://doi.org/10.1002/eat.1112
- Bashir Shaikh, F., Rehman, M., & Amin, A. (2020). Cyberbullying: A Systematic Literature Review to Identify the Factors Impelling University Students Towards Cyberbullying. *IEEE Access*, 8, 148031–148051. https://doi.org/10.1109/ACCESS.2020.3015669
- Bauman, S., Toomey, R. B., & Walker, J. L. (2013). Associations among bullying, cyberbullying, and suicide in high school students. *Journal of Adolescence*, *36*(2), 341–350. https://doi.org/10.1016/j.adolescence.2012.12.001
- Berne, S., Frisén, A., & Kling, J. (2014). Appearance-related cyberbullying: A qualitative investigation of characteristics, content, reasons, and effects. *Body Image*, *11*(4), 527–533. https://doi.org/10.1016/j.bodyim.2014.08.006
- Brosof, L. C., & Levinson, C. A. (2017). Social appearance anxiety and dietary restraint as mediators between perfectionism and binge eating: A six month three wave longitudinal study. *Appetite*, 108, 335–342. https://doi.org/10.1016/j.appet.2016.10.015
- Buğra Karaman, H., & Professor, F. (2020). AN INVESTIGATION OF ADOLESCENTS' LEVELS OF EXPOSURE TO CYBERBULLYING IN TERMS OF SOCIAL MEDIA ATTITUDES AND SOCIAL APPEARANCE ANXIETY Coşkun Arslan PhD. In *Psycho-Educational Research*

- *Reviews* / (Vol. 9, Issue 3). London Academic Publishing. https://www.journals.lapub.co.uk/index.php/PERR
- Calogero, R. M., Davis, W. N., & Thompson, J. K. (2005). The Role of Self-Objectification in the Experience of Women with Eating Disorders. *Sex Roles*, *52*(1–2), 43–50. https://doi.org/10.1007/s11199-005-1192-9
- Carvalho, M., Branquinho, C., & de Matos, M. G. (2021). Cyberbullying and Bullying: Impact on Psychological Symptoms and Well-Being. *Child Indicators Research*, *14*(1), 435–452. https://doi.org/10.1007/s12187-020-09756-2
- Cheah, W. L., Hazmi, H., & Chang, C. T. (2017). Disordered eating and body image issues and their associated factors among adolescents in urban secondary schools in Sarawak, Malaysia. *International Journal of Adolescent Medicine and Health*, 29(2). https://doi.org/10.1515/ijamh-2015-0044
- Chen, J., Guo, L., Gu, L., & Han, H. (2021). The introduction of treatment and the cultural adaptability of western psychotherapies for eating disorders in China. *International Journal of Eating Disorders*, 54(1), 102–106. https://doi.org/10.1002/eat.23437
- Cho, A., & Lee, J.-H. (2013). Body dissatisfaction levels and gender differences in attentional biases toward idealized bodies. *Body Image*, 10(1), 95–102. https://doi.org/10.1016/j.bodyim.2012.09.005
- Chong, L. S., Chin, Y. S., Gan, W. Y., & Mohd Nasir, M. T. (2017). Associations between socio-demographic characteristics and pubertal status with disordered eating among primary school children in Selangor, Malaysia. *Asia Pacific Journal of Clinical Nutrition*, 326–333.
- Claes, L., Hart, T. A., Smits, D., van den Eynde, F., Mueller, A., & Mitchell, J. E. (2012). Validation of the Social Appearance Anxiety Scale in Female Eating Disorder Patients. *European Eating Disorders Review*, 20(5), 406–409. https://doi.org/10.1002/erv.1147
- Coles, M. E., Phillips, K. A., Menard, W., Pagano, M. E., Fay, C., Weisberg, R. B., & Stout, R. L. (2006). Body dysmorphic disorder and social phobia: cross-sectional and prospective data. *Depression and Anxiety*, 23(1), 26–33. https://doi.org/10.1002/da.20132

- Conley, A., & Boardman, J. D. (2007). Weight overestimation as an indicator of disordered eating behaviors among young women in the United States. *International Journal of Eating Disorders*, 40(5), 441–445. https://doi.org/10.1002/eat.20383
- Fink, E., Bodell, L., Smith, A., & Joiner, T. (2013). The Joint Influence of Disordered Eating and Anxiety Sensitivity on the Acquired Capability for Suicide. *Cognitive Therapy and Research*, *37*(5), 934–940. https://doi.org/10.1007/s10608-012-9502-3
- Fitriyah, L., & Rokhmawan, T. (2019). "You're fat and not normal!" From Body Image to Decision of Suicide. *Indonesian Journal of Learning Education and Counseling*, 1(2), 102–118. https://doi.org/10.31960/ijolec.v1i2.75
- Fontenelle, L. F., Vítor Mendlowicz, M., de Menezes, G. B., Papelbaum, M., Freitas, S. R., Godoy-Matos, A., Coutinho, W., & Appolinário, J. C. (2003). Psychiatric comorbidity in a Brazilian sample of patients with binge-eating disorder. *Psychiatry Research*, 119(1–2), 189–194. https://doi.org/10.1016/S0165-1781(03)00127-6
- Frisén, A., & Berne, S. (2020). Swedish adolescents' experiences of cybervictimization and body-related concerns. *Scandinavian Journal of Psychology*, 61(1), 68–76. https://doi.org/10.1111/sjop.12561
- Gadalla, T. M. (2008). Psychiatric comorbidity in eating disorders: a comparison of men and women. *Journal of Men's Health*, 5(3), 209–217. https://doi.org/10.1016/j.jomh.2008.06.033
- Gan, W., Mohamad, N., & Law, L. (2018). Factors Associated with Binge Eating Behavior among Malaysian Adolescents. *Nutrients*, *10*(1), 66. https://doi.org/10.3390/nu10010066
- Gardner, B., Cane, J., Rumsey, N., & Michie, S. (2012). Behaviour change among overweight and socially disadvantaged adults:

 A longitudinal study of the NHS Health Trainer Service. *Psychology & Health*, 27(10), 1178–1193. https://doi.org/10.1080/08870446.2011.652112
- Gatward, N. (2007). Anorexia nervosa: an evolutionary puzzle. *European Eating Disorders Review*, 15(1), 1–12. https://doi.org/10.1002/erv.718
- Grabe, S., Ward, L. M., & Hyde, J. S. (2008). The role of the media in body image concerns among women: A meta-analysis of

- experimental and correlational studies. *Psychological Bulletin*, 134(3), 460–476. https://doi.org/10.1037/0033-2909.134.3.460
- Greenwood, D. N. (n.d.). Chrisler, Handbook of Gender Research in Psychology Vol 2 (2010). *Lippman, J.R.* .
- Griffin, Y. M. (2021). HOW DO I LOOK? AN EMPIRICAL INVESTIGATION OF SELF-OBJECTIFICATION AND MUSCLE DYSMORPHIA AMONG FEMALE BODYBUILDERS AND FEMALE RECREATIONAL LIFTERS.
- Hart, T. A., Flora, D. B., Palyo, S. A., Fresco, D. M., Holle, C., & Heimberg, R. G. (2008). Development and Examination of the Social Appearance Anxiety Scale. *Assessment*, *15*(1), 48–59. https://doi.org/10.1177/1073191107306673
- Holland, G., & Tiggemann, M. (2016). A systematic review of the impact of the use of social networking sites on body image and disordered eating outcomes. *Body Image*, *17*, 100–110. https://doi.org/10.1016/j.bodyim.2016.02.008
- Homan, K., McHugh, E., Wells, D., Watson, C., & King, C. (2012). The effect of viewing ultra-fit images on college women's body dissatisfaction. *Body Image*, *9*(1), 50–56. https://doi.org/10.1016/j.bodyim.2011.07.006
- Honkalampi, K., Hintikka, J., Tanskanen, A., Lehtonen, J., & Viinamäki, H. (2000). Depression is strongly associated with alexithymia in the general population. *Journal of Psychosomatic Research*, 48(1), 99–104. https://doi.org/10.1016/S0022-3999(99)00083-5
- Janssen, I., Craig, W. M., Boyce, W. F., & Pickett, W. (2004). Associations Between Overweight and Obesity With Bullying Behaviors in School-Aged Children. *Pediatrics*, 113(5), 1187–1194. https://doi.org/10.1542/peds.113.5.1187
- Jung, J., & Forbes, G. B. (2006). Multidimensional Assessment of Body Dissatisfaction and Disordered Eating in Korean and US College Women: A Comparative Study. Sex Roles, 55(1–2), 39–50. https://doi.org/10.1007/s11199-006-9058-3
- Jung, J., Forbes, G. B., & Lee, Y. (2009). Body Dissatisfaction and Disordered Eating Among Early Adolescents From Korea and the US. *Sex Roles*, 61(1–2), 42–54. https://doi.org/10.1007/s11199-009-9609-5

- Khor, G. L., Zalilah, M. S., Phan, Y. Y., Ang, M., Maznah, B., & Norimah, A. K. (2009). Perceptions of Body Image among Malaysian Male and Female Adolescents. In *Singapore Med J* (Vol. 50, Issue 3). https://www.researchgate.net/publication/24263489
- Kim, H. M. (2021). What do others' reactions to body posting on Instagram tell us? The effects of social media comments on viewers' body image perception. New Media & Society, 23(12), 3448–3465. https://doi.org/10.1177/1461444820956368
- Koskina, A., van den Eynde, F., Meisel, S., Campbell, I. C., & Schmidt, U. (2011). Social appearance anxiety and bulimia nervosa. *Eating and Weight Disorders Studies on Anorexia, Bulimia and Obesity*, *16*(2), 142–145. https://doi.org/10.1007/BF03325321
- Lee, B., Jeong, S., & Roh, M. (2018). Association between body mass index and health outcomes among adolescents: the mediating role of traditional and cyber bullying victimization. *BMC Public Health*, *18*(1), 674. https://doi.org/10.1186/s12889-018-5390-0
- Levinson, C. A., & Rodebaugh, T. L. (2012). Social anxiety and eating disorder comorbidity: The role of negative social evaluation fears. *Eating Behaviors*, 13(1), 27–35. https://doi.org/10.1016/j.eatbeh.2011.11.006
- Levinson, C. A., Rodebaugh, T. L., White, E. K., Menatti, A. R., Weeks, J. W., Iacovino, J. M., & Warren, C. S. (2013). Social appearance anxiety, perfectionism, and fear of negative evaluation. Distinct or shared risk factors for social anxiety and eating disorders? *Appetite*, *67*, 125–133. https://doi.org/10.1016/j.appet.2013.04.002
- Liechty, J. M., & Lee, M.-J. (2013). Longitudinal predictors of dieting and disordered eating among young adults in the U.S. *International Journal of Eating Disorders*, 46(8), 790–800. https://doi.org/10.1002/eat.22174
- Malinowska-Cieślik, M., Dzielska, A., & Oblacińska, A. (2022). Psychosocial Determinants of Adolescents' Cyberbullying Involvement—The Role of Body Satisfaction. *International Journal of Environmental Research and Public Health*, 19(3), 1292. https://doi.org/10.3390/ijerph19031292

- Mamun, A. A., O'Callaghan, M. J., Williams, G. M., & Najman, J. M. (2013). Adolescents bullying and young adults body mass index and obesity: a longitudinal study. *International Journal of Obesity*, *37*(8), 1140–1146. https://doi.org/10.1038/ijo.2012.182
- Mazubir, N. N., Hassan, N. M., Abd Aziz, A., & Suan, W. B. (2020). Disordered Eating Behaviour among School-going Adolescents: Prevalence and Associated Factors. International Journal of Academic Research in Progressive Development, Education and 9(1), 193–207. https://doi.org/10.6007/IJARPED/v9-i1/6987
- Mellor, D., Ricciardelli, L. A., McCabe, M. P., Yeow, J., bt Mamat, N. H., & bt Mohd Hapidzal, N. F. (2010). Psychosocial Correlates of Body Image and Body Change Behaviors Among Malaysian Adolescent Boys and Girls. Sex Roles, 63(5–6), 386–398. https://doi.org/10.1007/s11199-010-9812-4
- Menzel, J. E., Schaefer, L. M., Burke, N. L., Mayhew, L. L., Brannick, M. T., & Thompson, J. K. (2010). Appearancerelated teasing, body dissatisfaction, and disordered eating: A meta-analysis. *Body Image*, 7(4), 261–270. https://doi.org/10.1016/j.bodyim.2010.05.004
- Mervat Nasser, & Helen Malson. (2009). Beyond western disorders: Thinness and self-starvation of other-ed women (1st ed.). Routledge.
- Mustafa, M. S. A., Mahat, I. R., Md Shah, M. A. M., Mohd. Ali, N. A., Mohideen, R. S., & Mahzan, S. (2022). The Awareness of the Impact of Body Shaming among Youth. *International Journal of Academic Research in Business and Social Sciences*, 12(4). https://doi.org/10.6007/IJARBSS/v12-i4/13197
- Myers, T. A., & Crowther, J. H. (2009). Social comparison as a predictor of body dissatisfaction: A meta-analytic review. *Journal of Abnormal Psychology*, 118(4), 683–698. https://doi.org/10.1037/a0016763
- Omar, A., & Che Bakar, O. (2008). Bio-psychological perspectives of eating disorders and obesity: a revisited. *ASEAN Journal of Psychiatry*, 33–41.

- Patchin, J. W., & Hinduja, S. (2010). Cyberbullying and Self-Esteem*. *Journal of School Health*, 80(12), 614–621. https://doi.org/10.1111/j.1746-1561.2010.00548.x
- Peat, C. M., & Muehlenkamp, J. J. (2011). Self-Objectification, Disordered Eating, and Depression. *Psychology of Women Quarterly*, 35(3), 441–450. https://doi.org/10.1177/0361684311400389
- Radwan, H., Hasan, H. A., Ismat, H., Hakim, H., Khalid, H., Al-Fityani, L., Mohammed, R., & 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. https://doi.org/10.3390/ijerph16091541
- Rodgers, R. F., & Melioli, T. (2016). The Relationship Between Body Image Concerns, Eating Disorders and Internet Use, Part I: A Review of Empirical Support. *Adolescent Research Review*, 1(2), 95–119. https://doi.org/10.1007/s40894-015-0016-6
- Schaefer, L. M., & Thompson, J. K. (2018). Self-objectification and disordered eating: A meta-analysis. *International Journal of Eating Disorders*, 51(6), 483–502. https://doi.org/10.1002/eat.22854
- Schreurs, L., & Vandenbosch, L. (2022). Different interactions with appearance-focused social media content and adolescents' body dissatisfaction: A within-person perspective. *Computers in Human Behavior*, *135*, 107364. https://doi.org/10.1016/j.chb.2022.107364
- Selkie, E. M., Kota, R., Chan, Y.-F., & Moreno, M. (2015). Cyberbullying, Depression, and Problem Alcohol Use in Female College Students: A Multisite Study. Cyberpsychology, Behavior, and Social Networking, 18(2), 79–86. https://doi.org/10.1089/cyber.2014.0371
- Sim, L., & Zeman, J. (2004). Emotion Awareness and Identification Skills in Adolescent Girls With Bulimia Nervosa. *Journal of Clinical Child & Adolescent Psychology*, *33*(4), 760–771. https://doi.org/10.1207/s15374424jccp3304_11
- Singh, M., Shamshir, D., & Dhillon, S. (2020). Prevalence and Influence of Cyberbullying Behaviour on Self-Esteem and

- Body Image among the Adolescents. In *Wesleyan Journal of Research* (Vol. 13, Issue 25). https://www.researchgate.net/publication/347813478
- Slater, A., & Tiggemann, M. (2002). A Test of Objectification Theory in Adolescent Girls. *Sex Roles*, 46(9/10), 343–349. https://doi.org/10.1023/A:1020232714705
- Soo, K. L., Shariff, Z. M., Taib, M. N. M., & Samah, B. A. (2008). Eating Behaviour, Body Image, and Self-Esteem of Adolescent Girls in Malaysia. *Perceptual and Motor Skills*, 106(3), 833–844. https://doi.org/10.2466/pms.106.3.833-844
- Sorensen, C. (n.d.). Exploring Associations Between Social Appearance Anxiety, External Shame and Body Dissatisfaction.
- Spoor, S. T. P., Bekker, M. H. J., van Heck, G. L., Croon, M. A., & van Strien, T. (2005). Inner Body and Outward Appearance: The Relationships Between Appearance Orientation, Eating Disorder Symptoms, and Internal Body Awareness. *Eating Disorders*, 13(5), 479–490. https://doi.org/10.1080/10640260500297267
- Stice, E. (2002). Risk and maintenance factors for eating pathology: A meta-analytic review. *Psychological Bulletin*, *128*(5), 825–848. https://doi.org/10.1037/0033-2909.128.5.825
- Strahan, E. J., Wilson, A. E., Cressman, K. E., & Buote, V. M. (2006). Comparing to perfection: How cultural norms for appearance affect social comparisons and self-image. *Body Image*, 3(3), 211–227. https://doi.org/10.1016/j.bodyim.2006.07.004
- Tajik, E., Latiffah, A. L., Awang, H., Siti Nur'Asyura, A., Chin, Y. S., Azrin Shah, A. B., Patricia Koh, C. H., & Mohd Izudin Hariz, C. G. (2016). Unhealthy diet practice and symptoms of stress and depression among adolescents in Pasir Gudang, Malaysia. *Obesity Research & Clinical Practice*, 10(2), 114–123. https://doi.org/10.1016/j.orcp.2015.06.001
- Tiggemann, M. (2001). The Impact of Adolescent Girls' Life Concerns and Leisure Activities on Body Dissatisfaction, Disordered Eating, and Self-Esteem. *The Journal of Genetic Psychology*, 162(2), 133–142. https://doi.org/10.1080/00221320109597955

- Tiggemann, M., & Kuring, J. K. (2004). The role of body objectification in disordered eating and depressed mood. *British Journal of Clinical Psychology*, *43*(3), 299–311. https://doi.org/10.1348/0144665031752925
- Tiggemann, M., & Lynch, J. E. (2001). Body image across the life span in adult women: The role of self-objectification. *Developmental Psychology*, *37*(2), 243–253. https://doi.org/10.1037/0012-1649.37.2.243
- Tiggemann, M., & McGill, B. (2004). The Role of Social Comparison in the Effect of Magazine Advertisements on Women's Mood and Body Dissatisfaction. *Journal of Social and Clinical Psychology*, 23(1), 23–44. https://doi.org/10.1521/jscp.23.1.23.26991
- Titchener, K., & Wong, Q. J. J. (2015). A weighty issue: Explaining the association between body mass index and appearance-based social anxiety. *Eating Behaviors*, *16*, 13–16. https://doi.org/10.1016/j.eatbeh.2014.10.005
- Turel, T., Jameson, M., Gitimu, P., Rowlands, Z., Mincher, J., & Pohle-Krauza, R. (2018). Disordered eating: Influence of body image, sociocultural attitudes, appearance anxiety and depression a focus on college males and a gender comparison. *Cogent Psychology*, 5(1), 1483062. https://doi.org/10.1080/23311908.2018.1483062
- Tylka, T. L., & Hill, M. S. (2004). Objectification Theory as It Relates to Disordered Eating Among College Women. *Sex Roles*, *51*(11–12), 719–730. https://doi.org/10.1007/s11199-004-0721-2
- van Geel, M., Vedder, P., & Tanilon, J. (2014). Relationship Between Peer Victimization, Cyberbullying, and Suicide in Children and Adolescents. *JAMA Pediatrics*, *168*(5), 435. https://doi.org/10.1001/jamapediatrics.2013.4143
- Webb, H. J., & Zimmer-Gembeck, M. J. (2014). The Role of Friends and Peers in Adolescent Body Dissatisfaction: A Review and Critique of 15 Years of Research. *Journal of Research on Adolescence*, 24(4), 564–590. https://doi.org/10.1111/jora.12084
- Xu, J.-M., Jun, K.-S., Zhu, X., & Bellmore, A. (n.d.). *Learning from Bullying Traces in Social Media*.

Xu, X., Mellor, D., Kiehne, M., Ricciardelli, L. A., McCabe, M. P., & Xu, Y. (2010). Body dissatisfaction, engagement in body change behaviors and sociocultural influences on body image among Chinese adolescents. *Body Image*, 7(2), 156–164. https://doi.org/10.1016/j.bodyim.2009.11.003