Associations between Highly Visual Social Media Use and Eating Disorders and Disordered Eating– A Changing Landscape

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Systematic Review

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Abstract

**Background:** Although the etiology of eating disorders (ED) and disorder eating (DE) is multifactorial, exposure to highly visual social media (HVSM) may be an important contributor to the onset or worsening of DE and ED symptoms. We aim to understand HVSM use, ED, and DE with a particular focus on gender differences, as well as details of engagement on “selfies” in adolescents and young adults (AYA).

**Methods:** We conducted a literature search in Psycho ED, PubMed, MEDLINE of articles, including participants with DE/ED and users of HVSM, focused on AYA. Studies in which the study population was not well-defined and the methodology to assess ED/HVSM use was not robust were excluded.

**Results:** We found a strong association between HVSM and ED and DE with existing gender differences. The literature also shows specific mechanisms of use of these platforms involving “selfie” preparation and posting. The literature is limited in that the research is mostly cross-sectional with no uniform methodology and not well-defined participant populations.

**Conclusions:** The use of unregulated and profit-driven SM platforms can increase risk for ED. To use these HVSM platforms for positive influence, there is a need to have more transparency, and involvement of clinicians, researchers, and educators.

**Public Significance:** Due to HVSM’s popularity among the adolescent and young adult population, it is important to identify its effects on the prevalence of disordered eating and eating disorders, as well as recognize any gender differences in this relationship. Clinicians, parents and other adults working with youth should be aware of HVSM’s impact of DE/ED, as described by this review.

Plain English Summary

This paper aims to review the literature considering the effects of HVSM on the development of eating disorders (ED) and disordered eating (DE) in the adolescent and young adult population. We aim to elucidate this relationship by considering the bidirectional interactions between various established ED causal factors, such as body image and body satisfaction and HVSM use. Furthermore, we place an emphasis on recognizing gender differences in the relationship between HVSM and DE/ED. Given HVSM’s popularity among the adolescent and young adult populations and the risk for ED/DE in this population, it is important for clinicians, parents and other adults working with youth to be aware of HVSM’s impacts.

Introduction

Since its advent, social media (SM) use has increased exponentially among adolescents (1). More recently, highly visual SM (HVSM), which are SM platforms that consist of sharing predominately images or videos, have gained popularity. The use of HVSM has been associated with body image concerns and disordered eating (DE) behaviors (2). Simultaneously, the critical developmental period of adolescence (3)
is characterized by an increased focus on body image, which is linked to both self and social worth, and is dependent on body weight and shape (4). This confluence of adolescence and HVSM use can influence the prevalence and management of eating disorders (ED) and DE, especially among girls.

ED are associated with severe disturbances in people’s eating patterns and related emotions and thoughts, including preoccupation with food, body weight, and shape. ED include, but are not limited to, anorexia nervosa (AN), bulimia nervosa (BN), and binge eating disorder (BED) (5). In their lifetime, 13% of adolescent girls and women experience a clinical or subclinical ED (6), and 60% actively try to lose weight despite being within the normal weight range. Males may have a higher drive for muscularity, which in extreme cases may lead to muscle dysmorphic disorder (7). Across genders, a maladaptive focus on body image (8, 9) may cause body dissatisfaction, which has been identified as the most powerful predictor and risk factor for the development of DE (10).

DE and EDs are among the most gendered of mental health disorders with strong associations with female gender. Eating behavior associations with the female gender date back to the Middle Ages when fasting was associated with holiness, and have evolved with societal changes to a focus less on religion and more on body self-presentation (4). Today, preoccupation with weight is such an integral part of the adolescent female experience that “psychologists have coined the term “normative discontent” to explain the idea that it is common to be unhappy with your weight if you are a female (11). For example, in an Australian study with 67 girls focusing on the importance of body-image, many participants preferred to be size 10 than get straight A’s (12).

HVSM has a complex interaction with ED and DE. HVSM platforms, such as Instagram and Snapchat, allow for the editing, filtering, posting, sharing, and tagging of photos, thus transforming contemporary everyday life into a “more photographic” life presented as a ‘selfie,’ which refers to a photograph of oneself that is typically shared through SM (13). HVSM is used ubiquitously as a ready and primary source of information on food, exercise, and beauty standards with unprecedented access to advertisements and posts from peers, celebrities, and SM influencers (14), as well as personalized ad content. The engagement with content either as a producer, consumer, or prosumer (producers and consumers) promotes social comparison, the internalization of thin/muscular ideal, and the aim to adopt an observer’s perspective of their bodies and to habitually monitor themselves (15–18), contributing to the development and maintenance of DE and ED (19, 20). Specifically, the internalization of the thin/muscular idea is influenced by the use of SM filters. Filtered photo activity is positively associated with body dissatisfaction, and thin ideal internalization may mediate this relationship (21). HVSM influences overvaluation of weight and shape, fear of weight gain, and preoccupation with weight and shape, contributing to core ED psychopathology (19, 22).

With regards to sex and gender differences, pubertal changes have differing effects on body image for females and males. Particularly, an increase in estrogen, which drives pubertal development in females, regulates gene transcription in neurotransmitter systems that are disrupted in ED (e.g., serotonin), and estrogen receptor 1 gene (ESR 1) has been associated with restrictive AN (23). Furthermore, increase in
testosterone, characteristic of pubertal development in males, seems to be a protective factor against DE (24–26). Notably, there is more limited discussion regarding these topics in males, since males are underrepresented in most studies. In an analysis of 20 peer reviewed articles on the use of SM on body image and DE, only eight studies had male representation (27).

Two recent meta-analysis, centering on SM before the popularization of the SM platform Tik Tok, focused on adult populations. A recent comprehensive meta-analysis inclusive of 127 studies showed that thin/athletic media exposure influences the internalization of thin ideal and ED across genders (8).

In this review, we aim to understand HVSM use and ED/DE with a particular focus on gender differences, as well as details of time and depth of engagement on ‘selfies’ in adolescents and young adults (AYA).

**Methods**

**Search Strategy**


**Eligibility Criteria**

Studies published between 2015 and 2022 that examined HVSM and its association with ED, DE and ED’s risk factors were analyzed.

**Inclusion Criteria**

Studies specifying the following criteria were included in the analysis: 1) The independent variable was exclusive or predominant use of HVSM; 2) The dependent variable was any of these terms: eating disorder; disordered eating; self-esteem; body image, body dissatisfaction, self-esteem, gender, time, selfie, photo manipulation, posting of selfies; 3) the study had a well-defined design and statistical analysis; 4) the manuscript was written in English and published between 2015 and 2022.

**Exclusion Criteria**

The following exclusion criteria were established: 1) presentations, dissertations, theses, books, book chapters, communications at conferences, and other technical documents; 2) mainly qualitative studies; 3) studies about contact and dating websites, chats, forums, online game pages, and virtual reality apps; 4) articles aimed at evaluating and examining SM groups that promote anorexia and bulimia; 5) articles
on specific populations (e.g., athletes, dancers, models, and others), which could lead to bias in the data; and 6) validations of standardized tests and instruments.

The final studies analysis fulfilled the following PICOS statement (Table 1).

**Table 1: PICOS Statement**

<table>
<thead>
<tr>
<th>Participants:</th>
<th>Mean age &lt;25 years</th>
</tr>
</thead>
<tbody>
<tr>
<td>Gender</td>
<td>Binary (male and female)</td>
</tr>
<tr>
<td>Intervention</td>
<td>Use of HVSM</td>
</tr>
<tr>
<td>Comparison</td>
<td>No engagement with HVSM vs. Engagement with HVSM</td>
</tr>
<tr>
<td>Outcomes</td>
<td>Effect on defined dependent variables of gender, time, processing of selfies in context of ED or DE</td>
</tr>
</tbody>
</table>

**Selection of Studies for In-Depth Review**

In compliance with the PRISMA like guidelines, a flowchart was used to provide a general overview of the article selection process (28). The first author (A.S) reviewed and screened articles sequentially by title, title and abstract and full text review. The search yielded 538 articles which were screened, and 44 duplicates were removed. From the 353 manuscripts screened based on the title, 90 total manuscripts were eliminated based on the inclusion criteria. The remaining 263 manuscripts were then screened based on abstract, which resulted in the exclusion of 40 manuscripts. Finally, 219 manuscripts assessment for eligibility after a full text review resulted in elimination of 145 manuscripts, and a total of 74 were selected for this literature review (Figure 1).

A template to extract the following information was generated: (1) Author and year of publication; (2) Objectives of the study; (3) Study method; (4) Country of study population; (5) Demographic profile of the participants; (6) Results.

**Results**

Early work on SM and ED focused primarily on the association between overall time spent on SM platforms and causal factors for ED, such as worsened body image, body dissatisfaction, and lower self-esteem (17). However, current research recognizes the increasing role of appearance-based engagement on SM platforms (29) and the complex interactions with body image and body satisfaction (30).

The literature review findings are presented as per the schemata in Figure 2 that displays the main themes found in the existing literature surrounding HVSM and ED/DE and include: Time spent, type of engagement with an emphasis on selfies, and gender differences.
1.0. Time Spent on HVSM

There is robust evidence regarding the negative effects of HVSM on body image, depression, social comparison, and DE (31). However, weight and appearance related esteem mediate the relationship between excessive time on SM and restrained eating across genders, and appearance esteem mediates the relationship between excessive time on SM and emotional eating for females (32). A study from Bangkok with 246 participants with a mean (SD) age of 15.7 (1.9) years, 40% of which were male, found similar results (33).

Furthermore, a cross-sectional survey of 1,765 young adults showed that compared with those in the lowest quartile, participants in the highest quartiles for SM use volume and frequency had significantly greater odds of having eating concerns (adjusted odds ratio, AOR 2.18, 95% CI 1.50 to 3.17 and AOR 2.55, 95% CI 1.72 to 3.78, respectively) (34). Similarly, data from 996 adolescents showed that greater daily time spent using Instagram was associated with significantly higher incidence of DE behaviors for girls (35). Comparable results were reported in a longitudinal study from Iceland (36) and a cross-sectional study from Spain (37).

In another study, 210 girls with a mean age of 15 years self-reported on measures of online appearance-related activity, social comparisons to female target groups, internalization of the thin ideal, body dissatisfaction, and self-esteem. Body dissatisfaction was significantly related to (i) time spent engaged in social comparisons and (ii) upward social comparisons with various female targets while online (38). A study from Louisiana observed that females were more likely to use SM (p < 0.001) and report body image issues (p < 0.001) compared to males. However, body dissatisfaction corelated with increased time spent on SM across genders (p < 0.001) (39).

Another study found that though overall, ED and control groups spent similar amounts of time online (6.21 hours, SD = 5.13), they spent this time differently. ED participants devoted more than half of their online time to eating, weight and body image, versus one-third for controls (t = 5.3, p < 0.0001, Cohen's d = 0.87). ED subjects also engaged more often in social comparison (t = 3.6, p < 0.005, Cohen's d = 0.65), had a higher online-offline friend ratio (t = 3.7, p < 0.0001, Cohen's d = 0.65), and more online friends with ED (t = 5.4, p < 0.0001, Cohen's d = 0.89). In comparison to controls, ED participants reported that HVSM forums and blogs gave them more eating- and weight-related advice, and a greater sense of belonging, social support, and safety resulting from anonymity, with effect sizes of 0.63-0.96 (40). Similarly, another study also documented that ED subjects spend extra time browsing food, weight and body image sites, in addition to other pro-eating sites (41) and may engage in extreme dieting behavior and compulsive exercise (22). Interestingly, another study revealed that neither TikTok nor Instagram use were predictive of subsequent increases or decreases in internalization of beauty ideals and body image self-discrepancy (42).

In summary, while females tend to spend more time on SM, time spent on HVSM and social comparisons significantly and positively correlate with measures of symptomatology of ED and negatively with measures of psychological health in both genders.
1.1. Gender Differences in HVSM Use

The literature is equivocal on gender differences in HVSM user with ED/DE.

An Irish study seeking to understand the processing of appearance-related content and potential strategies to protect body image found that males can avoid negative content and select positive content by using cognitive processing strategies such as critically evaluating body-related content, and psychologically distancing from and positively reframing challenging content (43). Males also viewed content posts by athletes and body builders (44). In particular, males who looked at content pertaining to fitspiration (a combination of “fit” and “inspiration,” which refers to media that inspires one to get physically fit through rigorous exercise and diet, were less concerned about their health and more concerned about their appearance (45). In contrast, females are more passive in their SM use, scrolling through accounts, posts, or images regarding weight loss, diet plans, and celebrity content (44).

Pro-eating websites, which increase the risk of DE and thus ED, have distinct gender differences. An experimental study explored outcomes such as body satisfaction and exercise motivation after looking at fitspiration posts compared with traditional messaging, self-compassion messaging, or no text (image-only control). Self-compassion messaging optimized positive outcomes among females, whereas images without associated text were found optimal for promoting positive outcomes among males (41). In contrast, another study with a similar design found that viewing fitspiration images promoted lower body satisfaction, whereas viewing self-compassion images lead to improved body satisfaction and appreciation across genders (46).

Both women and men are affected by thin/athletic-ideal media exposure (8). Perfectionism about physical appearance significantly mediates the relationship between Instagram addiction and body esteem (47). Upward comparison is a mediator of body dissatisfaction in females (48). Gender can also be a moderator of the positive association between sharing selfies and body shame (49).

With respect to posting selfies, there are distinct gender differences in terms of the nature of the selfies posted and their effect on personal characteristics. Posted selfies follow a gender stereotypical pattern with females sharing photographs featuring submissiveness and males highlighting masculinity (50). Females are more likely to take personal and group selfies, post personal selfies, crop photos and use photographic filters as compared to male counterparts (51). Though no gender difference emerged from selfies taken alone (52), selfies featuring others were more common among females (53). Selfie posting among females show a stronger association with leadership and/or authority, while male’s use of selfie seems to be linked to ideas of entitlement and exploitation (54). On comparison, male’s overall score on the Narcissistic Personality Inventory (NPI) scale correlated positively to posting one’s own selfies, selfies with a partner and group selfies, unlike females where selfie posting was unrelated (55). On the other hand, ideal image exposure had negative effects across genders (56).

Overall, there are gender differences in the posted SM content related to body image and eating behaviors, the type of engagement and the psychological involvement.
A few salient studies characterizing gender differences in HVSM use are tabulated in Table 2.

2.0. Photo Investment and Manipulation

Current evidence suggests that photo-centered activity, rather than total time spent on HVSM contributes to adolescents’ body image disturbances (59). In preparation to posting selfies, users typically engage in photo investment and photo manipulation (60), i.e. using filters (61). This practice’s effect on ED causal factors is mixed (16).

While prior studies have found a positive relationship between photo investment and manipulation and the development of ED causal factors (62), a few studies did not find a significant association between photo manipulation and body dissatisfaction. A randomized control trial found that photo manipulation was not significantly associated with worsened mood and body image dissatisfaction when compared to the act of posting a selfie (63). In other words, while editing photos without posting causes an immediate decrease in weight/shape concerns and a delayed decrease in sadness, posting photos reinforces urges to exercise and restrict food intake, and increases anxiety (64).

It is important to note that there is a “feedback loop” with photo investment, meaning that photo-editing is a consequence of body dissatisfaction, and body dissatisfaction further reinforces the behavior of editing, for an Australian study found that photo manipulation and investment is associated with greater body dissatisfaction and negative appearance evaluation increased photo manipulation (65). The loop is driven by increased body surveillance and heighten awareness towards perceived flaws and imperfections (66).

Therefore, literature regarding impacts of photo investment and manipulation are mixed with the latest study finding that body appreciation, not photo editing and manipulation, is the final determinant risk factor for ED; a more recent comprehensive review tabulating narrative synthesis (22 studies) found that while nearly half (n=10) of the included studies found an association between photo-editing and body-image, 4 reported mixed results, and 3 highlighted indirect associations between photo-editing and body-image concerns that were influenced by several constructs, including rumination and self-objectification (18).

2.1. Posting a Selfie on HVSM

Selfie posting is a social behavior related to attention-seeking, communication, and entertainment motivations (67). Additionally, selfie posting and self-objectification are bidirectional, in that is selfie posting may precede or result from appearance dissatisfaction (68). A study from the United States and China showed that 98% of participants (aged 18-24) took selfies, and a majority shared selfies 3 to 20 times daily (69). In another two staged study, posting edited photos was associated with greater eating pathology and anxiety, whereas editing photos without posting caused an immediate decrease in body image concerns and delayed decrease in sadness (64).
This form of engagement is a double-edged sword. A study using the Selfitis Behavior Scale (SBS) found a positive relationship between selfie posting and increased self-confidence in the short term (70). Over the long-term, posting selfies resulted in worsened mood and body image, and posting retouched selfies resulted in more harmful effects (70).

Though there is complex relationship of selfie posting with body image and thus ED, offline selfies (taking selfies that are not shared), known as body-checking, is related to greater ED symptom severity in most research (71).

2.2. Viewing Other's Selfies

Through HVSM, adolescents can view their peers idealized and edited photos. Viewing others’ photos on HVSM risks DE through increasing body dissatisfaction and appearance comparisons (2).

Adolescents high in trait social comparison may be especially vulnerable to the deleterious effects of viewing others’ photos on body image and satisfaction (72). A Singaporean study showed that there is negative association between participants' photo browsing and editing behaviors and body esteem that is mediated by peer appearance comparisons, regardless of the direction of the comparisons involved (73).

Furthermore, the newly developed comprehensive Social Media Appearance Preoccupation Scale (SMAP) whose subscales include Online Self-Presentation, Appearance-Related Online Activity, and Appearance Comparison, also substantiated associations with DE (74).

2.3. Viewing One's Own Selfies

Adolescents are also highly attuned to quantifiable metrics of peer approval in the form of likes, comments, friends, and followers (75). Among adolescent Australian females, many friends on SM has been shown to positively correlate with body image concerns (76) and dieting (77). In terms of likes, neuroimaging studies have demonstrated greater activation in the brain's reward circuitry (e.g., the nucleus accumbens) when adolescents view photos that receive high numbers of “likes,” especially when these were their own photos, suggesting that quantifiable approval of one's online self-presentation may be especially rewarding. Additionally, the number of likes has been found to influence female's inclination to continue sharing objectifying selfies on HVSM (75).

Peer approval is communicated through comments on adolescents’ posts. Longitudinal evidence suggests that HVSM use is generally associated with more appearance-related peer comments on adolescents’ SM posts (78). Though the same study found that peer appearance-related comments are unrelated to body dissatisfaction, positive appearance related comments (compliments) have been implicated in adolescent girls' self-objectification (79). However, negative appearance related comments may be linked to adolescent females’ lower self-esteem and depression and to males’ tendency to act out (80).
In summary, the literature shows that each state of the process of the selfie, including preparation, posting, and viewing, is associated with risk factors for ED, such as negative effects on self-esteem, body satisfaction, and body image.

Based on these results, we propose a model of ED/DE through a triangular, dynamic relationship between the host (individual with ED/DE), agent (HVSM use and engagement) and environment (food intake, exercise, edited selfies) (Figure 3). With regards to the host, there are a variety of biological (age, sex, and genetic predisposition) (81), and psychological (low self-esteem, perfectionism) (17) and social factors (family, SM, gender) that influence an individual’s susceptibility to develop ED. We hypothesize that the relationship between the individual predisposing factors and the development of ED may be linked to HVSM use, namely the number of HVSM platforms used and maladaptive use, because HVSM use promotes the development of recognized causal factors for ED, such as low self-esteem and body dissatisfaction (82). In an environment where practices like dieting and exercising are prevalent in the real world and processes like editing selfies and posting edited selfies are common on HVSM platforms, individuals’ inclination to use HVSM increases. In summary, it is the interaction of HVSM use and the individual’s engagement with the real and virtual world that affects the development or worsening of ED symptoms in individuals with risk factors.

**Discussion**

Time spent on HVSM can lead to either real reparative exercise and changes in eating behavior or virtual body fixation via selfie engagement. Extensive HVSM use worsens one’s body image and lowers one’s body satisfaction, thus leading to DE and orthorexia nervosa, which refers to an obsession with healthy eating, and these may evolve into ED (21). Specifically, because the advertised female body is unattainable for most women, their discouragement, captured through negative body image and decreased body satisfaction, and tenacity to achieve the ideal body type may lead them to practice DE to bridge the gap (35). Both upward (38) and downward comparisons reinforce the behavior of HVSM use and engagement, thus contributing to eating behaviors, thereby suggesting a positive-feedback cycle and bidirectional relationship between HVSM engagement and DE/ED. Furthermore, using SM for more than two hours per day has been independently associated with poor self-rating of mental health, increased levels of psychological distress and suicidal ideation (83). As such, time spent on HVSM correlates positively with measures of symptomatology of ED and negatively with measures of psychological health.

In addition to time spent on HVSM, the specific engagement with HVSM platforms is notable in the context of DE/ED development. Selfie engagement without posting on HVSM or addictive HVSM use are both correlated with ED/DE through the pathway of body surveillance to fix body dissatisfaction (Fig. 3). Therefore, engagement in curating selfies takes precedence over the time spent on HVSM. Furthermore, in most studies, time spent on HVSM is a self-reported measure which is fraught with recollection bias and requires more objective attention.
This literature review on HVSM engagement with a focus on gender differences showed that the research so far demonstrates a close relationship between ED/DE, HVSM use, and the critical developmental period of adolescence on multiple fronts. With regards to HVSM engagement, gender differences were noted in engagement, with females being more passive and males more active on HVSM, and the content explored, with females focusing on dieting/weight-loss content and males on fitspiration-content. With this, the literature largely suggests that HVSM use does not uniquely impact females nor males in the development of DE/ED.

This review has some limitations. Of the studies reviewed, most were cross-sectional studies, which prevents us from making conclusions about causality and limits our conclusions to general associations between HVSM use and ED and DE. Most studies on HVSM quantity and quality of use (selfie behavior) collapse all HVSM and subjects into a single category; however, there are significant differences that must be accounted for, such as specific platform and gender. Furthermore, males are underrepresented in most of the studies, and there are distinct differences in the neurobiological effects of estrogens vs. testosterone as shown by the twin dizygotic study, which showed that increased testosterone exposure in-utero leads to fewer incidence of ED (84). The ever-changing body ideal from the thin-ideal to slim-thick to thick-muscular, body objectification, different neurobiology, and pubertal phenotype continues to make ED/DE a gendered disease. Rather than designing studies with equal gender distribution, it is important to include subjects with distinct biological, demographic, psychological and cultural profiles and, after adjusting for these confounders, study the interaction between HVSM and different constructs causal for ED/DE.

In conclusion, the relationship between HVSM use and DE/ED is complex, but overall, the type of HVSM engagement is more important than time spent on HVSM. There is a lack of longitudinal studies and most of the cross-sectional studies have female preponderance of Caucasian descent. The positive studies have a small effect size, but given the highly prevalent use of SM, they can have significant effects in the general population. Furthermore, all the variables are interactive and bidirectional. Heightened emotional and social sensitivity, self-consciousness, and self-esteem influenced by HVSM engagement indeed create a perfect storm for the emergence of DE/ED in adolescence. HVSM has a potential to be used as a therapeutic tool for treatment of ED as shown in a feasibility study (85). However, there is an unmet need for longitudinal and randomized control trials to address differences across gender, age, sociocultural, other psychosocial individual and family determinants to better define the relationship between HVSM use and DE/ED.

Declarations

Ethics approval and consent to participate: n/a

Consent for publication: n/a

Availability of data and materials:
Data sharing is not applicable to this article as no datasets were generated or analyzed during the current study.

**Competing interests:**

The authors declare that they have no competing interests.

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**Authors' contributions:**

AS wrote the manuscript, and CV supervised, edited, and reviewed.

**Acknowledgements:** n/a

**Authors' information (optional):** n/a

**References**


22. Turner PG, Lefevre CE. Instagram use is linked to increased symptoms of orthorexia nervosa. Eat Weight Disord. 2017;22(2):277-84.


47. Simon PD, Cu SMO, De Jesus KEM, Go NTS, Lim KTF, Say CLC. Worried about being imperfect? The mediating effect of physical appearance perfectionism between Instagram addiction and body esteem. Personality and Individual Differences. 2022;186:111346.


77. Tiggemann M, Zaccardo M. 'Strong is the new skinny': A content analysis of fitspiration images on Instagram. J Health Psychol. 2018;23(8):1003-11.


Table

Table 2 is available in the Supplementary Files section.

Figures

Figure 1

Flowchart of Article Selection
Figure 2

Schemata from review of literature on time and mode of engagement, and gender differences on use of HVSM sites.
Figure 3

Agent-Host-Environment Triad Model Adapted to Eating Disorders and Highly Visual SM Use.

Supplementary Files

This is a list of supplementary files associated with this preprint. Click to download.

- Table2.docx