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Graduate School of Education and Psychology

SOCIAL MEDIA USE, DISORDERED EATING, AND BODY IMAGE IN ADOLESCENT FEMALES: A SYSTEMATIC REVIEW OF THE LITERATURE

A clinical dissertation submitted in partial satisfaction

of the requirements for the degree of

Doctor of Psychology

by

Alara Ozpolat

December, 2022

Judy Ho Gavazza, PhD, ABPP, ABPdN, CFMHE – Dissertation Chairperson

This clinical dissertation, written by

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under the guidance of a Faculty Committee and approved by its members, has been submitted to and accepted by the Graduate Faculty in partial fulfillment of the requirements for the degree of

DOCTOR OF PSYCHOLOGY

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ABSTRACT

Adolescent females are especially at risk of developing eating disorders due to expectations surrounding body image, social pressures, and influence from peers. With the significant role of social media in daily life, the average adolescent currently spends several hours a day engaging with content on social media. The overall aim of this review was to better understand the impact of social media consumption on disordered eating and body image among female adolescents. The primary research questions explored within this systematic review were as follows: Is there a relationship between social media use, body image concerns, and/or eating disorder symptoms in adolescent girls? What social media platforms and forms of engagement on social media are related to body image concerns and disordered eating? What is the age, race/ethnicity, and socioeconomic status of adolescent females endorsing body dissatisfaction and/or eating disorder symptoms? Seven studies that met the inclusion criteria were examined and their findings were synthesized narratively. Results of this review help identify gaps in the literature to guide eating disorder prevention, treatment, and research.

Chapter 1: Background and Rationale

Statement of the Problem

According to Arcelus et al. (2011), eating disorders possess one of the highest mortality rates among mental illnesses. Adolescent females especially are at risk of developing eating disorders due to expectations surrounding body image, social pressures, and influence from peers (Berends et al., 2016). Though eating disorders affect individuals of all ages, the onset of eating disorders most often occurs in adolescence, which may be related to increased body image concerns and social comparison (Berends et al., 2016; Rodgers, 2016). With the significant role of social media in daily life, the average adolescent spends several hours a day engaging with social media and viewing, posting, liking, and interacting with content on various platforms (Ferguson et al., 2013). The more time adolescents spend on social media, the greater their risk of developing body image concerns and disordered eating symptoms (Smink et al., 2012).

According to research conducted in the United States and Australia, adolescent females experience higher levels of body dissatisfaction and disturbed eating behaviors than do adolescent males (Holland & Tiggemann, 2016; Veldhuis et al., 2020). Approximately 50% of adolescent females in the United States report dissatisfaction with their bodies (Holland & Tiggemann, 2016). This dissatisfaction can lead to significant consequences in terms of physical and mental health, such as low self-esteem, depression, anxiety, dangerously low body weight, and other health risks (Ferguson et al., 2013; Hogue & Mills, 2019). Adolescents who engage in social media use can be at risk of developing various feeding and eating disorders, including anorexia nervosa, bulimia nervosa, binge eating disorder, and restricting or purging behaviors associated with other eating disorders, as content on social media can be triggering to image-conscious adolescents who feel pressured to meet societal standards regarding their appearance

(Fitzsimmons-Craft et al., 2020; Holland & Tiggemann, 2016). Social media platforms can promote low self-esteem and body image concerns in adolescent females, who are especially vulnerable due to societal pressures (Holland & Tiggemann, 2016). These influences, combined with biological or environmental factors, may contribute to the development of disordered eating (Perloff, 2014). When eating disorders form, they can be notoriously difficult to treat and may leave individuals with health concerns and long-term impairment in multiple domains of their lives (Ferguson et al., 2013).

Before the prevalence of social media, traditional media was identified as a contributor to poor body image and disordered eating, as television and magazines often promoted a societal belief that thinness was attractive and preferred (Smink et al., 2012). Print and runway models, the fashion industry, and magazines were blamed for promoting unhealthy and unrealistic ideals of female bodies, relying heavily on photo editing, and employing underweight models (Burnette et al., 2017). The fashion industry and print media were thought to be the main causes of concern for producing content that influenced disordered eating (Burnette et al., 2017). Now, an endless stream of content is constantly available online and through applications on smartphones and other devices (Smink et al., 2012). Adolescents spend up to 9 hours a day consuming digital media on social networking sites such as Instagram, Facebook, YouTube, Snapchat, and Pinterest, in addition to playing games, listening to music, watching television, and spending time online (Saunders & Eaton, 2018; Smink et al., 2012).

Compared to other internet activities, social media is thought to have a stronger relationship with body dissatisfaction due to its interactive and self-exposing nature, as adolescents have the option to like, comment, and post publicly (McLean et al., 2015). With the development of social media, the internet, and technology, adolescents are constantly engaging

in social media consumption and communication with others. Adolescents who may be vulnerable or at risk of developing disordered eating have constant access to triggering content that may be promoting a poor body image (Veldhuis et al., 2014). Currently, 30%–50% of adolescent patients with diagnosed eating disorders use social media as a way of supporting the maintenance of their disordered eating (Saunders & Eaton, 2018; Smink et al., 2012). As the role of social media has grown substantially over the years and continues to grow, understanding factors associated with these sites that may contribute to disordered eating may be highly beneficial for eating disorder prevention and improving treatment outcomes. This review was designed to identify characteristics and provide information on components of social media use that may influence or contribute to poor body image and disordered eating among adolescent girls.

Overview of Current Research

Current research surrounding disordered eating shows appearance-based social comparison and the use of social networking sites influence body image and eating concerns (Ferguson et al., 2013; Juarascio et al., 2010). A strong correlation was found between social media use and disordered eating in a nationally representative sample consisting of young adults (Rodgers et al., 2020). More frequent Facebook use, consisting of viewing and posting images, has also been found to be related to the maintenance of weight concerns (Mabe et al., 2014). Most social media platforms, such as Instagram, Snapchat, Pinterest, and Tumblr, revolve around the sharing of idealistic or influential pictures and videos and these images may promote slenderness as an ideal body type (McLean et al., 2015; Sidani et al., 2016). Individuals who share content may also aim to present themselves at their best and choose photos in which thinness and attractiveness are emphasized, resulting in a critical view of the self and higher

expectations for one's own appearance (Sidani et al., 2016). Though some research has shown there is a relationship between eating disorders and social media use, there is a need for more research in this area, especially related to adolescents, who are more susceptible to disordered eating (Saiphoo & Vahedi, 2019; Suplee, 2016), and that includes an exploration of newer social networking sites that have grown significantly in terms of use in recent years. Additionally, more information surrounding the correlational relationship between social media usage and eating disorder presentations in adolescents is needed.

TIME magazine called Instagram in particular the "worst social media for mental health," as photo-sharing platforms like Instagram can cause problems with body image, encourage low self-esteem, and lead to unrealistic expectations for those who are frequently viewing media on the application (Ahrens et al., 2022; MacMillan, 2017, p. 1). On social media platforms such as Instagram and Facebook, individuals have the opportunity to view, post, and interact with content that can be triggering for many (Saunders & Eaton, 2018). Users can follow and view images and videos from users of their choice, including peers, bloggers, models, and celebrities. The shift in social media use has also brought about an unconventional career—content creators and "influencers," or individuals with a following whose role on social media is to share images or videos with the purpose of influencing and engaging with an audience (Saunders & Eaton, 2018). These content areas can include, but are not limited to, curated fashion, travel, beauty, and fitness posts that can resemble print media in some ways. Indirectly influential content on these pages can include posts that promote an idealized body type (e.g., through fashion or fitness photography) in the same way traditional media outlets once did and still do (Alberga et al., 2018).

Though some pages may indirectly promote thinness or idealized body types, pro-anorexia or pro-ana pages, which are pages aimed at promoting eating disorders as a lifestyle choice, specifically post content to encourage and promote thin bodies, weight loss, and disordered eating through calorie restriction, meal skipping, and purging (Branley & Covey, 2017). The pro-anorexia community on social media provides a space for individuals to support and motivate one another and normalize their eating habits as a lifestyle choice (Alberga et al., 2018). Because pro-anorexia pages violate most social media site policies and can be removed, individuals often explicitly state in their biography that they are "NOT pro-ana" and provide a "trigger warning," though their content still indicates otherwise. Though the use of pro-anorexia hashtags is also banned, users can work around restrictions with slight variations in their spelling, such as using "th1nspo" in place of "thinspo/thinspiration" (Bert et al., 2016; Sidani et al., 2016). Though social networking sites have made an effort to reduce pro-anorexia posts, pages that promote thinness are still present on many social media platforms, websites, and forums (Burnette et al., 2017). An impressionable adolescent who is experiencing body dissatisfaction may easily become absorbed in the world of social media and can stumble across or seek out pages that promote unhealthy ideals and behaviors. The easy access to digital media and abundance of online pictures, videos, and posts can make social media sites a dangerous place for adolescent females who are experiencing body dissatisfaction or are at risk of disordered eating. By considering sources that indirectly promote self-comparison or slimness as an ideal body type (e.g., celebrities, bloggers, influencers, or even other peers) and sources that directly promote slimness (e.g., fitspiration, thinspiration, and pro-anorexia pages), the relation of disordered eating and body image concerns and engagement with various types of content on social media can be better understood.

Rationale, Primary Aims, and Key Research Questions

The aim of this systematic review was to help adolescents, parents, and clinicians better understand the relationship between social media use, poor body image, and disordered eating among adolescent females. With the relatively low rates of treatment success for eating disorders, it is important to continue evaluating and exploring factors that may influence eating pathology and contribute to the development of an eating disorder (Griffiths et al., 2018). Though the risks of frequent social media use have been explored, there is limited research on the direct impact of social media use on eating disorders (Barth & Starkman, 2016). By learning more about the influence of social media, adolescents can be taught to engage in social media with awareness and caution. Increasing social media literacy can help adolescents navigate social media as informed users and consider how media messages are constructed and how the content they consume shapes their perception of themselves. By better understanding these factors, parents can also help their children safely navigate social media, observe patterns in their social media use, and set boundaries if needed. Clinicians working with adolescents who endorse low body image, are at risk of developing disordered eating, or have been diagnosed with an eating disorder can also benefit from better understanding factors that come into play in treatment and preventing relapse, as eating disorders such as anorexia nervosa typically have a high relapse rate of 35%–41% (Berends et al., 2016). Researchers can also consider the types of social media platforms and forms of engagement that may contribute to poor body image and disordered eating, and work to identify populations that may be especially susceptible. By understanding the link between social media use and eating disorders, adolescents can make informed decisions about their social media consumption and parents can help guide them in these decisions. Exploring the influences of social media can be beneficial in improving the ways in which

adolescent females engage with social media in their daily lives and can also enhance the knowledge, understanding, and treatment of eating disorders and body dissatisfaction.

This systematic review included studies in which the relationship between social media use, body image, and eating disorders in adolescent females was examined. Correlations between social media platforms used by individuals, forms of engagement, and whether individuals reported body dissatisfaction and disordered eating were also explored. Adolescent females were the primary focus of this systematic review, as adolescents are particularly vulnerable to poor body image and spend the most time on social media (Holland & Tiggemann, 2016; Jarman et al., 2021). Though eating disorders affect both men and women, the large majority of individuals experiencing poor body image and disordered eating are female and thinness is more likely to be emphasized as an ideal body type for females (Ferguson et al., 2013). By better understanding the relationship between social media consumption and body image concerns and disordered eating in adolescent females, the influence of social media use on poor body image and eating disorder symptoms can be better acknowledged in symptom prevention and treatment (Suplee, 2016). This review also aimed to identify the forms of social media that have been explored in the existing literature and identify the types of social media engagement (e.g., viewing, commenting, posting, etc.) that were found to occur among adolescents with body dissatisfaction and eating disorder symptoms. The primary research questions that guided this systematic review were as follows:

1. Is there a relationship between social media use, body dissatisfaction, and/or eating disorder symptoms in adolescent girls?
2. What social media platforms and forms of engagement on social media are related to body image concerns and disordered eating?

3. What is the age, race/ethnicity, and socioeconomic status of adolescent females endorsing body dissatisfaction and/or eating disorder symptoms?

Chapter 2: Methodology

Systematic Review Approach

This systematic review with narrative synthesis was conducted to examine the impact of social media use on body image and disordered eating and as a means to thoroughly examine the research and literature to date. According to Schmidt (1992), a systematic review is classified a specific methodology used to identify relevant studies on a specific topic and select appropriate studies based on certain criteria. In many cases, systematic reviews are not only able to provide information and evidence on a specific topic, but can help to determine gaps in the body of knowledge. As systematic reviews can also be verified and reproduced, this can help to reduce the likelihood of bias (Schmidt, 1992). Thus, a systematic review with narrative synthesis was chosen to address the author's specific research questions.

The Preferred Reporting Items for Systematic Reviews and Meta-Analyses (PRISMA-P) flow diagram is used to consider recommended items to address in a systematic review protocol (Moher et al., 2009; Page et al., 2021; Shamseer et al., 2015; see Appendix A). The PRISMA-P checklist includes 17 items that are considered necessary components of a systematic review or meta-analysis protocol (Shamseer et al., 2015).

Eligibility Criteria

Quantitative and qualitative studies examining the effects of social media use on anorexia nervosa, disordered eating, and body image concerns in adolescent females were eligible for inclusion.

- Types of studies: This review included studies that were published in the years of 2010–2021. The publication years were selected based on considerations regarding the emergence of social media, smartphone and application use, changes in social

media in the past years, and the role and relevance of social media use in the lives of adolescents. Quasi-experimental, randomized clinical trials, mixed methods, and ethnographic design studies were reviewed when searching the literature. Studies using either quantitative or qualitative methods were considered eligible.

- Types of publications: This review included studies in English that were published in academic journals.
- Types of participants: This review included adolescent females ranging in age from 10 to 19 years of all races and ethnicities. Studies with early, middle, and late adolescents were considered. Adolescent age range was selected based on the World Health Organization (WHO) definition of adolescents as individuals ranging in age from 10–19 years (Sacks et al., 2003). Adolescent females without an eating disorder diagnosis as well as adolescents at risk of developing an eating disorder or with a current or past diagnosis of an eating disorder were considered eligible. Additionally, adolescent females exhibiting body dissatisfaction were considered. Articles were excluded if they included data on age groups outside of adolescence, such as individuals younger than 10 or older than 19 years. Studies that included male participants were also excluded.
- Types of settings: All countries and locations were considered. Studies published worldwide were considered to capture research fitting the inclusion criteria and report information on adolescent experiences around the world. The review included studies with data collected on adolescents in the United States, Australia, and Fiji.
- Types of outcome measures: This review included studies that measured the possibility and severity of disordered eating and body image concerns. Outcome

measures included self-report measures that were deemed to be reliable and valid. The included measures were used to assess social media consumption, body image concerns, eating pathology, and mental health status.

- Timeframe of studies: Studies published between 2010–2021 were considered to account for the rapid growth of social media, its consumption among adolescents, and the use of relevant social networking sites. Studies prior to 2010 often included forms of social media that are no longer used frequently by adolescents or relevant to current social media consumption.

Search, Screening, and Selection Process

Information Sources

Electronic searches were conducted using a Pepperdine University Libraries account to search EBSCOhost, APA PsycINFO, and APA PsycArticles. As previously noted, the date limit used in these searches was 2010–2021. Searches were conducted using database-recommended search terms (see search terms section). Only research published in English or with English translations was searched. References of selected studies were also searched. Unavailable articles were requested through Pepperdine University Libraries.

Search Terms

An exhaustive search for study selection was conducted using a combination of the following keywords: “eating disorders OR anorexia OR bulimia OR disordered eating,” “anorexia nervosa OR anorexia OR bulimia OR eating disorder,” “adolescents OR teenagers OR young adults OR teen OR youth,” “female OR women OR woman OR females,” “social media OR Facebook OR Twitter OR Instagram OR Snapchat OR Tumblr OR social networking,” and

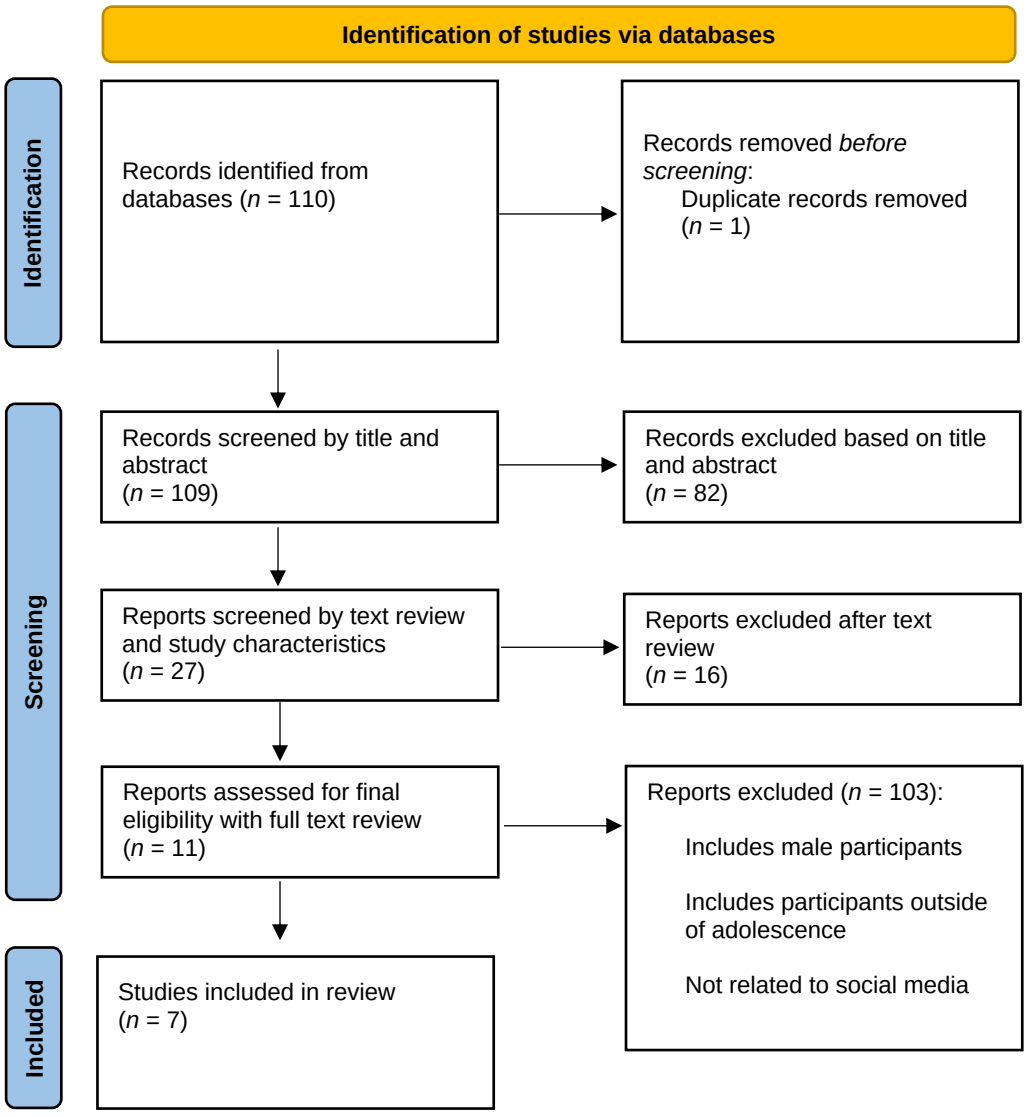
"body image OR self-esteem OR self-image OR body dissatisfaction" (see Appendix B). Search strategies were logged in lists on Microsoft Word and Excel (see Appendix C).

Data Management

Results of the review process were recorded using a PRISMA flow diagram (see Figure 1). Search results were recorded using Microsoft Excel (see Appendix D). Microsoft Word, Microsoft Excel, Mendeley, and folders on EBSCOhost were used to organize the data.

Figure 1

PRISMA Flow Diagram



Selection of Studies

Articles were located through the Pepperdine University Libraries system, which was used to connect to EBSCOhost, PsycINFO, and PsycArticles. Search and selection steps were recorded to keep track of searches, search terms, and results. A search documentation log was used to record search terms, search database, search specifications (e.g., year restrictions,

population, etc.), and number of results. Keywords were searched in the identified databases, dates were adjusted to include articles from 2010 to 2021, and search results were saved to an electronic folder on EBSCOhost. Decisions to include studies were made based on inclusion and exclusion criteria, such as participant age and gender, target population, and relevance of the study to the identified research questions. Duplicate studies were identified and removed while searching.

The initial step of the screening process involved screening studies based on title and keywords. Studies that did not appear to meet the criteria for the review, such as studies that included participants outside of the selected age range, studies not related to disordered eating and body image concerns, or studies conducted on males, were excluded. Selected studies were saved to an electronic folder titled "included based on title – read abstract." The reviewer then reviewed each study's abstract to screen for studies that could potentially meet criteria. Studies that appeared to meet criteria based on their abstract, title, and keywords were then saved to another folder titled "included based on abstract – read article." The full texts of these articles were then read and reviewed to confirm whether the articles met the inclusion criteria. The remaining articles were then saved to an EBSCOhost folder titled "final articles." All studies deemed eligible were closely reviewed to confirm eligibility. All reviewed studies that were either included or excluded were tracked in a log using Microsoft Excel, with reasons listed for exclusion if not included in the final list of selected studies (Appendix E).

Data Collection and Extraction

Data were extracted from each article meeting the inclusion criteria using a Data Collection and Extraction Form that was modified from the Effective Practice and Organization of Care (EPOC) data collection form (EPOC, 2013; see Appendix F). The data collection form

consisted of several categories, including general information (e.g., publication type, name of source), design characteristics and methodological features (e.g., aim of study, design or research approach), assessment of research variables, study participant characteristics (e.g., population of interest, recruitment methods, sample size, age, gender, race/ethnicity), setting characteristics, results, and conclusion (e.g., key conclusions of study authors, study author recommendations for future research, key takeaways, study limitations).

To maintain consistency and ensure relevant information and data were extracted, two reviewers independently completed a form for each study. Data and findings listed in the forms were then reviewed to ensure consistency between the two forms completed for each study.

Quality Appraisal

A Quality Appraisal Form was used to carefully assess for study quality. The Critical Appraisal Skills Programme (CASP, 2018) checklist is a 10-question tool that was used as a guide to evaluate and rate the quality of each study (see Appendix G). The quality appraisal forms were completed as the data collection process took place and articles were reviewed. The author rated the study's overall quality while also extracting data from the article. The quality appraisal form used the following rating scale: *strong* = 3, *good/adequate* = 2, *weak* = 1 , *missing* = 0. This form consisted of 10 items for which the author provided ratings. These items included strength of rationale for the study and literature foundation, clarity and specificity of research aims/questions, quality of research design or methodological approach, sample selection and characteristics, measures, data collection tools, analysis of data, discussion of study limitations, and considerations of culture and diversity.

Data Organization and Management

Data were primarily organized using Microsoft Excel. Data from the extraction and quality appraisal forms were entered into a spreadsheet (see Appendix H). This spreadsheet included sections from the data extraction form, along with ratings from the quality appraisal form. Excel spreadsheet categories included relevant information regarding the articles, such as the date of extraction, authors and title, year of publication, country, statistical methods employed, participant characteristics, outcome, and author takeaways and notes. Data obtained using the data collection and extraction forms were included in this spreadsheet. Any other important or relevant information was also noted by the author.

Additionally, data were organized into spreadsheets that addressed each research question (see Appendix I). The spreadsheets, labeled "RQ1 – Relationship," "RQ2 – Engagement," and "RQ3 – Characteristics," included sub-questions for each main research question, relevant data and characteristics, and author takeaways for each research question. To synthesize the data, observations were noted and patterns were observed from the data listed in the spreadsheets.

Chapter 3: Results

Searches using electronic databases resulted in a total of 110 articles (as shown in Figure 1). Of the 110 results, 109 remained after duplicates were identified and removed. Articles that clearly did not meet the criteria for inclusion after an initial screen of their titles, abstracts, and study characteristics were excluded, resulting in 27 articles with potential eligibility. A review of the abstracts and a partial text review of the 27 articles was conducted, resulting in 11 articles that appeared to be potentially eligible. After a full text review of the 11 remaining articles, seven met the eligibility criteria and were included for narrative synthesis (see Appendix J). This included studies published between 2010–2021 with female participants ranging in age from 10–19 years, in accordance with the WHO's definition of adolescence. Common reasons for the exclusion of articles consisted of data that included participants outside of the identified age range, studies conducted on male participants, and studies that did not specifically focus on social media, such as studies evaluating media sources outside of social media (e.g., print media) and social engagement outside of social media (e.g., social interactions at school or in peer groups). Though searches were set to include studies published as recently as 2021, the most recent study that was eligible for inclusion was published in 2017, demonstrating a possible gap in the literature. Approval from the Institutional Review Board (IRB) at Pepperdine University was obtained prior to proceeding with data collection and extraction (see Appendix K). Once data were extracted from the included studies and entered into the data collection and extraction forms, themes and information relevant to the author's research questions were identified. The author organized relevant information extracted from the articles into three separate Microsoft Excel spreadsheets for each research question.

General Characteristics of Included Studies

After data from each article were extracted and entered into a data collection form, general characteristics of each study were entered into a spreadsheet of included studies. This spreadsheet included the study ID, authors, title, year, country, method, age of participants, race/ethnicity, social media platforms included in the study (if specified), whether participants reported body image concerns, whether participants reported disordered eating, whether a relationship between social media and disordered eating/body image concerns was found, and general findings of the study. International studies were included in the review and the majority of the included research was conducted in Australia (*n* = 4, 57.14%). The remaining included articles were published in the United States (*n* = 2, 28.57%) and Fiji (*n* = 1, 14.29%; see Figure 2). Studies were conducted in the following years: 2011 (*n* = 1, 14.29%), 2013 (*n* = 2, 28.57%), 2014 (*n* = 1, 14.29%), 2015 (*n* = 1, 14.29%), 2016 (*n* = 1, 14.29%), and 2017 (*n* = 1, 14.29%; see Figure 3). Of the included articles, the majority were quantitative studies (*n* = 4, 57.14%) and the rest were mixed method studies (*n* = 3, 42.86%). Specific study designs reported in the articles included cross-sectional, quasi-experimental, experimental, and longitudinal.

Figure 2

Articles by Country

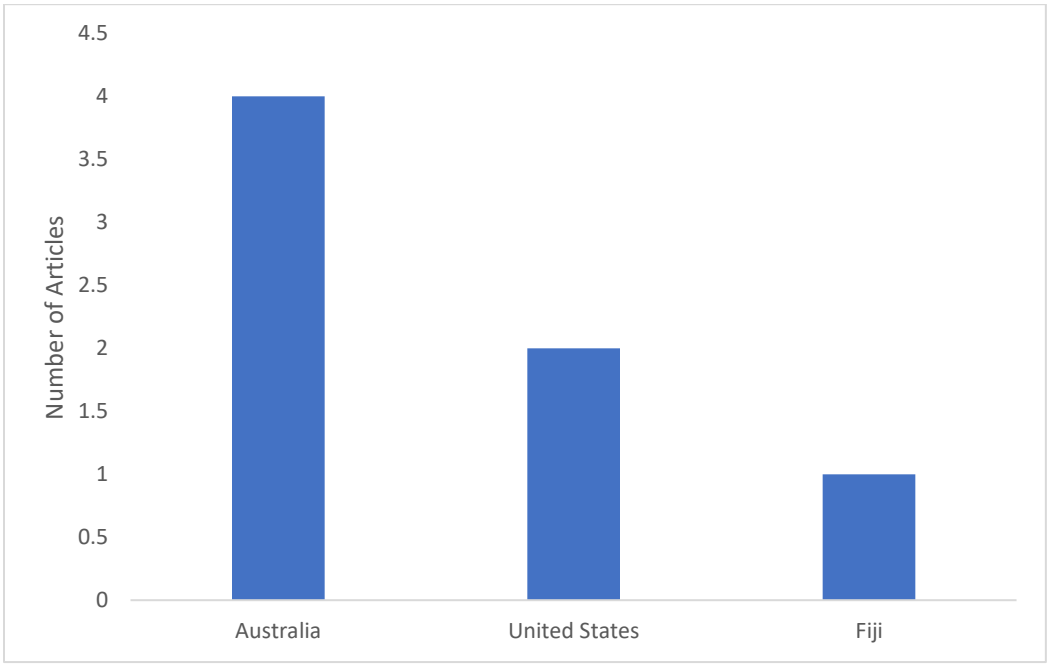
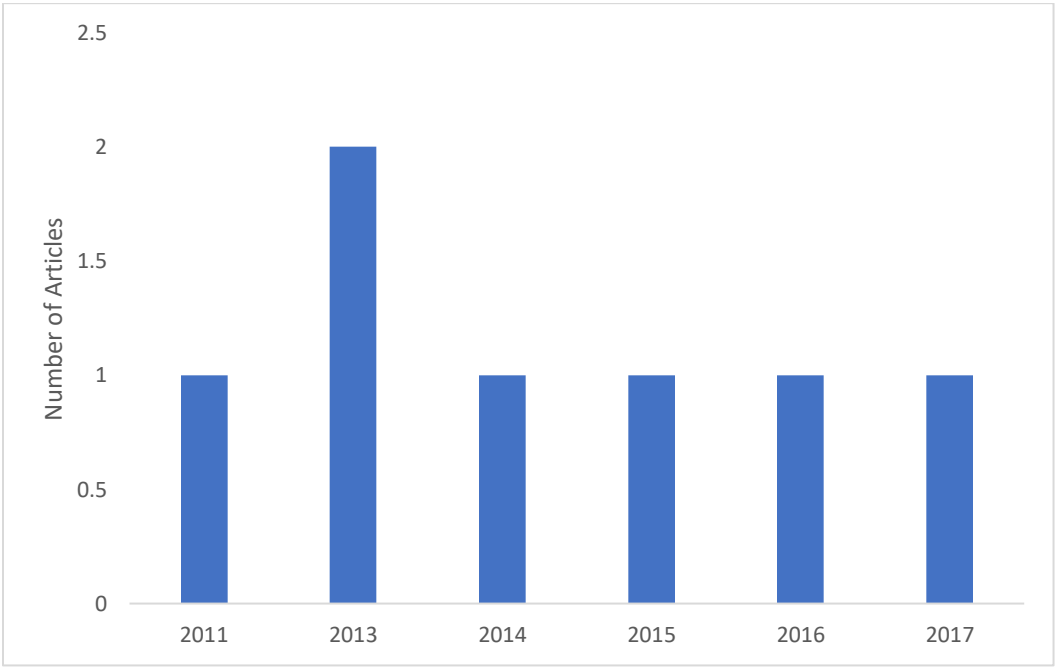


Figure 3

Articles by Publication Year



Characteristics of Study Participants

One of the research questions focused on characteristics of study participants in the included articles. The ages, race/ethnicities, and socioeconomic status (SES) of participants, if reported in the articles, are included below. A total of 2,590 female participants were included across the studies.

Participant Recruitment

All except one of the studies recruited adolescent girls from schools. One study recruited 103 participants from a public middle and high school in New York (Meier & Gray, 2014). Another study recruited 1,087 participants from 18 schools across South Australia, stating these schools were specifically selected by the Department of Education to cover metropolitan and rural areas, as well as public and private schools (Tiggemann & Slater, 2013). Tiggemann and Slater (2016) recruited 438 adolescent girls from 18 schools across South Australia for another study that was also included. Two studies by the same lead author recruited 101 female adolescents from public and private schools in Melbourne (McLean et al., 2015, 2017). Another study recruited 523 adolescent girls across 12 secondary schools in Fiji (Becker et al., 2011). One study's authors stated they recruited 237 participants from the local community in Laredo, Texas (Ferguson et al., 2013).

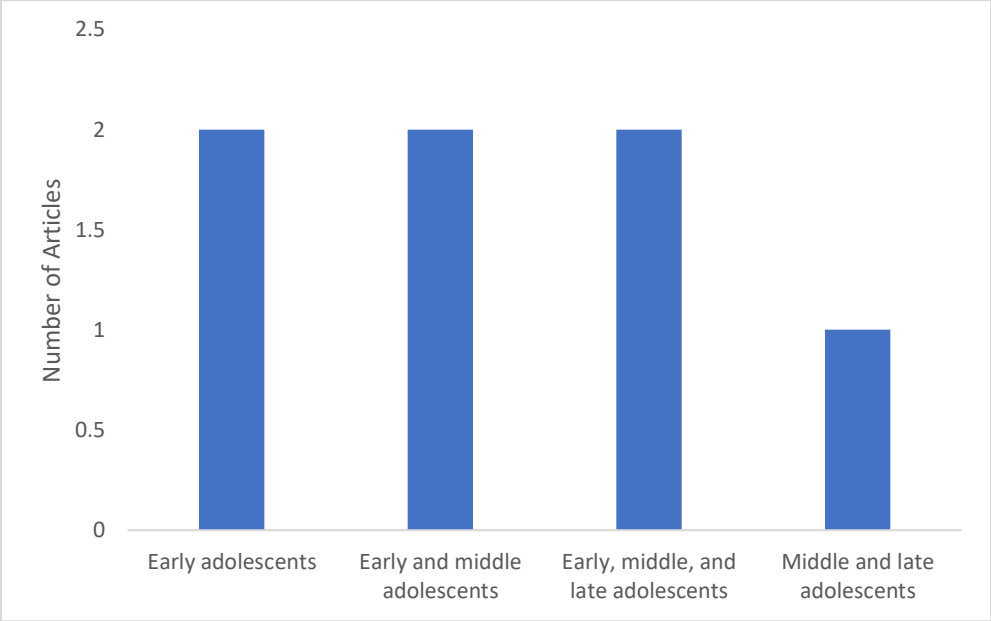
Participant Age

The seven included studies had participants between the ages of 10–19 years. Participants were categorized into groups for early, middle, and late adolescence based on the WHO's (2010) classification of adolescent developmental stages. Two of the studies (Tiggeman & Slater, 2013, 2016) included participants between the ages of 13–15 (early and middle adolescence), one study (McLean et al., 2015) included only 13-year-old participants (early adolescence), one study

(McLean et al., 2017) included participants between the ages of 11–14 (early adolescence), one study (Ferguson et al., 2013) included participants aged 10–17 (early, middle, and late adolescence), one study (Meier & Gray, 2014) included participants aged 12–18 (early, middle, and late adolescence), and one study (Becker et al., 2011) included participants between the ages of 15–19 (middle and late adolescence; see Figure 4).

Figure 4

Participant Age



Participant Race/Ethnicity

Four of the seven studies provided some racial/ethnic information on participants (57.14%), though these studies did not all provide a specific breakdown of the racial/ethnic background of all participants. Three studies did not provide data (42.86%). One article (Meier & Gray, 2014) only reported that participants were predominantly White (84.5%). Another article reported that only Fijian individuals were included in the study (Becker et al., 2011). One article reported that 95% of participants were Hispanic, 2.5% were Caucasian, and 3.4% were classified as "other" (Ferguson et al., 2013). Another study (McLean et al., 2017) shared that

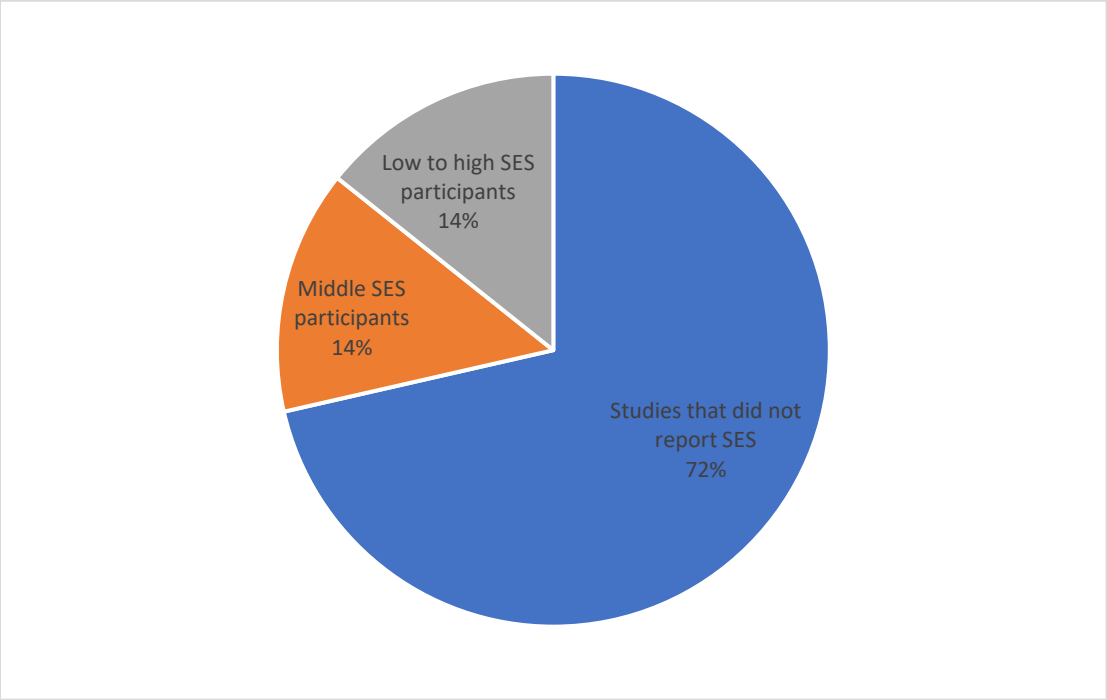
participants were all residing in Australia and were born in Australia or New Zealand (93%), Southeast Asia (3%), the United Kingdom (2%), and the United States (1%). The remaining studies were focused on adolescent females in Australia (McLean et al., 2015; Tiggemann & Slater, 2013, 2016) but did not provide specific racial/ethnic information.

Participant SES

Only two of the seven studies (28.57%) provided information on the participants' SES (see Figure 5). One study only indicated participants were of middle SES and recruited from public middle and high schools (Meier & Gray, 2014). Another study stated adolescents were recruited from 18 schools specifically selected to cover metropolitan and rural areas, as well as private and public schools, to include a wide range of SES groupings (Tiggemann & Slater, 2013).

Figure 5

Socioeconomic Status of Participants



Assessment of Body Image Concerns and Disordered Eating

The included articles used various questionnaires and rating scales to assess participants' body image, disordered eating, and social media use (see Table 1). Each of the seven articles used self-report measures. For all of the included measures, the authors provided evidence supporting their reliability and validity. Some of the authors also created their own questionnaires (McLean et al., 2015; Meier & Gray, 2014). For one study, the authors created their own questionnaire to assess engagement in specific activities (e.g., updating profile photos, sending/receiving messages) on Facebook (Meier & Gray, 2014). Measures used by more than one study included the Eating Disorder Inventory, Eating Disorders Examination - Questionnaire (EDE-Q), Sociocultural Attitudes Toward Appearance Questionnaire, and Objectified Body Consciousness Scale - Youth. Some studies used subscales from measures but did not administer the entire measure; for instance, the Drive for Thinness subscale of the Eating Disorder Inventory was administered in three of the studies (Meier & Gray, 2014; Tiggemann & Slater, 2013, 2016). The different constructs that each assessment measured are referenced in Table 1.

Table 1

Measures Across Studies

Article	Measures	# of Items	Construct assessed
Meier and Gray (2014)	Sociocultural Internalization of Appearance Questionnaire for Adolescents (SIAQ–A)	5-item	Internalization of the thin ideal
	The Physical Appearance Comparison Scale (PACS)	4-item (shortened)	Appearance comparison
	Weight Satisfaction subscale of Body Esteem Scale for Adolescents and Adults (BES)	8-item	Weight satisfaction
	Drive for Thinness subscale of Eating Disorder Inventory	7-item	Drive for thinness
	Self-Objectification Questionnaire	10-item	Self-objectification
	The Facebook Questionnaire (FBQ)	24-item	Facebook use
Tiggemann and Slater (2016)	Sociocultural Attitudes Toward Appearance Questionnaire	3-item (shortened)	Internalization of beauty ideals
	Objectified Body Consciousness Scale–Youth	Not specified	Body surveillance
	Drive for Thinness Scale of the Eating Disorder Inventory	7-item	Drive for thinness
Tiggemann and Slater (2013)	Custom questionnaire on social media/internet use	Not specified	Social media use
	Sociocultural Attitudes Toward Appearance Questionnaire	3-item (shortened)	Internalization of beauty ideals
	Objectified Body Consciousness Scale–Youth	Not specified	Body surveillance
	Drive for Thinness Scale of the Eating Disorder Inventory	7-item	Drive for thinness
McLean et al. (2015)	Custom questionnaire on social media use	Not specified	Social media use

Article	Measures	# of Items	Construct assessed
	Custom social media and digital communication scale	Not specified	Social media and online engagement
	Custom measure on photo activities	Not specified	Practices of taking and sharing images online
	Custom questionnaire on photo taking and sharing	4-item	Frequency of images shared
	Custom questionnaire on photo investment	8-item	Participant effort in choosing photos
	Custom questionnaire on photo manipulation	Not specified	Photo editing
McLean et al. (2017)	Appearance and Weight subscales of the Body Esteem Scale	Not specified	Body image
	Overvaluation of shape and weight questions from the Eating Disorder Examination-Questionnaire (EDE-Q)	2-item (shortened)	Shape and weight concerns
	Dutch Eating Behaviour Questionnaire	Not specified	Eating behaviors
Ferguson et al. (2013)	Body Esteem Scale for Adolescents and Adults (BESAA)	21-item	Body image
	Eating Attitudes Test (EAT-26)	26-item	Disordered eating
Becker et al. (2011)	Eating Disorder Examination-Questionnaire (EDE-Q)	28-item	Disordered eating
	Sociocultural Attitudes Towards Appearance Questionnaire (SATAQ-3)	30-item	Media influence on social appearance

Social Media Engagement

All seven articles included in this review looked at adolescent females' forms of social media engagement. In each study, participants were asked about their social media consumption, though the aspects of social media use that were assessed varied from study to study. Three

studies focused primarily on Facebook use (Meier & Gray, 2014; Tiggemann & Slater, 2013, 2016). Meier and Gray (2014) focused on engagement with specific features on Facebook (e.g., sending a message, uploading a profile picture, joining groups). In 2013, Tiggemann and Slater looked at time spent online and on social media (primarily Facebook, though Myspace was included in the study as well), and in 2016, Tiggemann and Slater looked at time spent on Facebook and the number of friends participants had on Facebook. McLean et al. (2015) considered time spent on social networking sites such as Instagram, Facebook, Snapchat, and Pinterest; online photo and video sharing; participants' investment into content shared online; and whether participants manipulated photos shared online. In 2017, McLean et al. looked at the selection and modification of participants' images shared on social media. Ferguson et al. (2013) considered the frequency of social media use on social networks such as Facebook, Twitter, YouTube, and Pinterest, as well as other photo/video sharing platforms, such as WordPress. Becker et al. (2011) considered internet access, access to devices to use social media, and frequency of social media use.

Time Spent on Social Media

Though some of the included studies assessed the amount of time participants spent on social media, other studies focused on social media engagement and evaluating features of social media that adolescent girls used. Studies differed on whether time spent on social media was considered an important variable in assessing social media use. The majority of the participants in Meier and Gray's (2014) study spent between 30 minutes to an hour (36.9%) or 1–2 hours (18.4%) daily on Facebook. However, Meier and Gray reported that time allocated to photo activity, rather than total time spent on Facebook or online, was associated with greater thin ideal internalization, self-objectification, weight dissatisfaction, and drive for thinness. Tiggemann and

Slater (2016) reported that greater time spent on Facebook was significantly correlated with internalization of the thin ideal and body surveillance. Tiggemann and Slater (2013) disclosed that participants averaged about 2 hours of daily social media use on both weekdays and weekends and that time spent on the internet was significantly related to "internalization of the thin ideal, body surveillance, and drive for thinness" (p. 2). McLean et al. (2015) looked at time spent on social networking sites and activities in which participants engaged, such as messaging and online video and photo sharing (including self-image taking frequency, photo investment, and photo manipulation) and reported that adolescent girls spent an average of just under 5 hours a day consuming digital media online. In McLean et al.'s (2017) study, the authors found that time on social media was correlated with the overvaluation of shape and weight, appearance comparison, fear of fat, and negative evaluation of one's appearance. The remaining two articles did not examine or discuss time spent on social media.

Social Media Use, Body Image Concerns, and Disordered Eating

Three of the included articles looked primarily at Facebook use. Of these three, Meier and Gray (2014) controlled for body mass index (BMI) due to the association between adolescent BMI and body dissatisfaction and reported that "Facebook appearance exposure was positively correlated with the internalization of the thin ideal, self-objectification, and drive for thinness" (p. 4). Additionally, this study found Facebook appearance exposure was negatively correlated with weight satisfaction (Meier & Gray, 2014). Meier and Gray also reported significant differences in self-objectification and physical appearance concerns when Facebook users were compared to non-Facebook users. Tiggemann and Slater (2013) reported that though internet exposure, in general, was associated with internalization of the thin ideal, body surveillance, and drive for thinness in adolescent girls, the most highly endorsed use of the

internet was for social networking (particularly Facebook), which was associated with negative body image. Time spent on social media was correlated with higher levels of internalization of the thin ideal, body surveillance, drive for thinness, poor body image, and appearance concerns, which were thought to form as users created their profile, uploaded content, and connected with peers (Tiggemann & Slater, 2013). Years later, Tiggemann and Slater (2016) found that the number of adolescent girls who had a Facebook account increased by 90% in 2 years, leading to an increase in Facebook friends, which increased the drive for thinness. In this longitudinal study, adolescent girls with a Facebook account were found to have a significantly higher drive for thinness compared to peers who did not use Facebook (Tiggemann & Slater, 2016). This study also reported that time spent on Facebook was significantly correlated with internalization and body surveillance, which, when occurring earlier in adolescence, likely played a causal role in the development of disordered eating (Tiggemann & Slater, 2016). Another study reported that participants who regularly shared photos on social media obtained significantly higher mean scores for overvaluation of shape and weight, body dissatisfaction, and internalization of the thin ideal compared to participants who did not post pictures on social media (McLean et al., 2015). In McLean et al.'s (2015) study, the authors reported that participants who engaged in more social media-related photo activities, including photo sharing and the manipulation of photos, endorsed higher levels of body and eating concerns. Specifically, participants endorsed an overvaluation of shape and weight, body dissatisfaction, and dietary restraint (McLean et al., 2015). In a later study, McLean et al. (2017) reported that adolescent girls who completed a social media literacy program revealed improvements in body image and disordered eating compared to adolescents in their control group, who endorsed higher rates of dietary restraint, weight concerns, and lower body esteem, despite there being no initial differences between the

groups at baseline. In contrast, another study found that social media use did not predict eating disorder symptoms and that body dissatisfaction and disordered eating correlations with social media use were low (Ferguson et al., 2013). This article reported that increased body dissatisfaction and disordered eating were related to higher BMIs and peer competition in adolescent girls, though they pointed out that social media use can play a role in peer competition (Ferguson et al., 2013). Ferguson et al. (2013) shared that their results "left unanswered questions" (p. 4) about whether peer competition contributes to social media use or whether social media contributes to peer competition, thus contributing to body dissatisfaction and disordered eating. Another study looking specifically at social network media exposure and eating pathology in adolescent females in Fiji found that social network media exposure was associated with higher levels of eating pathology (Becker et al., 2011). After examining both indirect and direct social network media exposure, the authors found that indirect exposure to media content on social media may be considered even more influential than direct exposure in the particular context of their study with Fijian adolescents (Becker et al., 2011).

Chapter 4: Discussion

Overview

For decades, research has been conducted on media exposure and its influence on body image and disordered eating. This research has been especially focused on females, as the media was observed to present thinness as an idealized body type in television and print media for girls and women (Harrison & Hefner, 2006). This was demonstrated in a famous study that linked the effects of mass media with body image concerns and disordered eating in school-age Fijian girls who initially had minimal media exposure and eating pathology until the introduction of television (Becker et al., 2002). Adolescent females have been considered especially susceptible to media influences given their developing personalities, impressionable nature, and vulnerability to peer influences and societal pressures (Peterson et al., 2007).

Since the introduction of the first social media websites in the late 1990s (Edosomwan et al., 2011), social media has rapidly grown and evolved in terms of its availability and use. Currently, many adolescent girls have access to a constant stream of media through smartphones and various devices. As social media has rapidly grown and become widely used, new concerns regarding media consumption have appeared. This systematic review was designed to explore the relationship between social media, body image, and disordered eating through an examination of seven studies that met the eligibility criteria. Characteristics of social media use, such as forms of engagement with social media, social networks used, and time spent on social media, were explored in relation to body image concerns and disordered eating. This review was conducted to highlight this area of research regarding adolescent females by providing information on the age, SES, and racial/ethnic background of the included participants. This

chapter includes a discussion of the findings, how they relate to the study's research questions, and recommendations for research and practice.

Discussion of Findings

Research Question 1: Is There a Relationship Between Social Media Use, Body Dissatisfaction, and/or Disordered Eating in Adolescent Girls?

Six of the seven studies (85.7%) reported a correlation between social media use by adolescent females and body image concerns and/or disordered eating. Meier and Gray (2014) reported a significant difference between the scores of Facebook users and non-Facebook users on self-report measures, with Facebook users obtaining higher scores in the areas of self-objectification and physical appearance comparisons. Other researchers who examined Facebook use shared similar findings, reporting that Facebook use was associated with significantly higher levels of body image concerns (Tiggemann & Slater, 2013, 2016). Self-objectification theory was an explanation that was considered, as this theory involves the process of objectifying oneself and turning one's perception inward after first objectifying others (Calogero, 2012). Meier and Gray (2014) considered that photo sharing on social media may promote this process via the public consumption of shared photos and valuation of likes or comments from others. McLean et al. (2015) found that higher scores for photo investment and photo manipulation were correlated with high scores for body and eating concerns for adolescent girls posting images on social media. Several of the studies considered that social media exposure may influence adolescents in ways that are similar to traditional media consumption given its visual and image-focused nature, though social media is typically used more actively and traditional media is consumed more passively. Only one of the included studies did not find a correlation between social media use and body or eating concerns; these researchers reported that body

dissatisfaction and disordered eating correlations with social media use were low, but that peer competition, which social media may play a part in, can contribute to body dissatisfaction and disordered eating symptomology (Ferguson et al., 2013). Given the reported findings, the majority of the studies found a correlation between social media use and concerns about body image or endorsements of disordered eating. Though research indicates there is a correlation between social media use and body dissatisfaction, causal factors may be difficult to demonstrate given the cross-sectional nature of some of the studies. It is possible that individuals who are dissatisfied with their bodies or experiencing symptoms of disordered eating spend more time on social media and dedicate more time to photo editing and manipulation because of their existing concerns about their bodies. However, in their longitudinal study, Tiggemann and Slater (2016) indicated time spent on Facebook was significantly correlated with internalization and body surveillance, which, when occurring earlier in adolescence, were found to play a causal role in the development of disordered eating later on in adolescence. Therefore, it is possible that social media use and related concerns about one's body can predict later eating pathology.

Research Question 2: What Social Media Platforms and Forms of Engagement on Social Media are Related to Body Image Concerns and Disordered Eating?

Studies included a range of variables related to social media, such as time spent on social media; the number of "friends" on social media; interactions on social media; and time spent sharing, editing, or altering photos. Several of the studies included in this review (42.8%) focused primarily on Facebook use, though platforms such as Snapchat, YouTube, Instagram, Pinterest, Twitter, Myspace, and other forms of social media, such as blogging platforms, were also included across the studies. Tiggemann and Slater (2013) reported that time spent on social networking sites was correlated with higher levels of thin idealization, body surveillance, and a

drive for thinness, and that the ability to easily connect with peers online may lead to frequent social comparison and poor body image. However, Meier and Gray (2014) suggested the amount of time spent engaging in photo-related activity on social media, rather than the total time spent on social media or online, was related to a greater thin ideal, self-objectification, weight dissatisfaction, and drive for thinness. For individuals engaging in photo sharing, endorsement of investment in photos of oneself and photo manipulation were correlated with high scores for body-related and eating concerns (McLean et al., 2015). This study also reported that actively using social media to present a desired image through shared photos, comparison of oneself to others, or commenting on others' images may induce body concerns and symptoms of disordered eating that would not occur with the passive consumption of traditional media, such as television (McLean et al., 2015). In their longitudinal study, Tiggemann and Slater (2016) also reported that a larger number of Facebook friends was correlated with internalization of the thin ideal and body surveillance appearing earlier in adolescence, predicting the drive for thinness and the development of disordered eating 2 years later. Given the reported findings within the studies, it appears that many forms of social media engagement and consumption have an appearance or comparison-related focus that can contribute to self-scrutiny, body dissatisfaction, and a desire for thinness, whether consumption is measured through overall time spent on social media, the number of friends or followers on social media, or features of social media with which adolescents engage, such as photo editing and sharing. Active use of social media appears to be best measured through behaviors such as photo editing and sharing, liking, commenting, and having more friends or followers, indicating users who actively engage with social media are more likely to have concerns related to their bodies due to a focus on self-image, valuation of the

likes and comments of others, and the sharing of their own photos for public consumption, compared to passive users who may view content without posting or engaging.

Research Question 3: What is the Age, Race/Ethnicity, and Socioeconomic Status of Adolescent Females Endorsing Body Dissatisfaction and/or Disordered Eating?

A total of 2,590 female participants ranging in age from 10–19 years were included in this review. More studies appeared to focus on early and middle adolescence, as participants between the ages of 13–15 years appeared to be the most commonly included age range across the studies. Though this review included studies that were conducted internationally, the majority of the studies were conducted in Australia (n = 4, 57.14%), followed by the United States (n = 2, 28.57%) and then Fiji (n = 1, 14.29%), representing only a small number of countries. A surprising finding was that a little more than half of the studies (57.14%) provided some racial/ethnic information on their participants, though these studies did not all include a complete breakdown of all participants' racial/ethnic backgrounds. Additionally, only two of the seven studies (28.57%) provided information on the SES of participants. Most of the articles did not address the implications of diversity in their participant pool, whereas some acknowledged that the results of their study might possess limited generalizability because of the location and racial/ethnic background or the SES of participants. One of the articles acknowledged that though their study, which took place in Fiji, included unique cultural characteristics for youth, their findings may be relevant to understanding vulnerability for eating disorders in other countries or areas undergoing rapid economic and cultural change (Becker et al., 2011). Another study addressed that their predominantly Caucasian participants who were of middle SES posed a limitation for generalization (Meier & Gray, 2014). A lack of diversity in some of the studies may demonstrate the need to include participants from a range of ethnic and socioeconomic

backgrounds to better understand the implications of the findings for a variety of backgrounds. Additionally, participant attitudes about body image concerns and eating pathology due to cultural variables and perceptions of body image around the world may be further explored in future studies. Given that access to technology for social media use can vary based on SES, it is important to consider individuals who may have more limited or infrequent access to social media. Improving the knowledge and understanding of the experiences of individuals from varying SES groups can help to improve access to mental health support for individuals who might otherwise have limited access to care.

Limitations

The limitations of this review pose opportunities for the development of future research. While screening the literature, search terms were specifically selected to capture the author's chosen topic and research questions, though relevant articles that used different terminology may not have shown up in searches or may have been missed. Though the literature searches revealed articles with male and female participants of various ages (despite using specific search terms and search settings), limiting the inclusion criteria to adolescent females restricted the number of studies that could be included. The data presented in this review represented a small number of studies, of which only some considered participants' backgrounds, diversity factors, or SES. The majority of the included studies were conducted in Australia, followed by the United States, and may not be representative of adolescent experiences in other parts of the world. Additionally, two sets of studies were conducted by the same authors and appeared to use similar participant pools. Though these studies offer valuable data, this may limit study data to participants of a specific region. Additionally, given that this review focused specifically on adolescent females, generalizability to other populations, such as males or adult women, may be limited.

Another major limitation is the everchanging nature of social media, as the ways in which adolescents consume social media are constantly evolving. Several of the studies included in this review focused on adolescent Facebook use, which has since declined in the last several years (Twenge et al., 2019). Though study findings still reflected aspects of social media use that are generalizable to current adolescent social media use, such as editing and posting photographs, engaging with friends or followers, and receiving or providing likes and comments, the articles included in this review did not cover some of the newer social media platforms that are currently considered popular or frequently used among adolescents. This might also pose challenges in measuring user activity for specific features of social media, especially as adolescent engagement with social media continues to change over time.

Another limitation is the use of self-report measures as the primary form of data collection within the included studies. Though many of the reported measures possess evidence of their reliability and validity, the responses of individuals can vary based on their level of insight and their memory of endorsed experiences or symptoms. Social desirability bias is also possible; participants may have over- or under-reported behaviors based on what they though may be viewed favorably by the researchers (Chung & Monroe, 2003). It is also important to note that these measures typically serve as screening tools to identify symptoms or areas of concerns and may not be considered sufficient for making a diagnosis of an eating disorder.

Implications for Practice and Research

The findings are a step toward better understanding body image concerns and disordered eating symptoms in relation to social media use. By understanding the influence of social media, parents can help their adolescent children navigate social media safely and pay attention to their patterns of social media engagement.

For adolescents using social media, limiting consumption might be an option to consider, especially for those who are experiencing poor body image or are at risk of disordered eating. Parents may choose to have discussions with their children and set boundaries around social media use if consumption becomes an issue or is negatively affecting an individual's mental health and well-being, causing distress, or affecting multiple domains of their life. Media literacy programs, which are designed to help individuals increase their awareness of messages in the media, apply critical thinking, and develop more adaptive perceptions of themselves in relation to what they view in the media, are another option (Wilksch et al., 2008). Evidence-based media literacy programs are considered an effective intervention to help adolescents combat negative body image (Wilksch et al., 2008). Media literacy programs have been found to reduce shape and weight concerns in adolescents and can help recognize bias and misinformation presented in social media (Wilksch & Wade, 2009). Media literacy programs can also help with anxiety and mood concerns related to social media use and may be especially helpful for adolescents who are at risk of developing an eating disorder (Wilksch & Wade, 2009). These programs are typically offered online and can be completed remotely or are sometimes offered as a school-based program.

Clinicians working with adolescents should discuss and consider social media use in evaluation and treatment, particularly with adolescents who are exhibiting poor body image or disordered eating. Clinicians who are assessing adolescent social media use may choose to administer measures such as the Media and Technology Use and Attitudes Scale (MTUAS), the Social Networking Time Use Scale (SONTUS), the Sociocultural Attitudes Towards Appearance Questionnaire-3 (SATAQ-3), or the Impact of Students' Social Network Use (ISSNU) Scale

(Choukas-Bradley et al., 2020; Sigerson & Cheng, 2018). Ongoing monitoring of social media and internet use is also important to consider throughout eating disorder treatment.

Given the rapid changes in social media, future researchers may choose to focus on adolescents' engagement and use of newer social media platforms, for which there appears to be limited research. Though the unique construct of each social network and frequent changes in social media characteristics may make it difficult to assess social media use, researchers may wish to pay attention to variables that apply to a range of social networking sites and will continue to remain relevant as social media continues to evolve. Future researchers may choose to explore social media use by adolescent developmental stage (e.g., early, middle, and late adolescence) and in males, females, and non-binary individuals.

Conclusions

Since the introduction of social media several decades ago, social media platforms have rapidly grown and become popular methods of engagement and communication with others (Edosomwan et al., 2011). As traditional media was considered to promote idealized body types and contribute to a poor body image for females, the growth of social media platforms brought new concerns regarding media consumption. Currently, many adolescent girls have access to a constant stream of media on their devices and spend several hours a day on social media, which may negatively influence their body image and contribute to the development of disordered eating (Ferguson et al., 2013). This systematic review was designed to explore the relationship between social media, body image, and disordered eating among adolescent females. Characteristics of social media use, such as forms of engagement on social media, use of various social networks, and time spent on social media, along with participant characteristics, were explored in relation to body image concerns and disordered eating. Adolescents who spent more

time on social media, had more friends on social media, and edited and shared photos were found to endorse higher levels of self-objectification, body surveillance, internalization of the thin ideal, and drive for thinness (Ferguson et al., 2013; Meier & Gray, 2014; Tiggemann & Slater, 2013, 2016). These behaviors were correlated with the development of eating pathology over time (Tiggemann & Slater, 2016). This review highlights the importance of awareness and education surrounding social media use for parents and adolescents and encourages clinicians to consider the role of social media in relation to body image and disordered eating in treatment.

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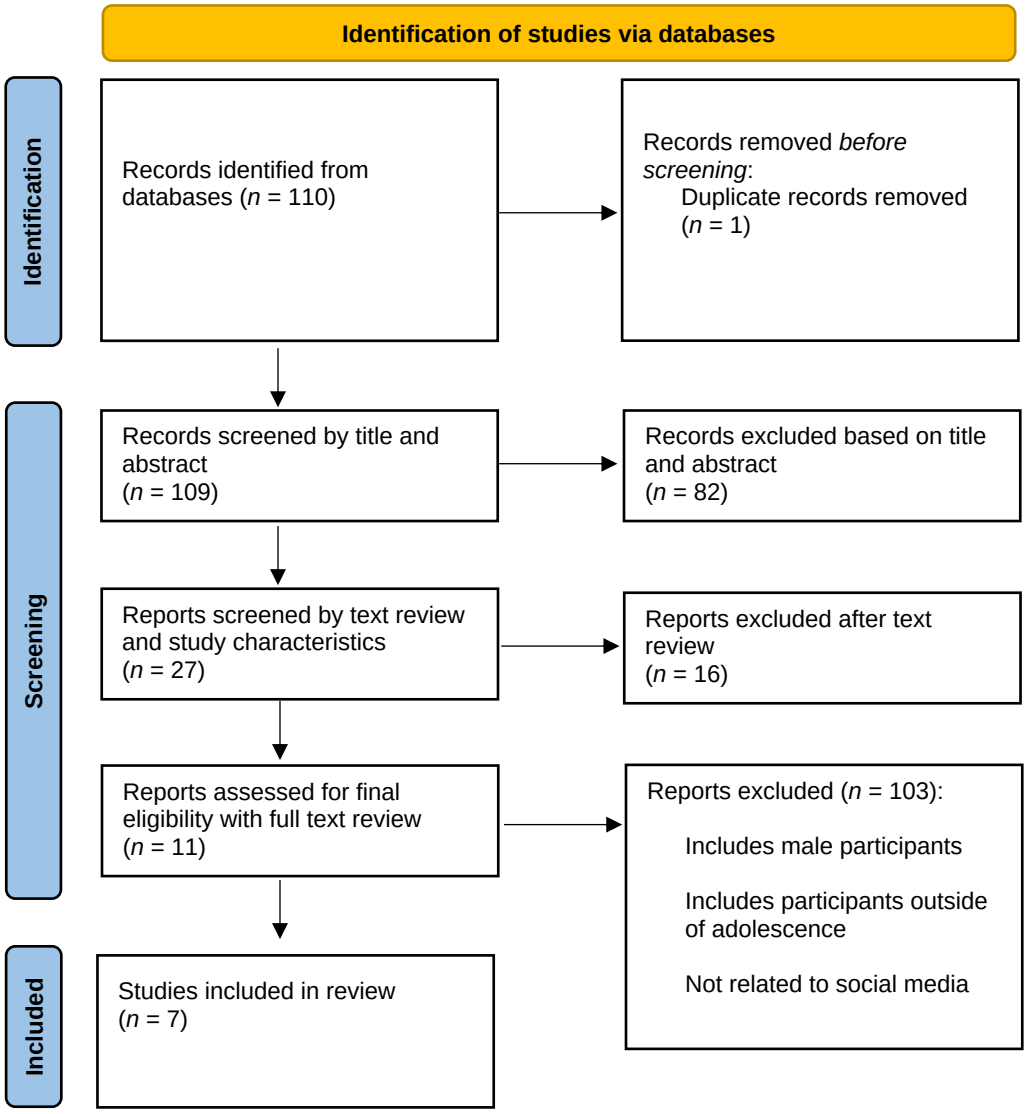
APPENDIX A

PRISMA Flow Diagram


Identification of studies via databases
Identification
Records identified from databases (n = 110)
Records removed before screening:
Duplicate records removed (n = 1)
Screening
Records screened by title and abstract (n = 109)
Records excluded based on title and abstract (n = 82)
Reports screened by text review and study characteristics (n = 27)
Reports excluded after text review (n = 16)
Reports assessed for final eligibility with full text review (n = 11)
Reports excluded (n = 103):
Includes male participants
Includes participants outside of adolescence
Not related to social media
Included
Studies included in review (n = 7)

APPENDIX B

List of Search Terms

Search Term ID	Primary Term	Synonyms/Alternate Forms
1	Disordered eating	disordered eating OR eating disorder OR anorexia OR bulimia OR binge eating disorder
2	Adolescents	adolescents OR teenagers OR young adults OR teen OR youth
3	Female	female OR women OR woman OR females
4	Social media	social media OR facebook OR twitter OR instagram OR snapchat OR tumblr OR social networking
5	Body image	body image OR self-esteem OR self-image OR body dissatisfaction

APPENDIX C

Search Strategy

Search Type	**Databases**	**Search Terms**	**Search Syntax**	**Specifiers**
Electronic Database	PsycINFO, PsycArticles	1, 2, 3, 4	disordered eating OR eating disorder OR anorexia OR bulimia OR binge eating disorder, adolescents OR teenagers OR young adults OR teen OR youth, female OR women OR woman OR females, social media or Facebook or twitter or Instagram or snapchat or Tumblr or social networking	Articles set to 2010-current
Electronic Database	PsycINFO, PsycArticles	2, 3, 4, 5	adolescents OR teenagers OR young adults OR teen OR youth, female OR women OR woman OR females, social media or Facebook or twitter or Instagram or snapchat or Tumblr or social networking, body image OR self-esteem OR self-image OR body dissatisfaction	Articles set to 2010-current

APPENDIX D

Search Documentation Record

Search syntax or other guidelines for search	Fields searched	Number of records	Date of search
anorexia nervosa or anorexia or anorexic or eating disorder, adolescents or teenagers or young adults or teen or youth, female or women or woman or females, social media or Facebook or twitter or Instagram or snapchat or Tumblr or social networking	Title, keywords, abstract	107	10/22/21
anorexia nervosa or anorexia or anorexic or eating disorder, adolescents or teenagers or young adults or teen or youth, female or women or woman or females, social media or Facebook or twitter or Instagram or snapchat or Tumblr or social networking, body image or self-esteem or self-image or body dissatisfaction	Title, keywords, abstract	76	10/22/21
eating disorders or anorexia or bulimia or disordered eating, adolescents or teenagers or young adults or teen or youth, female or women or woman or females, social media or Facebook or twitter or Instagram or snapchat or Tumblr or social networking	Title, keywords, abstract	110	10/22/21
body image or self-esteem or self-image or body dissatisfaction, adolescents or teenagers or young adults or teen or youth, female or women or woman or females, social media or Facebook or twitter or Instagram or snapchat or Tumblr or social networking, eating disorders or anorexia or bulimia or disordered eating	Title, keywords, abstract	79	10/22/21

APPENDIX E

Screening and Selection Record

A new generation of eating disorders eating disorders—Not only for girls.	Edmonds, Ryan G.	2012	Both	Adolescence (13-17 yrs) Adulthood (18 yrs & older)
Snaps, selfies, and shares: How three popular social media platforms contribute to the sociocultural model of disordered eating among young women	Saunders, Jessica F.; Eaton, Asia A	2018	Female	Adulthood (18 yrs & older) Young Adulthood (18-29 yrs)
Netgirls: The Internet, Facebook, and body image concern in adolescent girls	Tiggemann, Marika; Slater, Amy	2013		Childhood (birth-12 yrs) School Age (6-12 yrs) Adolescence (13-17 yrs)
Bodies in Motion: An empirical evaluation of a program to support positive body image in female collegiate athletes.	Voelker, Dana K. Petrie, Trent A, Huang, Qiushi, Chandran, Avinash	2019	Female	Adulthood (18 yrs & older)
Experiences of preadolescent girls participating in a mindfulness-based eating disorder prevention group.	Klassen, Samantha Lynn.	2018	Female	Childhood (birth-12 yrs) School Age (6-12 yrs)
The relationship between social media use and disordered eating in young adolescents.	Wilksch, Simon M.O'Shea, Anne, Ho, Pheobe, Byrne, Sue. Wade, Tracey D.	2020	Both	Childhood (birth-12 yrs) School Age (6-12 yrs) Adolescence (13-17 yrs)
The impact of Facebook use on self-reported eating disorders during the COVID-19 lockdown.	Mannino, Giuseppe, Salerno, Laura, Bonfanti, Rubinia Celeste,Albano, Gaia	2021	Both	Adulthood (18 yrs & older) Young Adulthood (18-29 yrs) Thirties (30-39 yrs) Middle Age (40-64 yrs)
Me, my selfie, and I: The relations between selfie behaviors, body image, self-objectification, and self-esteem in young women.	Veldhuis, Jolanda, Alleva, Jessica M., Bij de Vaate, Anna J. D. (Nadia), Keijer, Micha, Konijn, Elly A, Veldhuis, Jolanda	2020	Female	Adulthood (18 yrs & older) Young Adulthood (18-29 yrs)
Disordered eating and media exposure among adolescent girls: The role of parental involvement and sense of empowerment.	Latzer, Yael, Spivak-Lavi, Zohar, Katz, Ruth.	2015	Female	Childhood (birth-12 yrs) School Age (6-12 yrs) Adolescence (13-17 yrs) Adulthood (18 yrs & older)
What do you see when you look at me? Social media, socialized gender variables, and disordered eating among adolescent girls.	McAndrew, Annamaria.	2021	Female	Adolescence (13-17 yrs)
Facebook photo activity associated with body image disturbance in adolescent girls	Meier, Evelyn P, Gray, James	2014	Female	Childhood (birth-12 yrs) School Age (6-12 yrs) Adolescence (13-17 yrs) Adulthood (18 yrs & older) Young Adulthood (18-29 yrs)
Adolescents and young adults engaged with pro-eating disorder social media: Eating disorder and comorbid psychopathology, health care utilization, treatment barriers, and opinions on harnessing technology for treatment.	Fitzsimmons-Craft, Ellen E.; Krauss, Melissa J.; Costello, Shaina J.; Floyd, Glennon M.; Wilfley, Denise E.; Cavazos-Rehg, Patricia A.	2020	Female	Adolescence (13-17 yrs) Adulthood (18 yrs & older) Young Adulthood (18-29 yrs)
The dynamic relationship between unhealthy weight control and adolescent friendships: A social network approach.	Simone, Melissa; Long, Emily; Lockhart, Ginger	2018	Both	Adolescence (13-17 yrs)
A magazine study of eating disorders in India: A puzzling failure?	Palmer, R. L.; Abbas, S.; Sekar, M.; Sen, S.; Meyer, C	2015	Female	Adulthood (18 yrs & older)
Body surveillance on Instagram: Examining the role of selfie feedback investment in young adult women's body image concerns	Butkowski, Chelsea P.; Dixon, Travis L.; Weeks, Kristopher	2019	Female	Adulthood (18 yrs & older) Young Adulthood (18-29 yrs) Thirties (30-39 yrs)
Internet and smartphone application usage in eating disorders: A descriptive study in Singapore.	Tan, Tina; Kuek, Angeline; Goh, Shih Ee; Lee, Ee Lian; Kwok, Victor	2016	Both	Adulthood (18 yrs & older) Young Adulthood (18-29 yrs
Chinese media coverage of eating disorders: Disorder representations and patient profiles.	Sun, Shaojing; He, Jinbo; Fan, Xitao; Chen, Yibei; Lu, Xueke	2020	Both	Adulthood (18 yrs & older) Young Adulthood (18-29 yrs) Thirties (30-39 yrs) Middle Age (40-64 yrs)
Selbstberichtete anorektische Essstörungssymptomatik und psychische Struktur: Zusammenhang bei weiblichen Adoleszenten und jungen Erwachsenen in einer Onlinestichprobe	Obbarius, Alexander; Sarrar, Lea; Psychotherapeut	2020	Female	Adolescence (13-17 yrs) Adulthood (18 yrs & older)
Motivations for social media use: Associations with social media engagement and body satisfaction and well-being among adolescents	Jarman, Hannah K.; Marques, Mathew D.; McLean, Siân A.; Slater, Amy; Paxton, Susan J.	2021	Both	Childhood (birth-12 yrs) School Age (6-12 yrs) Adolescence (13-17 yrs)
Mental health of women: A focus on adolescent girls.	Dole, Tia R	2017	Female	Adolescence (13-17 yrs)
The impact of COVID-19 lockdown on social network sites use, body image disturbances and self-esteem among adolescent and young women.	Vall-Roqué, Helena; Andrés, Ana; Saldaña, Carmina	2021	Female	Adolescence (13-17 yrs) Adulthood (18 yrs & older) Young Adulthood (18-29 yrs)
Features of objectified body consciousness and sociocultural perspectives as risk factors for disordered eating among late-adolescent women and men.	Jackson, Todd; Chen, Hong	2015	Both	Adolescence (13-17 yrs) Adulthood (18 yrs & older) Young Adulthood (18-29 yrs)
A biopsychosocial model of social media use and body image concerns, disordered eating, and muscle-building behaviors among adolescent girls and boys.	Rodgers, Rachel F.; Slater, Amy; Gordon, Chloe S.; McLean, Siân A.; Jarman, Hannah K.; Paxton, Susan J.	2020	Both	Childhood (birth-12 yrs) School Age (6-12 yrs) Adolescence (13-17 yrs)
The effects of social comparison through social media for young women and adolescent females with eating disordered symptomatology.	Chau, Quynh	2016	Female	Adolescence (13-17 yrs) Adulthood (18 yrs & older)

Facebook use and disordered eating in college-aged women.	Walker, Morgan; Thornton, Laura; De Choudhury, Munmun; Teevan, Jaime; Bulik, Cynthia M.; Levinson, Cheri A.; Zerwas, Stephanie	2015	Female	Adulthood (18 yrs & older) Young Adulthood (18-29 yrs)
Do you 'like' my photo? Facebook use maintains eating disorder risk.	Mabe, Annalise G.; Forney, K. Jean; Keel, Pamela K.	2014	Female	Adulthood (18 yrs & older)
Photoshopping the selfie: Self photo editing and photo investment are associated with body dissatisfaction in adolescent girls	McLean, Siân A.; Paxton, Susan J.; Wertheim, Eleanor H.; Masters, Jennifer	2015	Female	Adolescence (13-17 yrs)
The impact of fitspiration content on body satisfaction and negative mood: An experimental study.	Rounds, Emilia G.; Stutts, Lauren A	2021	Female	Adulthood (18 yrs & older) Young Adulthood (18-29 yrs)
#proana: Pro-eating disorder socialization on Twitter.	Arseniev-Koehler, Alina; Lee, Hedwig; McCormick, Tyler; Moreno, Megan A	2016	Both	Adolescence (13-17 yrs)
Weight loss expectations and body dissatisfaction in young women attempting to lose weight	Siervo, M.; Montagnese, C.; Muscariello, E.; Evans, E.; Stephan, B. C. M.; Nasti, G.; Papa, A.; Iannetti, E.; Colantuoni, A	2014	Female	Adulthood (18 yrs & older) Young Adulthood (18-29 yrs) Thirties (30-39 yrs)
Baby wants tacos': Analysis of health-related Facebook posts from young pregnant women	Marshall, Elizabeth; Moon, Margaret Abigail; Mirchandani, Anicia; Smith, D. Grace; Nichols, Lauren P.; Zhao, Xinyan ; Vydiswaran, V. G. Vinod; Chang, Tammy;	2019	Both	Adolescence (13-17 yrs) Adulthood (18 yrs & older) Young Adulthood (18-29 yrs)
The contribution of social media to body dissatisfaction, eating disorder symptoms, and anabolic steroid use among sexual minority men	Griffiths, Scott; Murray, Stuart B.; Krug, Isabel; McLean, Siân A	2018	Both	Adulthood (18 yrs & older)
Visual and cognitive processing of thin-ideal Instagram images containing idealized or disclaimer comments.	Couture Bue, Amelia C.; Harrison, Kristen	2020	Female	Adulthood (18 yrs & older) Young Adulthood (18-29 yrs) Thirties (30-39 yrs)
Body dissatisfaction in women's artistic gymnastics: A longitudinal study of psychosocial indicators.	Neves, Clara Mockdece; Meireles, Juliana Fernandes Filgueiras; de Carvalho, Pedro Henrique Berbert; Schubring, Astrid; Barker-Ruchti, Natalie; Ferreira, Maria Elisa Caputo	2017	Female	Childhood (birth-12 yrs) Preschool Age (2-5 yrs) School Age (6-12 yrs) Adolescence (13-17 yrs) Adulthood (18 yrs & older) Young Adulthood (18-29 yrs)
A test of the expanded tripartite dual pathway model in physically active Korean men	Lee, Minsun; Lee, Hyun-Hwa	2020	Male	Adulthood (18 yrs & older) Young Adulthood (18-29 yrs) Thirties (30-39 yrs)
How a moderated online discussion forum facilitates support for young people with eating disorders	Kendal, Sarah; Kirk, Sue; Elvey, Rebecca; Catchpole, Roger	2017	Male	Adulthood (18 yrs & older)
Influence of social media use on adolescent females' perceptions of their body image	Kalnes, Kathryn Christine Brown	2014	Female	Adolescence (13-17 yrs)
A pilot evaluation of a social media literacy intervention to reduce risk factors for eating disorders	McLean, Siân A.; Wertheim, Eleanor H.; Masters, Jennifer; Paxton, Susan J	2017	Female	Adolescence (13-17 yrs)
A psychological typology of females diagnosed with anorexia nervosa, bulimia nervosa or binge eating disorder	Izydorczyk, Bernadetta	2015	Female	Adulthood (18 yrs & older) Young Adulthood (18-29 yrs)
A cluster randomized controlled trial of the SoMe social media literacy body image and wellbeing program for adolescent boys and girls: Study protocol.	Gordon, Chloe S.; Rodgers, Rachel F.; Slater, Amy E.; McLean, Siân A.; Jarman, Hannah K.; Paxton, Susan J	2020	Female	Childhood (birth-12 yrs) School Age (6-12 yrs) Adolescence (13-17 yrs)
Effectiveness of recruitment strategies for a social media literacy e-intervention for young adults with body dissatisfaction: Cost, time, diversity, and completion	Doley, Joanna Rachel; Rodgers, Rachel Florence; Paxton, Susan Jessica; McLean, Siân Alexandra	2021	Both	Young Adulthood (18-29yrs)
Excessive time on social networking sites and disordered eating behaviors among undergraduate students: Appearance and weight esteem as mediating pathways	Murray, Marisa; Maras, Danijela; Goldfield, Gary S	2016	Both	Adulthood (18 yrs & older)
Cyber-victimisation and mental health in young people: A co-twin control study	Baldwin, Jessie R.; Ayorech, Ziada; Rijsdijk, Fruhling V.; Schoeler, Tabea; Pingault, Jean-Baptiste	2021	Both	Adolescence (13-17 yrs) Adulthood (18 yrs & older) Young Adulthood (18-29 yrs)
Does a Facebook-enhanced Mindful Self-Compassion intervention improve body image? An evaluation study.	Seekis, Veya; Bradley, Graham L.; Duffy, Amanda L	2020	Female	Adolescence (13-17 yrs) Adulthood (18 yrs & older) Young Adulthood (18-29 yrs)
Ask and you shall receive: Desire and receipt of feedback via Facebook predicts disordered eating concerns	Hummel, Alexandra C.; Smith, April R.	2015	Both	Adulthood (18 yrs & older)
Initial development and validation of the Online Appearance-Relevant Peer Conversations Scale.	Cai, Ling; Lam, Ka Hou; Leong, Hou Hin; Jackson, Todd	2020	Both	Adolescence (13-17 yrs) Adulthood (18 yrs & older) Young Adulthood (18-29 yrs)
The Appearance-Related Social Media Consciousness Scale: Development and validation with adolescents	Choukas-Bradley, Sophia; Nesi, Jacqueline; Widman, Laura; Galla, Brian M	2020	Male, transge	Adolescence (13-17 yrs) Adulthood (18 yrs & older) Young Adulthood (18-29 yrs)
Is #cleaneating a healthy or harmful dietary strategy? Perceptions of clean eating and associations with disordered eating among young adults.	Ambwani, Suman; Shippe, Meghan; Gao, Ziting; Austin, S. Bryn	2019	both	Adulthood (18 yrs & older) Young Adulthood (18-29 yrs) Thirties (30-39 yrs)
Free to be: Developing a mindfulness-based eating disorder prevention program for preteens.	Klassen, Samantha	2017	Female	Childhood (birth-12 yrs) School Age (6-12 yrs) Adolescence (13-17 yrs) Adulthood (18 yrs & older)
Social network media exposure and adolescent eating pathology in Fiji.	Becker, Anne E.; Fay, Kristen E.; Agnew-Blais, Jessica; Khan, A. Nisha; Striegel-Moore, Ruth H.; Gilman, Stephen E	2011	Female	Adolescence (13-17 yrs) Adulthood (18 yrs & older) Young Adulthood (18-29 yrs)
Media, technology use, and attitudes: Associations with physical and mental well−being in youth with implications for evidence−based practice.	Klassen, Samantha	2018	Both	Adolescence (13-17 yrs) Adulthood (18 yrs & older) Young Adulthood (18-29 yrs)
Body image comparisons on social networking sites and chinese female college students' restrained eating: The roles of body shame, body appreciation, and body	Becker, Anne E.; Fay, Kristen E.; Agnew-Blais, Jessica; Khan, A. Nisha; Striegel-Moore, Ruth H.; Gilman, Stephen E	2020	Female	Young Adulthood (18-29yrs)
Using participant feedback to improve two selective eating disorder and obesity prevention programs.	Zeeni, Nadine; Doumit, Rita; Abi Kharma, Joelle; Sanchez−Ruiz, Maria−Jose	2018	Both	Adolescence (13-17 yrs) Adulthood (18 yrs & older) Young Adulthood (18-29 yrs)

Using social network analysis to better understand compulsive exercise behavior among a sample of sorority members.	Yao, Liangshuang; Niu, Gengfeng; Sun, Xiaojun	2017	Female	Adulthood (18 yrs & older)
Adolescents' experience of anorexia with a friend: A phenomenological study.	Shaw, Heather; Rohde, Paul; Stice, Eric	2018	Female	Adolescence (13-17 yrs)
Digital technology use and muscle−building behaviors in young adults.	Patterson, Megan S.; Goodson, Patricia	2021	Both	Adolescence (13-17 yrs) Young Adulthood (18-29 yrs)
Longitudinal relationships among internalization of the media ideal, peer social comparison, and body dissatisfaction: Implications for the tripartite influence mo	Urban, Hillary	2015	Female	Childhood (birth-12 yrs) School Age (6-12 yrs)
The association between Internet and television access and disordered eating in a Chinese sample.	Nagata, Jason M.; Hazzard, Vivienne M.; Ganson, Kyle T.; Hahn, Samantha L.; Neumark−Sztainer, Dianne; Eisenberg,	2015	Female	Childhood (birth-12 yrs) School Age (6-12 yrs) Adolescence (13-17 yrs) Adulthood (18 yrs & older) Young Adulthood (18-29 yrs) Thirties (30-39 yrs)
Negotiated media effects. Peer feedback modifies effects of media's thin-body ideal on adolescent girls.	Rodgers, Rachel F.; McLean, Siân A.; Paxton, Susan J	2014	Both	Childhood (birth-12 yrs) School Age (6-12 yrs) Adolescence (13-17 yrs) Adulthood (18 yrs & older) Young Adulthood (18-29 yrs)
Objectification theory and the family: The effect of attachment insecurity on self-objectification and attentional bias toward eating disorder stimuli.	Peat, Christine M.; Von Holle, Ann; Watson, Hunna; Huang, Lu; Thornton, Laura M.; Zhang	2016	Female	Adulthood (18 yrs & older) Young Adulthood (18-29 yrs) Thirties (30-39yrs)
The Eating Disorder Examination Questionnaire (EDE-Q) among university men and women at different levels of athleticism.	Veldhuis, Jolanda; Konijn, Elly A.; Seidell, Jacob C	2013	Both	Adulthood (18 yrs & older) Young Adulthood (18-29 yrs)
The Norwegian healthy body image programme: Study protocol for a randomized controlled school-based intervention to promote positive body image and preve	Russon, Jody Moser	2018	Both	Adolescence (13-17 yrs)
Adolescent mental health challenges in the digital world.	Darcy, Alison M.; Hardy, Kristina K.; Lock, James; Hill, Katherine Bell; Peebles, Rebecka	2020	Both	Adolescence (13-17 yrs)
Concurrent and prospective analyses of peer, television and social media influences on body dissatisfaction, eating disorder symptoms and life satisfaction in ado	Sundgot-Borgen, Christine; Bratland-Sanda, Solfrid; Engen, Kethe M. E.; Pettersen, Gunn; Friborg, Oddgeir; Torstveit,	2014	Female	Childhood (birth-12 yrs) School Age (6-12 yrs) Adolescence (13-17 yrs)
Przyjaciółki wirtualnej Any—Zjawisko proanoreksji w sieci internetowej.	Charmaraman, Linda; Sode, Olaide; Bickham, David	2010	Both	Adolescence (13-17 yrs) Adulthood (18 yrs & older) Young Adulthood (18-29 yrs)
Effects of tailored and ACT-influenced internet-based CBT for eating disorders and the relation between knowledge acquisition and outcome: A randomized cont	Ferguson, Christopher J.; Muñoz, Mónica E.; Garza, Adolfo; Galindo, Mariza	2017	Both	Adulthood (18 yrs & older) Young Adulthood (18-29 yrs) Thirties (30-39 yrs) Middle Age (40-64 yrs)
Weight information labels on media models reduce body dissatisfaction in adolescent girls.	Stochel, Martyna; Janas-Kozik, Małgorzata; Psychiatria Polska	2012	Female	Childhood (birth-12 yrs) School Age (6-12 yrs) Adolescence (13-17 yrs)
APOLO-Teens, a web-based intervention for treatment-seeking adolescents with overweight or obesity: Study protocol and baseline characterization of a Portugu	Strandskov, Sandra Weineland; Ghaderi, Ata; Andersson, Hedvig; Parmskog, Nicole; Hjort, Emelie; Wärn, Anna Svanbe	2020	Both	Adolescence (13-17 yrs) Adulthood (18 yrs & older) Young Adulthood (18-29 yrs)
Co-occurrences of substance use and other potentially addictive behaviors: Epidemiological results from the Psychological and Genetic Factors of the Addictive I	Veldhuis, Jolanda; Konijn, Elly A.; Seidell, Jacob C	2020	Both	Adulthood (18 yrs & older) Young Adulthood (18-29 yrs
Barriers and strategies to optimize diabetes management in emerging adults with type 1 diabetes.	Ramalho, Sofia; Saint-Maurice, Pedro F.; Silva, Diana; Mansilha, Helena Ferreira; Silva, Cátia; Gonçalves, Sónia; Mach	2021	Both	Adulthood (18 yrs & older) Young Adulthood (18-29 yrs) Thirties (30-39 yrs)
Disordered eating and group membership among members of a pro−anorexic online community.	Kotyuk, Eszter; Magi, Anna; Eisinger, Andrea; Király, Orsolya; Vereczkei, Andrea; Barta, Csaba; Griffiths, Mark D.; Sza	2012	Female	Childhood (birth-12 yrs) School Age (6-12 yrs) Adolescence (13-17 yrs) Adulthood (18 yrs & older) Young Adulthood (18-29 yrs)
Media image stereotypes and ethnic identity of young Black college women.	Sawyer, Bailee Catherine	2017	Female	Adulthood (18 yrs & older) Young Adulthood (18-29 yrs
The associations between pathological narcissism, alexithymia and disordered eating attitudes among participants of pro−anorexic online communities.	Rodgers, Rachel F.; Skowron, Sabrina; Chabrol, Henri	2014	Female	Adulthood (18 yrs & older) Young Adulthood (18-29 yrs) Thirties (30-39 yrs)
The household economic burden of eating disorders and adherence to treatment in Australia.	Bennett, Kourtney	2014	Both	Adulthood (18 yrs & older)
Use of social networking sites and desire for slimness among 10−year−old girls and boys: A population−based birth cohort study.	Zerach, Gadi	2020	Both	Childhood (birth-12 yrs) School Age (6-12 yrs)
What are you thinking when you look at me?' A pilot study of the use of virtual reality in body image.	Gatt, Lauren; Jan, Stephen; Mondraty, Naresh; Horsfield, Sarah; Hart, Susan; Russell, Janice; Laba, Tracey Lea; Essue	2016	Female	Adulthood (18 yrs & older)
The MABIC project: An effectiveness trial for reducing risk factors for eating disorders.	Sugimoto, Noriko; Nishida, Atsushi; Ando, Shuntaro; Usami, Satoshi; Toriyama, Rie; Morimoto, Yuko; Koike, Shinsuke	2016	Female	Adolescence (13-17 yrs)
Body size ideals and dissatisfaction in Ghanaian adolescents: Role of media, lifestyle and well-being.	Mountford, Victoria A.; Tchanturia, Kate; Valmaggia, Lucia	2017	Both	Childhood (birth-12 yrs) School Age (6-12 yrs) Adolescence (13-17 yrs) Adulthood (18 yrs & older) Young Adulthood (18-29 yrs)
Anorexia nervosa and social contagion: Clinical implications.	Sánchez-Carracedo, David; Fauquet, Jordi; López-Guimerà, Gemma; Leiva, David; Puntí, Joaquim; Trepat, Esther; Pàm	2014	Female	Adolescence (13-17 yrs)

Negative comparisons about one's appearance mediate the relationship between Facebook usage and body image concerns.	Michels, N.; Amenyah, S. D	2015	Female	Adulthood (18 yrs & older)
Internet addiction symptoms, disordered eating, and body image avoidance.	Allison, Stephen; Warin, Megan	2013	Both	Adulthood (18 yrs & older) Young Adulthood (18-29 yrs) Thirties (30-39yrs)
Examining similarities in eating pathology, negative affect, and perfectionism among peers: A social network analysis.	Fardouly, Jasmine; Vartanian, Lenny R.	2019	Both	Adulthood (18 yrs & older)
Bones, body parts, and sex appeal: An analysis of #thinspiration images on popular social media.	Rodgers, Rachel F.; Melioli, Tiffany; Laconi, Stéphanie; Bui, Eric; Chabrol, Henri	2015	Female	Childhood (birth-12 yrs) School Age (6-12 yrs) Adolescence (13-17 yrs) Adulthood (18 yrs & older)
The role of body image in the relationship between Internet use and bulimic symptoms: Three theoretical frameworks.	Forney, K. Jean; Schwendler, Teresa; Ward, Rose Marie	2015	Female	Adulthood (18 yrs & older) Young Adulthood (18-29 yrs
Status update: Maladaptive Facebook usage predicts increases in body dissatisfaction and bulimic symptoms.	Ghaznavi, Jannath; Taylor, Laramie D	2013	Female	Adolescence (13-17 yrs) Adulthood (18 yrs & older) Young Adulthood (18-29 yrs) Thirties (30-39yrs)
Social media effects on young women's body image concerns: Theoretical perspectives and an agenda for research.	Melioli, Tiffany; Rodgers, Rachel F.; Rodrigues, Marie; Chabrol, Henri	2014	Female	Young Adulthood (18-29yrs)
Media exposure, extracurricular activities, and appearance-related comments as predictors of female adolescents' self-objectification.	Smith, April R.; Hames, Jennifer L.; Joiner, Thomas E. Jr	2015	Female	Adolescence (13-17 yrs)
Pro-eating disorder communities on social networking sites: A content analysis.	Perloff, Richard M.	2010	Female	Adulthood (18 yrs & older)
Predictors of 'liking' three types of health and fitness-related content on social media:A cross-sectional study.	Derenne, Jennifer L.; Beresin, Eugene V	2015	Both	Adolescence (13-17 yrs) Adulthood (18 yrs & older) Young Adulthood (18-29 yrs)
Using social network analysis to clarify the role of obesity in selection of adolescent friends.	Slater, Amy; Tiggemann, Marika	2014	Both	Adolescence (13-17 yrs)
Is exposure to online content depicting risky behavior related to viewers' own risky behavior offline?	Juarascio, Adrienne S.; Shoaib, Amber; Timko, C. Alix	2017	Both	Adulthood (18 yrs & older) Young Adulthood (18-29 yrs)
Contextualizing the 'student body': Is exposure to older students associated with body dissatisfaction in female early adolescents?	Carrotte, Elise R.; Vella, Alyce M.; Lim, Megan S. C	2015	Female	Childhood (birth-12 yrs) School Age (6-12 yrs) Adolescence (13-17 yrs)
Mirror, mirror on the wall: How women learn body dissatisfaction.	Schaefer, David R.; Simpkins, Sandra D	2014	Female	Adulthood (18 yrs & older) Young Adulthood (18-29 yrs) Thirties (30-39 yrs) Middle Age (40-64 yrs)
Effects of attributions and social media exposure on obesity stigma among Korean adolescents.	Branley, Dawn Beverley; Covey, Judith	2018	Both	Adolescence (13-17 yrs) Adulthood (18 yrs & older) Young Adulthood (18-29 yrs)
The use of videogames as complementary therapeutic tool for cognitive behavioral therapy in bulimia nervosa patients.	Strauss, Jaine; Sullivan, Jacklyn M.; Sullivan, Christine E.; Sullivan, Stephen J.; Wittenberg, Chloe E.	2015	Female	Adulthood (18 yrs & older) Young Adulthood (18-29 yrs) Thirties (30-39 yrs) Middle Age (40-64 yrs)
Eating disorder behaviors and ideal-type print media exposure in middle-aged women.	Lev-Ari, Lilac; Baumgarten-Katz, Inbar; Zohar, Ada H	2012	Female	Adulthood (18 yrs & older) Thirties (30-39 yrs) Middle Age (40-64 yrs)
Body image in eating disorders: The influence of exposure to virtual-reality environments.	Lim, Yujin; An, Soontae	2010	Female	Adolescence (13-17 yrs) Adulthood (18 yrs & older) Young Adulthood (18-29 yrs)
Facebook and body image concern in adolescent girls: A prospective study.	George, Valerie A.; Erb, Allison F.; Harris, Cristen L.; Casazza, Krista	2017	Female	Adolescence (13-17 yrs)
You are what your friends eat: Systematic review of social network analyses of young people's eating behaviours and bodyweight.	Fernandez-Aranda, Fernando; Jimenez-Murcia, Susana; Santamaría, Juan J.; Giner-Bartolomé, Cristina; Mestre-Bach, G	2011	Both	Unclear (states "young people)
General psychopathology in anorexia nervosa: The role of psychosocial factors.	Cornelious, Patricia	2010	Female	Adulthood (18 yrs & older)
Social support and psychological well−being in gender dysphoria: A comparison of patients with matched controls.	Davey, Amanda; Bouman, Walter P.; Arcelus, Jon; Meyer, Caroline	2014	Both	Adulthood (18 yrs & older) Young Adulthood (18-29 yrs) Thirties (30-39 yrs) Middle Age (40-64 yrs) Aged (65 yrs & older)
Observable weight distributions and children's individual weight assessment.	Brown, H. Shelton III; Evans, Alexandra E.; Mirchandani, Gita G.; Kelder, Steven H.; Hoelscher, Deanna M	2010	Both	Childhood (birth-12 yrs) School Age (6-12 yrs)
Relationships between self-esteem, media influence and drive for thinness.	Fernandez, Sofia; Pritchard, Mary	2012	Both	Adulthood (18 yrs & older) Young Adulthood (18-29 yrs) Thirties (30-39 yrs) Middle Age (40-46yrs)
Abstracts of the 2nd International Conference on Behavioral Addictions—March 16–18, 2015, Budapest, Hungary.	No Author indicated	2015	None	None
The relationship between internet addiction and body mass index in Turkish adolescents.	Canan, Fatih; Yildirim, Osman; Ustunel, Tuba Yildirim; Sinani, Gjergji; Kaleli, Arzu Hisarvant; Gunes, Cemalettin; Atac	2014	Both	Adolescence (13-17 yrs) Adulthood (18 yrs & older) Young Adulthood (18-29 yrs)
Body dissatisfaction: Can a short media literacy message reduce negative media exposure effects amongst adolescent girls?	Halliwell, Emma; Easun, Alice; Harcourt, Diana	2011	Female	Childhood (birth-12 yrs) School Age (6-12 yrs) Adolescence (13-17 yrs)
Identifying attentional bias and emotional response after appearance-related stimuli exposure.	Cho, Ara; Kwak, Soo-Min; Lee, Jang-Han	2013	Female	Adulthood (18 yrs & older)
Implicit and explicit self-esteem in the context of Internet addiction.	Stieger, Stefan; Burger, Christoph	2010	Both	Adulthood (18 yrs & older) Young Adulthood (18-29 yrs) Thirties (30-39 yrs) Middle Age (40-64 yrs) Aged (65 yrs & older))

APPENDIX F

Data Collection and Extraction Form

Document ID#

Authors and Year *(last names of authors and year of publication, e.g., Johnson, Jones, and*

Full Document Title

Research Variables

Notes:

General Information

1. **Date form completed** ***(dd/mm/yyyy)***	
2. **Initials/ID of person extracting data**	
3. **Source/Publication Type** *(journal, book, conference, report, dissertation, abstract, etc.)*	
4. **Source Name** *(Title of Journal, Book, Organization, etc.)*	
5. **Publication Status** *(Published, Unpublished)*	
6. **Document Language**	
7. **OTHER:**	
8. **Notes:**	

Design Characteristics and Methodological Features

	Descriptions as stated in report/paper	**Location in text** *(pg & ¶/fig/table)*
9. **Aim of study**		
10. **General Method** (Quant, Qual, Mixed)		

11. **Design or Specific Research Approach**		
12. **Notes:**		

Assessment of Research Variables

RESEARCH VARIABLES	**How Assessed** *(Measure, Observation, Interview Question, Archival, etc.)*
13. **Variable 1**	**Anorexia nervosa/eating disorders/body image**
14. **Variable 2**	**Social media**
15. **Notes:** How did they assess these variables?	

Study Participant Characteristics and Recruitment

	Description as stated in report/paper	**Location in text** *(pg & ¶/fig/table)*
16. **Population of Interest**		
17. **Recruitment Methods**		
18. **Sample Size**		
19. **Age**		
20. **Gender**		
21. **Race/Ethnicity**		

	Description as stated in report/paper	Location in text *(pg & ¶/fig/table)*
22. **Notes:**		

Setting Characteristics

	Descriptions as stated in report/paper	Location in text *(pg & ¶/fig/table)*
23. **Study Location**		
24. **Data Collection Setting(s)**		
25. **Notes:**		

Analyses Conducted

	Description as stated in report/paper	Location in text (pg & ¶/fig/table)
26. **Descriptive Statistics used**		
27. **Inferential Statistics used**		
28. **Qualitative Analyses conducted**		

	Description as stated in report/paper	**Location in text** (pg & ¶/fig/table)
29. **Other**		
30. **Notes:**		

Results

	Description as stated in report/paper	**Location in text** *(pg & ¶/fig/table)*
31. **Key Results**		
32. **Notes:**		

Conclusions and Follow-up

	Description as stated in report/paper	**Location in text** *(pg & ¶/fig/table)*
33. **Key conclusions of study authors**		
34. **Study Author's Recommendations for Future Research**		
35. **Does the study directly address your review question?** ***(any issues of partial or indirect applicability)***		

36. **Your Take-Aways: General**		
37. **Your Take-Aways: Implications for Practice**		
38. **Salient Study Limitations (to inform Quality Appraisal)**		
39. **References to other relevant studies**		
40. **Other publications from this dataset**		
41. **Further study information needed?** *(from whom, what and when, contact info)*		
42. **Correspondence received** *(from whom, what and when)*		
43. **Notes:**		

Modified from: *Effective Practice and Organisation of Care (EPOC). Data collection form. EPOC Resources for review authors. Oslo: Norwegian Knowledge Centre for the Health Services; 2013. Available at: http://epoc.cochrane.org/epoc-specific-resources-review-authors*

APPENDIX G

Quality Appraisal Form

INDIVIDUAL STUDY QUALITY ASSESSMENT

Author(s) and Year: _____ Study ID#_____

1. **Methodology:** Quantitative Qualitative Mixed Methods
2. **Specific Design/Inquiry Approach**:_____

RATING SCALE: Strong=3 Good/Adequate=2 Weak=1 Missing=0 N/A

3. **Strength of Literature Foundation and Rationale for Study: _____**
   (POSSIBLE CONSIDERATIONS: current and relevant references, background literature sufficiently comprehensive, Need/Rationale for study clearly stated, etc.)

4. **Clarity and specificity of Research Aims/Objectives/Questions: _____**

5. **Quality of research design or methodological approach: _____**
   (POSSIBLE CONSIDERATIONS: provides rationale for design chosen, appropriateness for research questions, clear description of design and methodological approach, strength of design characteristics utilized (e.g., randomization, blinding, triangulation, etc.), potential confounds identified and addressed in some way, consideration of internal and external validity in design, specific design–based "risk of bias" criteria)

6. **Sample Selection and Characteristics: _____**
   (POSSIBLE CONSIDERATIONS: adequacy of sample size in context of design, detailed description of sample characteristics, representativeness of sample, adequacy of sample characteristics in the context of research aims, detailed description of recruitment and selection of participants, extent of selection or sample bias,)

7. **Measures / Data Collection Tools: _____**
   (POSSIBLE CONSIDERATIONS: rationale for selection, appropriateness for assessing variables, development of new tool clearly described, psychometric properties (reliability, validity, utility) described, adequacy of psychometric properties, sufficiently comprehensive, etc.)

8. **Data Collection: _____**
   (POSSIBLE CONSIDERATIONS: data collection procedures clearly described, intervention strategies and implementation described in detail, quality of data collected, attrition, etc.)

9. **Analysis of Data: _____**
   (POSSIBLE CONSIDERATIONS: appropriateness of analysis for research questions and type of data, power and effect size presented, results presented clearly and comprehensively, etc.)

10. **Discussion of Study Limitations: _____**
    (POSSIBLE CONSIDERATIONS: identifies and discusses limitations in the context of design/strategy utilized (e.g., various forms of bias, internal validity, external validity (generalizability), ecological validity,
    transferability, credibility, transparency, etc.), comprehensiveness of limitations identified)

11. **Consideration of culture and diversity: _____**
    (POSSIBLE CONSIDERATIONS: attention to diversity within sample, includes culturally appropriate methods and tools, avoids biased language, uses appropriate terminology, etc.)

12. **OVERALL RATING: EXEMPLARY STRONG GOOD/ADEQUATE WEAK**
    (all "3"s) (mostly "3"s) (mostly "2"s) (mostly "1"s)

APPENDIX H

Data Extraction Form (Spreadsheet)

Study ID	Author	Title	Year	Country	Age of participants	Sample size
1	Evelyn P. Meier, MA, and Jame	Facebook Photo Activity Associated with Body Image Disturbance in Adolescent Girls	2014	USA	12 to 18	103
2	Marika Tiggemann, PhD and A	Facebook and Body Image Concern in Adolescent Girls: A Prospective Study	2016	Australia	13-15	438
3	Marika Tiggemann, PhD and A	NetGirls: The Internet, Facebook, and Body Image Concern in Adolescent Girls	2013	Australia	13-15	1,087
4	Sian A. McLean, BSc, Susan J. I	Photoshopping the Selfie: Self Photo Editing and Photo Investment are Associated with Body Dissatisfaction i	2015	Australia	13	101
5	Sian A. McLean, BSc, Susa	A pilot evaluation of a social media literay intervention to reduce risk factors for eating disorders	2017	Australia	11-14	101
6	Christopher J. Ferguson, Monic	Concurrent and Prospective Analyses of Peer, Television and Social Media Influences on Body Dissatisfaction,	2013	USA	10-17	237
7	Anne E. Becker, Kristen E. Fay,	Social network media exposure and adolescent eating pathology in Fiji	2011	Fiji	15-19	523

Sample size	Ethnicity	Gender	Social media platforms included in study, if specified (instagram, facebook, etc.)	Body image concerns? (Y/N)	Disordered eating? (Y/N)
103	All (predominately white (84.5%)	Female	Facebook	Y	Y
438	All	Female	Facebook	Y	Y
1,087	All	Female	Facebook	Y	Y
101	All	Female	Assessed generic social media use, rather than specific sites (Twitter, Snapchat, Ins	Y	Y
101	Australian or New Zealand (93%), south-east Asia (3%), United Kingdom (	Female	Not specified	Y	Y
237	Hispanic (95%), Caucasian (2.5%), "other" (3.4%)	Female	Various forms (Twitter, Facebook, Youtube, Wordpress etc..)	Y	Y
523	Fijian	Female	Not specified	Y	Y

Was social media use found to increase symptoms/concerns?	Findings
Yes, amount of time allotted to photo activity is associated wit	No significant correlations were found for total FB use and any body image variables significant difference between non-FB users and
Yes, Facebook use was associated with subsequent higher leve	The number of Facebook friends prospectively predicted the observed increase in the drive for thinness and internalization 2 years
Yes, time spent on the Internet was significantly related to int	Girls used the Internet for streaming media and visiting shopping, fashion, celebrity, and magazine websites, likely to have an
Yes, girls who regularly shared self-images on social media, re	the relationship between body-related and eating concerns and social media can be differentiated by the passive or active nature of
Pilot study about reduction of sysmptoms/concerns from socia	Media literacy intervention shown to reduce dietary restraint (prevention of risk for eating disorders) and improve body esteem
Indirectly yes, social media use was found to contribute to late	Focus away from media viewers as passive victims of a media that done to them but active shapers and consumers of media. Small
Yes, Social network media exposure was associated with eatin	Social network media exposure was associated with eating pathology in this Fijian study sample, independent of direct media

APPENDIX I

Data Synthesis for Research Questions

Research Question 1:

| Research Question 1: Is there a relationship between social media use, body dissatisfaction, and/or eating disorder symptoms? | | |

Research Question 2:

Research Question 2: What social media platforms and forms of engagement on social media are related to body image concerns and disordered eating symptoms?			
Study ID	Author	Study Title	Social media platform included
1	Evelyn P. Meier, MA, and James Gray, PhD	Facebook Photo Activity Associated with Body Image Disturbance in Adolescent Girls	
2	Marika Tiggemann, PhD and Amy Slater, PhD	Facebook and Body Image Concern in Adolescent Girls: A Prospective Study	
3	Marika Tiggemann, PhD and Amy Slater, PhD	NetGirls: The Internet, Facebook, and Body Image Concern in Adolescent Girls	
4	Sian A. McLean, BSc, Susan J. Paxton, PhD, Eleanor H. Wertheim, PhD & Jennifer Masters, PhD	Photoshopping the Selfie: Self Photo Editing and Phot Instagram, Snapchat, Facebook + mo	
5	Sian A. McLean, BSc, Susan J. Paxton, PhD, Eleanor H. Wertheim, PhD & Jennifer Masters, PhD	A pilot evaluation of a social media literay intervention to reduce risk factors for eating dis	
6	Christopher J. Ferguson, Monica E. Munoz, Adolfo Garza & Mariza Galindo	Concurrent and Prospective Analyses of Peer, Television and Social Media Influences on Bo	
7	Anne E. Becker, Kristen E. Fay, Jessica Agnew-Blais, A. Nisha Khan, Ruth H. Striegel-Moore and Stephen E. Gilman	Social network media exposure and adolescent	

What forms of social media use/engagement? (if assessed;	How much time spent on social media (if assessed)?	Any additional relevant info on participant social media behaviors?
Facebook: create an event; create/share a Facebook quiz; cre	Not specified	-
time spent on Facebook and number of friends	Time spent on Facebook increased (58.82-> 100.52)	ownership of Facebook profile increased over 2 years to over 90% and number of friends
time spent on Internet and specific platforms (Facebook and	"about 2 hours" each day during the week and weekend; spent an aver	95.9% had access to Internet at hom and 43.4% in their own bedroom; Highly endorsed email, instant messaging, social networking (Facebook) an
time spent on Internet; use of text messages, email, Twitter,	exposed to a little under 5hrs per day of digital media	text messages (98%), emails (95%), social networks (86%), Twitter (20%), virtual worlds (20%); 50.5% taking "selfies" at least once per fortnight a
selection and modification of images to present one's "l	not specified in this study** (escalating and frequently occupies great	-
Frequency of use on social media - social gaming sites,	Not specified	-
Weekly frequency of personal TV or video viewing, level of pe	3 evenings a week viewing TV; 88.3% at least one evening of TV viewi	access to TV, video deck or DVD player at household showed higher potential for indirect media exposure

Research Question 3:

Research Question 3: What is the age, ethnicity, and SES of adolescent females endorsing body dissatisfaction and/or eating disorder symptoms?					
Study ID	Author	Study Title	Country	Age of participants (	
1	Kieron P. Meier, MA, and James Gray, PhD	Facebook Photo Activity Associated with Body Image Disturbance in Adolescent Girls	USA	13-18	
2	Marika Tiggemann, PhD and Amy Slater, PhD	Facebook and Body Image Concern in Adolescent Girls: A Prospective Study	Australia	13-15	
3	Marika Tiggemann, PhD and Amy Slater, PhD	NetGirls: The Internet, Facebook, and Body Image Concern in Adolescent Girls	Australia	13-15	
4	Sian A. McLean, BSc, Susan J. Paxton, PhD, Eleanor H. Wertheim, PhD & Jennifer Masters, PhD	Photoshopping the Selfie: Self Photo Editing and Photo Investment are Associated with Body Dissatisfaction in Ad	Australia	13	
5	Sian A. McLean, BSc, Susan J. Paxton, PhD, Eleanor H. Wertheim, PhD & Jennifer Masters, PhD	A pilot evaluation of a social media literacy intervention to reduce risk factors for eating disorders	Australia	11-14	
6	Christopher J. Ferguson, Monica E. Munoz, Adolfo Garza & Marisa Galindo	Concurrent and Prospective Analyses of Peer, Television and Social Media Influences on Body Dissatisfaction, Eati	USA	10-17	
7	Anne E. Becker, Kristen E. Fay, Jessica Agnew-Blais, A. Nisha Khan, Ruth H. Striegel-Moore and Stephen E. Gilman	Social network media exposure and adolescent eating pathology in Fiji	Fiji	15-20	

(Race/ethnicity of participants (num	Socioeconomic status (if reported)	Any additional characteristics of participants (if relevant or given)
All (predominately white (84.5%))	none reported	sample size: 484; all female; public middle and high school
All	none reported	sample size: 483; all female
All	wide range of SES (M: 5.6; R: 1-10)	sample size: 1,087; all female; selection covered metropolitan and rual, private and public schools (18); most common languages spoken other than English were Freek followed by Vietnamese
All	none reported	sample size: 101; all female; recruited from co-educational secondary public and one single-sex independent secondary school in metropolitan area
Australian or New Zealand (93%),	none reported	sample size: 317; all female; recruited from one co-educational public and one private girls secondary school
Hispanic(95%), Caucasian (2.5%),	none reported	sample size: 223; all female; Hispanic; recruited specifically
Fijian	none reported	sample size: 523; all female; approx. half of participants attened school in an urban or peri-urban location and half in a rural location; 11% personally trawelled overseas; 40% had a parent or sibli

APPENDIX J

Summary of Studies

Authors	Title	Country	Study Size	Participant Ages
Meier and Gray (2014)	Facebook Photo Activity Associated With Body Image Disturbance in Adolescent Girls	USA	*N* = 103	12–18
Tiggemann and Slater (2016)	Facebook and Body Image Concern in Adolescent Girls: A Prospective Study	Australia	*N* = 438	13–15
Tiggemann and Slater (2013)	NetGirls: The Internet, Facebook, and Body Image Concern in Adolescent Girls	Australia	*N* = 1,087	13–15
McLean et al. (2015)	Photoshopping the Selfie: Self Photo Editing and Photo Investment are Associated With Body Dissatisfaction in Adolescent Girls	Australia	*N* = 101	13
McLean et al. (2017)	A Pilot Evaluation of a Social Media Literacy Intervention to Reduce Risk Factors for Eating Disorders	Australia	*N* = 101	11–14
Ferguson et al. (2013)	Concurrent and Prospective Analyses of Peer, Television and Social Media Influences on Body Dissatisfaction, Eating Disorder Symptoms and Life Satisfaction in Adolescent Girls	USA	*N* = 237	10–17
Becker et al. (2011)	Social Network Media Exposure and Adolescent Eating Pathology in Fiji	Fiji	*N* = 523	15–19

Becker, A. E., Burwell, R. A., Herzog, D. B., Hamburg, P., & Gilman, S. E. (2002). Eating behaviours and attitudes following prolonged exposure to television among ethnic Fijian adolescent girls. *The British Journal of Psychiatry*, *180*(6), 509–514. https://doi.org/10.1192/BJP.180.6.509

Ferguson, C. J., Muñoz, M. E., Garza, A., & Galindo, M. (2013). Concurrent and prospective analyses of peer, television and social media influences on body dissatisfaction, eating disorder symptoms and life satisfaction in adolescent girls. *Journal of Youth and Adolescence*, *43*(1), 1–14. https://doi.org/10.1007/s10964-012-9898-9

McLean, S. A., Paxton, S. J., Wertheim, E. H., & Masters, J. (2015). Photoshopping the selfie: Self photo editing and photo investment are associated with body dissatisfaction in adolescent girls. *International Journal of Eating Disorders*, *48*(8), 1132–1140. https://doi.org/10.1002/eat.22449

McLean, S. A., Wertheim, E. H., Masters, J., & Paxton, S. J. (2017). A pilot evaluation of a social media literacy intervention to reduce risk factors for eating disorders. *International Journal of Eating Disorders*, *50*(7), 847–851. https://doi.org/10.1002/eat.22708

Meier, E. P., & Gray, J. (2014). Facebook photo activity associated with body image disturbance in adolescent girls. *Cyberpsychology, Behavior, and Social Networking*, *17*(4), 199–206. https://doi.org/10.1089/cyber.2013.0305

Tiggemann, M., & Slater, A. (2013). NetGirls: The Internet, Facebook, and body image concern in adolescent girls. *International Journal of Eating Disorders*, *46*(6), 630–633. https://doi.org/10.1002/eat.22141

Tiggemann, M., & Slater, A. (2016). Facebook and body image concern in adolescent girls: A prospective study. *International Journal of Eating Disorders*, *50*(1), 80–83. https://doi.org/10.1002/eat.22640

APPENDIX K

IRB Approval

PEPPERDINE UNIVERSITY

Graduate & Professional Schools Institutional Review Board

May 10, 2022

Protocol #: **51122**

Project Title: Social Media, Disordered Eating, and Body Image in Adolescent Females: A Systematic Review of the Literature.

Dear Alara:

Thank you for submitting a "GPS IRB Non-Human Subjects Notification Form" for *Social Media, Disordered Eating, and Body Image in Adolescent Females: A Systematic Review of the Literature* project to Pepperdine University's Institutional Review Board (IRB) for review. The IRB has reviewed your submitted form and all ancillary materials. Upon review, the IRB has determined that the above titled project meets the requirements for *non-human subject research* under the federal regulations 45 CFR 46.101 that govern the protection of human subjects.

Your research must be conducted according to the form that was submitted to the IRB. If changes to the approved project occur, you will be required to submit *either* a new "GPS IRB Non-Human Subjects Notification Form" or an IRB application via the eProtocol system (httpw://irb.pepperdine.edu) to the Institutional Review Board.

A goal of the IRB is to prevent negative occurrences during any research study. However, despite our best intent, unforeseen circumstances or events may arise during the research. If an unexpected situation or adverse event happens during your investigation, please notify the IRB as soon as possible. We will ask for a complete explanation of the event and your response. Other actions also may be required depending on the nature of the event. Details regarding the timeframe in which adverse events must be reported to the IRB and documenting the adverse event can be found in the *Pepperdine University Protection of Human Participants in Research: Policies and Procedures Manual* at https://community.pepperdine.edu/irb/policies/.

Please refer to the protocol number denoted above in all further communication or correspondence related to this approval.

On behalf of the IRB, we wish you success in this scholarly pursuit.

Sincerely,

Institutional Review Board (IRB)
Pepperdine University

cc: Mrs. Katy Carr, Assistant Provost for Research
Dr. Judy Ho, Graduate School of Education and Psychology IRB Chair