

Instagram's Influence on Body Dysmorphic Disorder (BDD): A Scoping Review

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ABSTRACT : Social media platforms that foreground images, filters, and editing tools have been linked to appearance-based social comparison, body dissatisfaction, and body dysmorphic disorder (BDD). Instagram, as one of the largest and most image-centred platforms, has drawn increasing clinical and research interest, but there is no synthesis of this literature that currently exists. This scoping review mapped the existing peer-reviewed literature on the relationship between Instagram use and BDD, in order to identify what is known, how the relationship has been studied, and where gaps in current knowledge remain. Following a five-stage PRISMA-ScR framework and its reporting guidelines, six electronic databases (Scopus, PubMed, Science Direct, Wiley Online Library, Web of Science, and EBSCOhost) were searched for English-language, peer-reviewed primary studies published up to August 2025. Screening was conducted independently by two reviewers. Thirteen studies (N = 7 802 participants) met the inclusion criteria. All were quantitative, survey-based studies conducted predominantly in Europe and Asia, with samples skewed toward female adolescents and young adults. Findings consistently showed a positive association between Instagram engagement; particularly appearance-focused content consumption, photo editing, filter use, and appearance-based social comparison, and elevated body dysmorphic symptoms. Appearance-based rejection sensitivity, perfectionism, and low self-esteem emerged as psychological mechanisms underlying this relationship, while body appreciation functioned as a protective factor. Instagram use appears to be associated with, and may contribute to the maintenance of, body dysmorphic symptoms, although the cross-sectional and self-report nature of the existing evidence base precludes causal conclusions. Longitudinal and qualitative research, greater inclusion of male and non-binary participants, and studies conducted outside Europe, Asia, and North America; including in South Africa, where no studies currently exist, are needed.

KEYWORDS : *Instagram; body dysmorphic disorder; body image; social media; scoping review; appearance comparison.*

I. INTRODUCTION

Social media has expanded dramatically in recent years, transforming how individuals perceive, present, and evaluate physical appearance (Ryding, 2021). The emphasis on image sharing, coupled with extensive photo-editing capabilities and beauty filters, has created an environment conducive to, and maybe even prompting, appearance-based social comparison and idealisation (Fardouly & Vartanian, 2016). With social media providing instant access to others' opinions and visual images for comparison, many individuals pursue an unattainable idealised appearance standard (Ateq et al., 2024), a pursuit that frequently results in body dissatisfaction and decreased self-esteem (Ryding & Kuss, 2019), and which can, in turn, contribute to mental health disorders or drive individuals toward extreme appearance-altering measures such as cosmetic surgery (Ateq et al., 2024). Regular users of beauty filters, for example, report increased consideration of cosmetic procedures, consistent with greater engagement in appearance-focused content (Hermans et al., 2022; Tamplin et al., 2018; Varman et al., 2021).

These appearance-related concerns co-occur with a broader set of social-media-associated mental health risks. Nighttime social media engagement has been shown to disrupt sleep and elevate anxiety and depression symptoms (Wong et al., 2022), and higher Instagram use has been longitudinally associated with disordered eating; additionally, adolescents spending more than two hours daily on image-based platforms showed a 2.6-fold increase in risk of clinically significant eating disorder symptoms relative to minimal users (Wilksch et al., 2020). Sleep disturbance, disordered eating, and a desire for appearance modification interact to create a high-risk environment for individuals vulnerable to body dysmorphic disorder (BDD).

BDD is characterised by a preoccupation with perceived defects or flaws in physical appearance that are not observable, or appear only slight, to others, and which causes significant distress and functional impairment (American Psychiatric Association, 2013). BDD affects approximately 2% of the general population, with higher rates among adolescents and young adults (Schneider et al., 2017; Veale & Bewley, 2015). Although appearance-related concerns are documented across platforms such as Facebook and X (formerly Twitter), Instagram is of particular relevance given its scale of over 1.4 billion active users globally (John et al., 2024), and its emphasis on images, filters, and visual self-presentation, which together create a uniquely appearance-centred digital environment (Cohen et al., 2019; Tiggemann & Barbato, 2018). Instagram's algorithmic delivery of content further tends to amplify appearance-focused material, potentially intensifying exposure to idealised imagery (Cotter, 2018). Despite growing clinical observations linking Instagram use to BDD symptomatology (Enander et al., 2018), systematic synthesis of this relationship has, until now, been lacking.

This scoping review therefore aimed to map the existing literature on the relationship between Instagram and BDD, synthesise available findings on how Instagram may influence the development, maintenance, or exacerbation of BDD symptoms, and identify gaps to guide future research, clinical practice, and platform design. Specifically, the review addressed two questions: (1) What is known from the existing literature about Instagram's influence on BDD? and (2) To what extent does the available literature discuss the relationship between Instagram and BDD?

1.1 Body Image, Social Media, and Instagram

Body image is a multifaceted construct encompassing an individual's perceptions, thoughts, and feelings about their body and physical appearance (Digennaro & Tescione, 2024; Sparhawk, 2003), and difficulties arise when a perceived gap exists between actual and idealised appearance. Body dissatisfaction has long been linked to lowered self-esteem, anxiety, depression, and relationship difficulties (Frederick et al., 2017; Qamar & Ali, 2026; Tomas-Aragones & Marron, 2016), and can, in severe cases, develop into a diagnosable disorder. Social media differs from traditional media (e.g., magazines, television) in that users themselves are the subjects of curated, idealised self-presentations (Fardouly & Vartanian, 2016), a dynamic intensified by influencer culture, in which public figures model an aspirational standard of appearance and flawlessness (Aguilo et al., 2022).

Instagram, specifically, has been associated with appearance comparison, internalisation of body ideals, and body dissatisfaction (Lee & Lee, 2021; Stein et al., 2020), with adolescent females exposed to edited peer images reporting worse body image than unexposed peers (Digennaro & Tescione, 2024). Both active use (posting, engaging) and passive use (browsing without interacting) have been linked to negative body image outcomes, and both have been associated with increased consideration of cosmetic surgery (Bell et al., 2024; Hermans et al., 2022). The type of content consumed, particularly appearance-related content and upward appearance comparison, appears to matter more than platform use alone (Chang et al., 2019; Di Gesto et al., 2022; Walker et al., 2019).

1.2 Body Dysmorphic Disorder

Individuals with BDD typically have poor insight into their condition and elevated suicidality, particularly when they perceive themselves to have exhausted options for correcting a perceived flaw (Tomas-Aragones & Marron, 2016). Skin, hair, and nose are among the most common areas of preoccupation (Bjornsson et al., 2010; Liu et al., 2025; Phillips et al., 1999), and individuals with BDD may experience five to seven distinct body-part preoccupations across their lifetime (Bjornsson et al., 2010). BDD is distinguished from eating disorders in that the latter require abnormal eating patterns for diagnosis, whereas BDD centres on perceived physical defect rather than weight, shape, or food control (Gorbis & Jamero, 2019; Kollei et al., 2012). A muscularity-focused specifier, muscle dysmorphia (MD), is more prevalent among males and is similarly linked to social media use and content type (American Psychiatric Association, 2013; Ganson et al., 2023; Giordano et al., 2025; Imperatori et al., 2022; Matzen, 2020).

Sociocultural factors, including peer, family, and media influence, are implicated in BDD's development (Abbas & Dodeen, 2021), and identified risk factors include frequent photo editing, concern with others' evaluation of one's appearance, and acceptance of cosmetic surgery (Bugeja et al., 2026). Adolescents and young adults, still consolidating their identities, appear particularly vulnerable to appearance comparison on platforms such as Instagram (Kadavathe Peedikayil, 2025), and social media use has also been shown to maintain and exacerbate symptoms among individuals already diagnosed with BDD (Laughter et al., 2023). Given this convergence of clinical concern and platform-specific features, and the relative absence of research from South Africa and the broader African continent, a systematic mapping of this literature was warranted.

II. METHODS

This scoping review followed Arksey and O'Malley's (2005) five-stage framework; (1) identifying the research question, (2) identifying relevant studies, (3) study selection, (4) charting the data, and (5) collating, summarising, and reporting results, and adhered to the PRISMA-ScR (Preferred Reporting Items for Systematic Reviews and Meta-Analyses extension for Scoping Reviews) reporting guidelines (Tricco et al., 2018). The optional sixth stage (stakeholder consultation) was not undertaken.

2.1 Search Strategy

Six electronic databases: Scopus, PubMed, Science Direct, Wiley Online Library, Web of Science, and EBSCOhost, were searched via the University of KwaZulu-Natal online library. Search terms combined (Instagram) AND (body dysmorphic disorder OR BDD OR body dysmorphia) using Boolean logic, applied across titles, keywords, abstracts, and full text, with no date, geographic, or other limiters. Searches were conducted between July and August 2025.

2.2 Eligibility Criteria

Inclusion criteria were: published in English; peer-reviewed; primary research (qualitative, quantitative, or mixed-methods); human participants; full-text availability; and a focus on the relationship between Instagram and BDD, body dysmorphic symptoms, or body dysmorphia. Studies on muscle dysmorphia were included as a recognised BDD subtype. Studies addressing social media broadly were included only where Instagram was explicitly identified as one of the platforms studied; studies addressing body image generally, without reference to BDD or dysmorphic symptoms specifically, were excluded. Reviews, conference abstracts, non-peer-reviewed sources, books/book chapters, dissertations, and non-English articles were excluded.

2.3 Study Selection

Records were exported to Rayyan (Ouzzani et al., 2016) for de-duplication and screening, with parallel manual tracking in Microsoft Excel. Two independent reviewers screened titles, then abstracts, then full texts against the eligibility criteria; disagreements were resolved by discussion, with the academic supervisor available as a third arbiter. The search yielded 623 records; 90 duplicates were removed, 432 were excluded at the title and abstract screening, and 88 of the 101 full texts assessed were excluded, leaving 13 studies for inclusion (see Figure I, PRISMA-ScR flow diagram).

2.4 Data Charting and Synthesis

Data were charted descriptively-analytically, extracting author, year, title, study design, statistical approach, population, aims, and results for each study (Arksey & O'Malley, 2005). Findings were then synthesised thematically following Braun and Clarke's (2006) six-phase approach: familiarisation, initial coding, theme generation, theme review and refinement, theme definition, and write-up. Trustworthiness was addressed via dual independent screening, third-reviewer arbitration, and detailed reporting of study characteristics, consistent with the credibility, dependability, confirmability, and transferability criteria described by Connelly (2014).

2.5 Quality Appraisal

Consistent with Arksey and O'Malley's (2005) original scoping review framework and subsequent methodological guidance (Levac et al., 2010; Peters et al., 2020), formal risk-of-bias or methodological quality appraisal of included studies was not conducted. Scoping reviews are intended to map the breadth and nature of existing evidence rather than to evaluate the cumulative strength of an effect, and PRISMA-ScR does not mandate critical appraisal for this reason (Tricco et al., 2018). Nonetheless, indicators of methodological rigour, including sample size, sampling strategy, and use of validated versus study-specific measurement instruments, were extracted and charted for each study (Table I) and are considered in the synthesis and in the discussion of study limitations (see Section 4.5). Readers seeking a formal appraisal of individual study quality are directed to future systematic reviews or meta-analyses of this literature, for which quality appraisal would be both appropriate and necessary.

2.6 Ethical Considerations

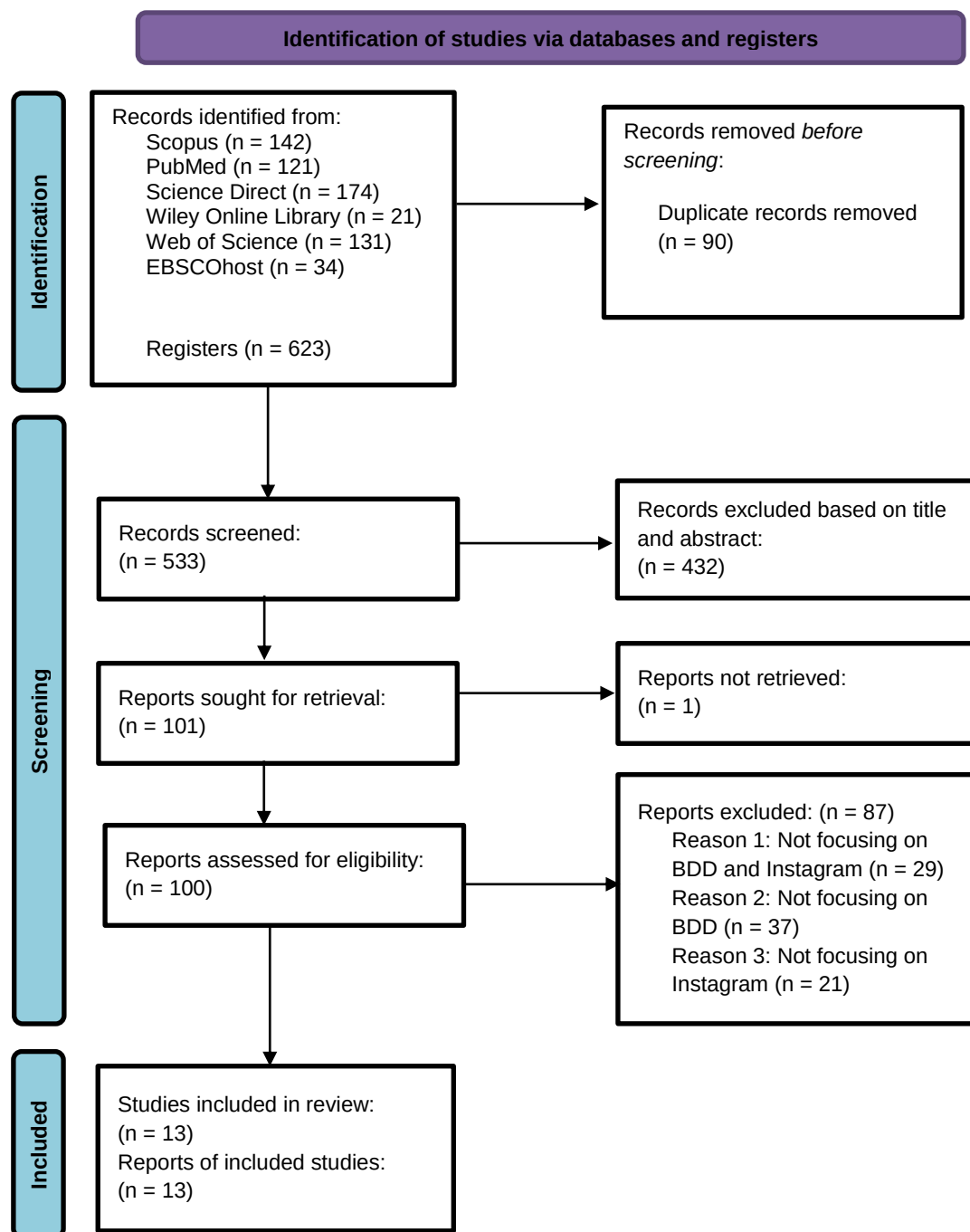
As a review of published literature, this study did not involve human participants directly. Ethical clearance was granted by the UKZN Humanities and Social Sciences Research Ethics Committee (00030822), with an extension subsequently granted; approval documentation is available on request.

III. RESULTS

Thirteen studies met the inclusion criteria, together comprising 7 802 participants (Table I). All were quantitative, survey-based studies. Publication years ranged from 2020 to 2025, with the highest concentration in 2024 ($n = 5$); no eligible studies were published before 2020 or in 2021. Geographically, studies were

concentrated in Europe ($n = 6$, notably Italy) and Asia ($n = 5$, notably Saudi Arabia), with one study each from North America and Africa (Egypt); no studies were conducted in South America or in South Africa.

Samples were predominantly mixed-gender but female-majority ($n = 9$), with four studies sampling only female participants and none sampling only males. Participant ages ranged from approximately 13 to 74 years, but the large majority of participants fell between 18 and 30 years. Sample sizes ranged from 149 to 1 483 participants, with six studies exceeding 500 participants. Every study assessed Instagram and/or social media use, and every study employed a validated or study-specific measure of BDD or dysmorphic concern; the Dysmorphic Concerns Questionnaire ($n = 5$), the Body Dysmorphic Disorder Questionnaire ($n = 4$), and the Body Appreciation Scale-2 ($n = 3$) were the most frequently used instruments, supporting some cross-study comparability.



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Figure I: PRISMA-ScR Flow Diagram

3.1 Studies Focusing Solely on Instagram

Four studies focused exclusively on Instagram. Across these, greater Instagram engagement, and particularly problematic or addictive use, was consistently associated with elevated dysmorphic concern, especially among young women (Elsadai et al.; Senin-Calderon et al., 2020). Pitirut et al. (2024) demonstrated that this relationship was mediated by appearance-based rejection sensitivity rather than direct, suggesting that sensitivity to perceived appearance-based evaluation is a key vulnerability factor. Mancin et al. (2024) further showed that the nature of engagement mattered, especially when following appearance-focused accounts and using filters were associated with more negative body image, whereas other forms of engagement showed more nuanced or protective associations.

Table I. Summary of Included Studies (N = 13)

Author(s)	Year	Study focus	Design / Analysis	Population	Country	n	Key Result
Abdelaziz et al.	2025	Social media beauty standards and body dysmorphia	Survey; descriptive & regression	Medical students, mean age 20.8	Egypt	1126	Internalisation of beauty standards related to higher dysmorphic symptoms
Alsaidan et al.	2020	Prevalence and determinants of BDD among social media users	Survey; descriptive & bivariate comparative	Social media users, mean age 22	Saudi Arabia	1010	Notable BDD prevalence; social media use and appearance concern were significant predictors
Ateq et al.	2024	Social media, BDD and attitudes to cosmetic surgery (national survey)	Survey; descriptive & bivariate comparative	Adults 18+	Saudi Arabia	1483	Social media use associated with increased BDD symptoms and cosmetic-surgery acceptance
Buali et al.	2024	Social media and BDD among citizens	Survey; descriptive & bivariate association	Adults 18+	Bahrain	444	Increased social media use linked to BDD
Elsadai & Eriyani	2022	Instagram utilisation intensity and BDD tendency	Survey; descriptive and correlation	Female nursing students, 18–24	Indonesia	539	Significant relationship between Instagram intensity and BDD tendency
Gupta et al.	2023	Social media use and BDD symptoms in young people	Survey; regression & moderation	Adolescents, Years 12–13 (16–18)	United Kingdom	209	Increased social media use linked to higher dysmorphic symptoms
Khajuria et al.	2025	Social media and rising body dissatisfaction/dysmorphia in adolescents	Survey; descriptive & bivariate comparative	School pupils, 13–18	India	740	Greater social media use linked to increased BDD
Mancin et al.	2024a	Instagram use, following/content/filters and body image	Survey; correlation, regression & comparative	Female students, 19–27	Italy	149	Appearance-focused following and filter use linked to more negative body image and BDD
Mancin et al.	2024b	BDD/MD symptoms, photo-based behaviours and body appreciation	Survey; correlation, regression & moderation	Adults who post self-photos, 18–66	Italy	485	Body appreciation associated with reduced dysmorphic symptoms
Pitirut et al.	2024	Appearance-based rejection sensitivity, Instagram addiction and dysmorphic concerns	Survey; correlation & mediation	Young adult women, 18–29	Romania	300	Rejection sensitivity partially mediated the Instagram–dysmorphic concern relationship
Primo-Simões et al.	2025	Appearance-based social comparison, dysmorphic concern and body appreciation	Survey; correlation & path/moderation	Women, 18–57, using Instagram/Facebook/TikTok	Portugal	346	Social comparison positively associated with dysmorphic concern; body appreciation buffered this effect
Senín-Calderón et al.	2020	Predictor model of Instagram-related dysmorphic concerns	Survey; correlation & mediation/moderation	Adults, 18–35	Spain	796	Instagram use and appearance comparison predicted dysmorphic concerns
Stevens et al.	2023	BDD prevalence in oculoplastic surgery patients and social media use	Survey; descriptive & bivariate comparative	Oculoplastic/reconstructive surgery patients, 12–90	USA	175	Elevated BDD prevalence; social media use linked to greater appearance concern

3.2 Studies Addressing Social Media More Broadly, Including Instagram

Nine studies examined social media use generally but explicitly identified Instagram as a platform of focus. These studies similarly reported that greater social media engagement, including on Instagram, was associated with body dissatisfaction, dysmorphic concern, and greater acceptance of cosmetic procedures (Abdelaziz et al., 2025; Alsaidan et al., 2020; Ateq et al., 2024; Buali et al., 2024; Gupta et al., 2023; Khajuria et al., 2025). Photo-based, image-focused engagement; prominent on Instagram specifically, was linked to appearance-based social comparison and internalisation of idealised beauty standards (Abdelaziz et al., 2025; Primo-Simões et al., 2025), while body appreciation functioned as a protective factor against these effects (Primo-Simões et al., 2025).

3.3 Conceptualisation of BDD Across Studies

Only a minority of studies assessed clinically defined BDD using diagnostic thresholds (Alsaidan et al., 2020; Buali et al., 2024; Stevens et al., 2023); most examined subclinical dysmorphic concern or symptom severity along a continuum (Gupta et al., 2023; Pitirut et al., 2024; Senin-Calderon et al., 2020). Terminology varied considerably; “body dysmorphic disorder,” “dysmorphic concerns,” “body image disturbance,” and “appearance-related preoccupation” were often used interchangeably despite reflecting different severity levels (Mancin et al., 2023; Primo-Simões et al., 2025), complicating direct comparison across studies.

IV. DISCUSSION

This scoping review synthesised 13 studies (N = 7 802) examining the relationship between Instagram and BDD. Three broad themes that emerged were; (1) a consistent positive association between Instagram usage and BDD symptomology, (2) the particular relevance of Instagram’s appearance-focused features (editing, filters, appearance-based social comparison), and (3) psychological processes and risk factors; including appearance-based rejection sensitivity, perfectionism, and low self-esteem, that appear to underlie this relationship, with body appreciation acting as a protective factor.

4.1 Instagram Usage and BDD Symptomology

Increased frequency and intensity of Instagram use were consistently associated with greater body dysmorphic symptomology, body dissatisfaction, and appearance-related anxiety across adolescent, student, and general adult populations, a pattern consistent with the broader social media literature (Alfonso-Fuertes et al., 2023; Alkiek et al., 2023; de Vries et al., 2016; Ioannou et al., 2024; Ryding & Kuss, 2019; Sherlock & Wagstaff, 2019; Thooba & Nasheeda, 2023; Vall-Roque et al., 2023). Findings for other highly visual platforms (Facebook, Snapchat, TikTok) mirrored those for Instagram (Ryding & Kuss, 2019; Zafar et al., 2015), consistent with the proposition that platform visual-centricity, rather than any single platform per se, drives the association with dysmorphic concern (Gupta et al., 2023; Hermans et al., 2022; Marengo et al., 2018).

4.2 Appearance-Focused Features and Comparison Processes

Beyond overall usage, specific Instagram-related behaviours; selfie-taking, photo editing, filter use, and engagement with beauty-related content, were independently associated with elevated BDD symptoms (Pitirut et al., 2024). Repeated exposure to curated, filtered imagery appears to normalise unrealistic beauty standards, heighten appearance comparison and self-scrutiny, and increase acceptance of cosmetic surgery (Abbas & Dodeen, 2021; Bugeja et al., 2026; Kleemans et al., 2016; McLean et al., 2015; Rousseau, 2021; Schroeder & Behm-Morawitz, 2025; Tiggemann & Anderberg, 2019). Upward appearance comparison; comparing oneself to individuals perceived as more attractive, including peers, influencers, and content creators, emerged as a key mechanism linking Instagram engagement to dysmorphic concern (Chang et al., 2019; Ho et al., 2016; Hogue & Mills, 2019; Holland & Tiggemann, 2016; Legkauskas & Kudlaitė, 2022; Lewallen & Behm-Morawitz, 2016).

4.3 Psychological Mechanisms and Vulnerability Factors

Appearance-based rejection sensitivity, perfectionism (specifically its discrepancy dimension), and low self-esteem each emerged as factors that may mediate or moderate the Instagram–BDD relationship (Pitirut et al., 2024; Sulistyo et al., 2022), consistent with prior evidence that greater social media use predicts lower self-esteem over time (Blomfield neira & Barber, 2020; Kalpidou et al., 2011). This suggests that individuals with pre-existing vulnerabilities may be disproportionately affected by appearance-focused Instagram content, while body appreciation may buffer against these effects (Primo-Simões et al., 2025).

4.4 Methodological and Demographic Patterns

All 13 studies employed quantitative, cross-sectional survey designs. While useful for identifying associations, this design cannot establish causality or its direction: it remains unclear whether Instagram use

contributes to BDD onset, or whether individuals with pre-existing appearance concerns are more likely to seek out appearance-focused content (a self-selection or “rich-get-richer” explanation). Samples were also overwhelmingly female, adolescent, and young adult, reflecting both the perceived higher prevalence of BDD and body image concern among women (Gualdi-Russo et al., 2022; Krebs et al., 2023) and greater social media engagement among younger users (Han & Chee, 2025); though findings on gender moderation are mixed (de Vries et al., 2016 found no moderation effect; Blomfield Neira & Barber, 2014; Tros et al., 2023 found consistent gender differences). This skew likely under-represents BDD and muscle dysmorphia experiences among men and non-binary individuals.

4.5 Strengths and Limitations of the Reviewed Literature

Strengths of the reviewed body of literature include consistent findings across diverse cultural contexts, several well-powered samples (three exceeding 1 000 participants), and near-universal use of validated psychometric instruments, supporting the credibility and comparability of findings. Limitations include the exclusively quantitative and self-report nature of the evidence base, inconsistent conceptualisation and terminology around BDD (ranging from formally diagnosed BDD to broader “dysmorphic concern”), the inclusion of some studies addressing social media broadly rather than Instagram specifically, and limited geographic diversity, with no studies from South America, and only a single African study (Egypt), leaving South Africa entirely unrepresented despite plausible cultural variation in beauty ideals and appearance norms.

V. CONCLUSION

This scoping review mapped and synthesised 13 studies examining the relationship between Instagram and BDD. The evidence indicates a consistent, positive association between Instagram engagement; particularly appearance-focused content consumption, photo-based interaction, and appearance-based social comparison, and elevated body dysmorphic symptoms, most robustly demonstrated among female adolescents and young adults. This relationship appears to be shaped by individual vulnerability factors (e.g., appearance-based rejection sensitivity, perfectionism, low self-esteem) and buffered by protective factors such as body appreciation. However, the exclusively cross-sectional, quantitative, self-report evidence base limits causal inference, and the literature remains geographically concentrated in Europe and Asia, with South Africa and much of the Global South unrepresented.

Future research should prioritise longitudinal designs capable of clarifying the direction of the Instagram–BDD relationship; qualitative approaches to capture lived experience; greater inclusion of male, non-binary, and gender-diverse participants, particularly in relation to muscle dysmorphia; broader age-range sampling beyond adolescence and young adulthood; and studies conducted in under-represented regions, including South Africa. Such research would meaningfully inform both clinical intervention for BDD and platform design and policy considerations aimed at reducing appearance-related harm.

VI. DECLARATIONS

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Conflict of Interest:

The authors declare no conflict of interest.

REFERENCES

- [1] L. Abbas and H. Dodeen (2021). Body dysmorphic features among Snapchat users of “Beauty-Retouching of Selfies” and its relationship with quality of life. *Media Asia*, 49(3), 196–212. <https://doi.org/10.1080/01296612.2021.2013065>
- [2] M.N. Abdelaziz, A.R. A.Moustafa, H. Azzam, A.M. Bshar, I.S. Ismail and O.Y. Elhadidy, (2025). Association between beauty standards shaped by social media and body dysmorphia among Egyptian medical students. *Scientific Reports*, 15(1), 12976. <https://doi.org/10.1038/s41598-025-95617-3>
- [3] V. Aguilo, A. Gerente and P. Marasigan (2022). Selfie-taking Behavior and Narcissistic Tendencies of College Students. *International Review of Social Sciences Research*, 2(2), 1–20. <https://doi.org/10.53378/352887>
- [4] I. Alfonso-Fuertes, M.A. Alvarez-Mon, R. Sanchez Del Hoyo, M.A. Ortega, M. Alvarez-Mon and R.M. Molina-Ruiz (2023). Time Spent on Instagram and Body Image, Self-esteem, and Physical Comparison Among Young Adults in Spain: Observational Study. *JMIR Form Res*, 7, e42207. <https://doi.org/10.2196/42207>

- [5] M.B. Alkiek, M.S. Attia, Z.N. Shata and H.A. Abdelaziz (2023). Prevalence and Determinants of Body Dysmorphic Symptoms among University Students in Alexandria, Egypt. *Journal of High Institute of Public Health*, 53(2), 46–54. <https://doi.org/10.21608/jhiph.2023.327607>
- [6] M.S. Alsaidan, N.S. Altayar, S.H. Alshmmari, M.M. Alshammari, F.T. Alqahtani and K.A. Mohajer (2020). The prevalence and determinants of body dysmorphic disorder among young social media users: A cross-sectional study. *Dermatology Reports*, 12(3), 8774. <https://doi.org/10.4081/dr.2020.8774>
- [7] American Psychiatric Association. (2013). *Diagnostic and statistical manual of mental disorders* (5th ed.). <https://doi-org.ezproxy.frederick.edu/10.1176/appi.books.9780890425596>
- [8] H. Arksey and L. O'Malley (2005). Scoping studies: towards a methodological framework. *International Journal of Social Research Methodology*, 8(1), 19–32. <https://doi.org/10.1080/1364557032000119616>
- [9] K. Ateq, M. Alhajji and N. Alhusseini (2024). The association between use of social media and the development of body dysmorphic disorder and attitudes toward cosmetic surgeries: a national survey. *Frontiers in Public Health*, 12, 1324092. <https://doi.org/10.3389/fpubh.2024.1324092>
- [10] C. Bell, A.J. Cocks, L. Hills and C. Kerner (2024). Active and passive social media use: Relationships with body image in physically active men. *New Media & Society*, 27(12), 6453–6471. <https://doi.org/10.1177/14614448241272201>
- [11] A.S. Bjornsson, E.R. Didie and K.A. Phillips (2010). Body dysmorphic disorder. *Dialogues in Clinical Neuroscience*, 12(2), 221–232. <https://doi.org/10.31887/DCNS.2010.12.2/abjornsson>
- [12] C.J. Blomfield neira and B.L. Barber (2020). Social networking site use: Linked to adolescents' social self-concept, self-esteem, and depressed mood. *Australian Journal of Psychology*, 66(1), 56–64. <https://doi.org/10.1111/ajpy.12034>
- [13] V. Braun amd V. Clarke (2006). Using thematic analysis in psychology. *Qualitative Research in Psychology*, 3(2), 77–101. <https://doi.org/10.1191/1478088706qp063oa>
- [14] F. Buali, J. Ahmed and H. Jahrami (2024). Exploring the effects of social media on body dysmorphic disorder among citizens of Bahrain: a cross-sectional study. *BMC Psychology*, 12(1), 614. <https://doi.org/10.1186/s40359-024-02101-0>
- [15] B. Bugeja, D. Spirou and J. Raman (2026). The effects of social media and photo-editing applications on body image and attitudes towards cosmetic procedures. *Clinical Psychologist*, 1–13. <https://doi.org/10.1080/13284207.2026.2628918>
- [16] L. Chang, P. Li, R.S.M. Loh and T.H.H. Chua (2019). A study of Singapore adolescent girls' selfie practices, peer appearance comparisons, and body esteem on Instagram. *Body Image*, 29, 90–99. <https://doi.org/10.1016/j.bodyim.2019.03.005>
- [17] R. Cohen, J. Fardouly, T. Newton-John and A. Slater (2019). #BoPo on Instagram: An experimental investigation of the effects of viewing body positive content on young women's mood and body image. *New Media & Society*, 21(7), 1546–1564. <https://doi.org/10.1177/1461444819826530>
- [18] L.M. Connelly (2014). Ethical considerations in research studies. *Medsurg Nursing*, 23(1), 54–55. <https://www.ncbi.nlm.nih.gov/pubmed/24707669>
- [19] K. Cotter (2018). Playing the visibility game: How digital influencers and algorithms negotiate influence on Instagram. *New Media & Society*, 21(4), 895–913. <https://doi.org/10.1177/1461444818815684>
- [20] D.A. de Vries, J. Peter, H. de Graaf and P. Nikken (2016). Adolescents' Social Network Site Use, Peer Appearance-Related Feedback, and Body Dissatisfaction: Testing a Mediation Model. *Journal of Youth & Adolescence*, 45(1), 211–224. <https://doi.org/10.1007/s10964-015-0266-4>
- [21] C. Di Gesto, A. Nerini, G.R. Policardo and C. Matera (2022). Predictors of Acceptance of Cosmetic Surgery: Instagram Images-Based Activities, Appearance Comparison and Body Dissatisfaction Among Women. *Aesthetic Plast Surg*, 46(1), 502–512. <https://doi.org/10.1007/s00266-021-02546-3>
- [22] S. Digennaro and A. Tescione (2024). Scrolls and self-perception, navigating the link between social networks and body dissatisfaction in preadolescents and adolescents: a systematic review. *Frontiers in Education*, 9, 139058. <https://doi.org/10.3389/feduc.2024.1390583Digennaro>
- [23] J. Enander, V.Z. Ivanov, D. Mataix-Cols, R. Kuja-Halkola, B. Ljotsson, S. Lundstrom, A. Perez-Vigil, B. Monzani, P. Lichtenstein and C. Ruck (2018). Prevalence and heritability of body dysmorphic symptoms in adolescents and young adults: a population-based nationwide twin study. *Psychological Medicine*, 48(16), 2740–2747. <https://doi.org/10.1017/S0033291718000375>
- [24] J. Fardouly and L.R. Vartanian (2016). Social Media and Body Image Concerns: Current Research and Future Directions. *Current Opinion in Psychology*, 9, 1–5. <https://doi.org/10.1016/j.copsyc.2015.09.005>
- [25] D.A. Frederick, J. Lever, B.J. Gillespie and J.R. Garcia (2017). What Keeps Passion Alive? Sexual Satisfaction Is Associated With Sexual Communication, Mood Setting, Sexual Variety, Oral Sex,

- Orgasm, and Sex Frequency in a National U.S. Study. *The Journal of Sex Research*, 54(2), 186–201. <https://doi.org/10.1080/00224499.2015.1137854>
- [26] K.T. Ganson, L. Hallward, M.L. Cunningham, R.F. Rodgers, S.B. Murray and J.M. Nagata (2023). Muscle dysmorphia symptomatology among a national sample of Canadian adolescents and young adults. *Body Image*, 44, 178–186. <https://doi.org/10.1016/j.bodyim.2023.01.001>
- [27] F. Giordano, D. Calaresi, L. Castellani, V. Verrastro, T. Feraco and V. Saladino (2025). Interaction Between Social Support and Muscle Dysmorphia: The Role of Self-Efficacy and Social Media Use. *Behav Sci (Basel)*, 15(2). <https://doi.org/10.3390/bs15020122>
- [28] E. Gorbis and J. Jamero (2019). Comparing and contrasting body-dysmorphic disorder and eating disorders. *#EthicsinAesthetics*, 8(3), 123–127. <https://doi.org/10.12968/joan.2019.8.3.12>
- [29] E. Gualdi-Russo, N. Rinaldo and L. Zaccagni (2022). Physical Activity and Body Image Perception in Adolescents: A Systematic Review. *Int J Environ Res Public Health*, 19(20). <https://doi.org/10.3390/ijerph192013190>
- [30] M. Gupta, A. Jassi and G. Krebs (2023). The association between social media use and body dysmorphic symptoms in young people. *Frontiers in Psychology*, 14, 1231801. <https://doi.org/10.3389/fpsyg.2023.1231801>
- [31] S. Han and H.S. Chee (2025). Personality Typing and Body Dissatisfaction in Korean Young Adults: Which Personality Type Is More Dissatisfied With Their Body Image? *Psychiatry Investigations*, 22(2), 186–195. <https://doi.org/10.30773/pi.2024.0234>
- [32] A.-M. Hermans, S.C. Boerman and J. Veldhuis (2022). Follow, filter, filler? Social media usage and cosmetic procedure intention, acceptance, and normalization among young adults. *Body Image*, 43, 440–449. <https://doi.org/10.1016/j.bodyim.2022.10.004>
- [33] S.S. Ho, E.W.J. Lee and Y. Liao (2016). Social Network Sites, Friends, and Celebrities: The Roles of Social Comparison and Celebrity Involvement in Adolescents' Body Image Dissatisfaction. *Social Media + Society*, 2(3). <https://doi.org/10.1177/2056305116664216>
- [34] J.V. Hogue and J.S. Mills (2019). The effects of active social media engagement with peers on body image in young women. *Body Image*, 28, 1–5. <https://doi.org/10.1016/j.bodyim.2018.11.002>
- [35] G. Holland and M. Tiggemann (2016). A systematic review of the impact of the use of social networking sites on body image and disordered eating outcomes. *Body Image*, 17, 100–110. <https://doi.org/10.1016/j.bodyim.2016.02.008>
- [36] C. Imperatori, A. Panno, G.A. Carbone, O. Corazza, I. Taddei, L. Bernabei, C. Massullo, E. Prevete, L. Tarsitani, M. Pasquini, B. Farina, M. Biondi and F.A. Bersani (2022). The association between social media addiction and eating disturbances is mediated by muscle dysmorphia-related symptoms: a cross-sectional study in a sample of young adults. *Eat Weight Disord*, 27(3), 1131–1140. <https://doi.org/10.1007/s40519-021-01232-2>
- [37] M. Ioannou, C. Tzani, P. Price, F. Walker, T.J.V. Williams, and A. Fumagalli (2024). #NoFilter: The impact of social media body dysmorphic disorder in adults. *Mental Health Science*, 2(4). <https://doi.org/10.1002/mhs2.89>
- [38] S. Kadavathe Peedikayil (2025). The Impacts of Social Media Influencer Marketing on Body Dysmorphic Disorder Among the Generation Z. *Journal of Digital Marketing and Communication*, 5(1), 82–95. <https://doi.org/10.53623/jdmc.v5i1.650>
- [39] M. Kalpidou, D. Costin and J. Morris (2011). The relationship between Facebook and the well-being of undergraduate college students. *Cyberpsychol Behav Soc Netw*, 14(4), 183–189. <https://doi.org/10.1089/cyber.2010.0061>
- [40] A. Khajuria, A. Gandotra, A. Khajuria, K. Arora, R.K. Gupta, U. Gupta and S. Babber (2025). Role of Social Media in the Rising Body Dissatisfaction and Dysmorphia Among Adolescents. *Cureus*, 17(1), e78314. <https://doi.org/10.7759/cureus.78314>
- [41] M. Kleemans, S. Daalmans, I. Carbaat and D. Anschütz (2016). Picture Perfect: The Direct Effect of Manipulated Instagram Photos on Body Image in Adolescent Girls. *Media Psychology*, 21(1), 93–110. <https://doi.org/10.1080/15213269.2016.1257392>
- [42] I. Kollei, S. Brunhoeber, E. Rauh, M. de Zwaan and A. Martin (2012). Body image, emotions and thought control strategies in body dysmorphic disorder compared to eating disorders and healthy controls. *Journal of Psychosomatic Research*, 72(4), 321–327. <https://doi.org/10.1016/j.jpsychores.2011.12.002>
- [43] G. Krebs, B. Clark, T. Ford and A. Stringaris (2023). Epidemiology of body dysmorphic disorder and appearance preoccupation in youth: prevalence, comorbidity and psychosocial impairment. *PsyArXiv*. <https://doi.org/10.31234/osf.io/zmd2h>
- [44] M.R. Laughter, J.B. Anderson, M.B.C. Maymone, and G. Kroumpouzou (2023). Psychology of aesthetics: Beauty, social media, and body dysmorphic disorder. *Clinical Dermatology*, 41(1), 28–32. <https://doi.org/10.1016/j.clindermatol.2023.03.002>

- [45] M. Lee, and H.-H. Lee (2021). Social media photo activity, internalization, appearance comparison, and body satisfaction: The moderating role of photo-editing behavior. *Computers in Human Behavior*, 114. <https://doi.org/10.1016/j.chb.2020.106579>
- [46] V. Legkauskas, and U Kudlaitė (2022). Gender Differences in Links between Daily Use of Instagram and Body Dissatisfaction in a Sample of Young Adults in Lithuania. *Psihologijske teme*, 31(3), 709–719. <https://doi.org/10.31820/pt.31.3.12>
- [47] D. Levac, H. Colquhoun and K.K. O'Brien (2010). Scoping studies: advancing the methodology. *Implementation Science*, 5(69), 69. <https://doi.org/10.1186/1748-5908-5-69>
- [48] J. Lewallen and E. Behm-Morawitz (2016). Pinterest or Thinterest?: Social Comparison and Body Image on Social Media. *Social Media + Society*, 2(1). <https://doi.org/10.1177/2056305116640559>
- [49] L. Liu, J. Yang, F. Tan, X. Yang, H. Luo, Y. Chen and X. Zhao (2025). Digital Interventions for Improving Body Dissatisfaction in Children and Emerging Adults: Systematic Review and Meta-Analysis. *Interact J Med Res*, 14, e72231. <https://doi.org/10.2196/72231>
- [50] P. Mancin, S. Cerea, G. Bottesi and M. Ghisi (2023). Instagram use and negative and positive body image: the relationship with following accounts and content and filter use among female students. *Current Psychology*, 43(12), 10669–10681. <https://doi.org/10.1007/s12144-023-05204-w>
- [51] D. Marengo, C. Longobardi, M.A. Fabris, and M. Settanni (2018). Highly-visual social media and internalizing symptoms in adolescence: The mediating role of body image concerns. *Computers in Human Behavior*, 82, 63–69. <https://doi.org/10.1016/j.chb.2018.01.003>
- [52] P.L. Matzen (2020). *The impact of social media influencers on male body image: How influencers shape male body image* [Masters in International Studies on Media, Power, and Differences, University of Pompeu Fabra]. upf, Institutional Repository. <https://repositori.upf.edu/server/api/core/bitstreams/76903932-0e6f-4463-885e-f91cf09e6a44/content>
- [53] S.A. McLean, S.J. Paxton, E.H. Wertheim and J. Masters (2015). Photoshopping the selfie: Self photo editing and photo investment are associated with body dissatisfaction in adolescent girls. *Int J Eat Disord*, 48(8), 1132–1140. <https://doi.org/10.1002/eat.22449>
- [54] M. Ouzzani, H. Hammady, Z. Fedorowicz and A. Elmagarmid (2016). Rayyan-a web and mobile app for systematic reviews. *Systematic Reviews*, 5(1), 210. <https://doi.org/10.1186/s13643-016-0384-4>
- [55] M.J. Page, J.E. McKenzie, P.M. Bossuyt, I. Boutron, T.C. Hoffmann, C.D. Mulrow, L. Shamseer, J.M. Tetzlaff, E.A. Akl, E S.E. Brennan, R. Chou, J. Glanville, J.M. Grimshaw, A. Hrobjartsson, M.M. Lalu, T. Li, E.W. Loder, E. Mayo-Wilson, S. McDonald, ... D. Moher (2021). The PRISMA 2020 statement: an updated guideline for reporting systematic reviews. *BMJ*, 372, n71. <https://doi.org/10.1136/bmj.n71>
- [56] M.D.J. Peters, C. Marnie, A.C. Tricco, D. Pollock, Z. Munn, L. Alexander, P. McInerney, C.M. Godfrey and H. Khalil (2020). Updated methodological guidance for the conduct of scoping reviews. *JBI Evidence Synthesis*, 18(10), 2119–2126. <https://doi.org/10.11124/jbies-20-00167>
- [57] K.A. Phillips, R.G. Dufrense, C.S. Wilkel and C.C. Vittorio (1999). Rate of body dysmorphic disorder in dermatology patients. *Journal of Academic Dermatology*, 42(3), 436–441.
- [58] I.B. Pitirut, V. Swami, T. Poama-Neagra and V. Enea (2024). Appearance-based rejection sensitivity mediates the relationship between Instagram addiction and dysmorphic concerns in young adult women. *Scandinavian Journal of Psychology*, 65(2), 275–283. <https://doi.org/10.1111/sjop.12973>
- [59] I. Primo-Simões, I. Matos-Pina, M. Coimbra and C. Ferreira (2025). Women's Appearance-Based Social Comparison and Dysmorphic Concern: The Moderating Role of Body Appreciation Among Social Media Users. *International Journal of Psychology*, 60(4), e70070. <https://doi.org/10.1002/ijop.70070>
- [60] A. Qamar and I. Ali (2026). Use of Instagram and its effect on the mental well-being of university students: A perspective from Pakistan. *PLOS Glob Public Health*, 6(4), e0005529. <https://doi.org/10.1371/journal.pgph.0005529>
- [61] A. Rousseau (2021). Adolescents' selfie-activities and idealized online self-presentation: An application of the sociocultural model. *Body Image*, 36, 16–26. <https://doi.org/10.1016/j.bodyim.2020.10.005>
- [62] C.F. Ryding and D.J. Kuss (2019). The use of social networking sites, body image dissatisfaction and Body Dysmorphic Disorder: A systematic review of psychological research. *Psychology of Popular Media Culture*, 9(4), 412–435. <https://doi.org/10.1037/ppm0000264>
- [63] F.C. Ryding (2021). *“My presence is there to be seen for people who judge” Instagram on well-being, body image and Body Dysmorphic Disorder* [Doctoral thesis, Nottingham Trent University]. <https://irep.ntu.ac.uk/id/eprint/46361/1/Francesca%20Chloe%20Ryding%202021.pdf>
- [64] S.C. Schneider, C.M. Turner, J. Mond and J.L. Hudson (2017). Prevalence and correlates of body dysmorphic disorder in a community sample of adolescents. *Australian & New Zealand Journal of Psychiatry*, 51(6), 595–603. <https://doi.org/10.1177/0004867416665483>

- [65] M. Schroeder and E. Behm-Morawitz (2025). Digitally curated beauty: The impact of slimming beauty filters on body image, weight loss desire, self-objectification, and anti-fat attitudes. *Computers in Human Behavior*, 165, 108519. <https://doi.org/10.1016/j.chb.2024.108519>
- [66] C. Senin-Calderon, S. Perona-Garcelan and J.F. Rodriguez-Testal (2020). The dark side of Instagram: Predictor model of dysmorphic concerns. *Int J Clin Health Psychol*, 20(3), 253–261. <https://doi.org/10.1016/j.ijchp.2020.06.005>
- [67] M. Sherlock and D.L. Wagstaff (2019). Exploring the relationship between frequency of Instagram use, exposure to idealized images, and psychological well-being in women. *Psychology of Popular Media Culture*, 8(4), 482–490. <https://doi.org/10.1037/ppm0000182>
- [68] J.M. Sparhawk (2003). *Body image and the media: The media's influence on body image*. Masters majoring in Mental Health Counseling. University of Wisconsin-Stout. <https://minds.wisc.edu/items/198aa736-7a1c-4bbf-a0ea-4ee2c0e2dc9e>
- [69] J.-P. Stein, M. Appel, A. Jost and P. Ohler (2020). Matter over mind? How the acceptance of digital entities depends on their appearance, mental prowess, and the interaction between both. *International Journal of Human-Computer Studies*, 142. <https://doi.org/10.1016/j.ijhcs.2020.102463>
- [70] S.M. Stevens, Z.A. Markatia, K. Ameli, E. Bayaraa, and W.W. Lee (2023). Prevalence of Body Dysmorphic Disorder in Orbital Plastic Surgery and Its Relationship with the Use of Social Media. *Aesthetic Plastic Surgery*, 47(6), 2447–2452. <https://doi.org/10.1007/s00266-023-03483-z>
- [71] P.T.S. Sulisty, M.E. Sukanto and N. Ibrahim (2022). Social media pressure and the body dysmorphic disorder tendency in women: The mediating role of perfectionism. *Psikohumaniora: Jurnal Penelitian Psikologi*, 7(2), 137–151. <https://doi.org/10.21580/pjpp.v7i2.10637>
- [72] N.C. Tamplin, S.A. McLean and S.J. Paxton (2018). Social media literacy protects against the negative impact of exposure to appearance ideal social media images in young adult women but not men. *Body Image*, 26, 29–37. <https://doi.org/10.1016/j.bodyim.2018.05.003>
- [73] M. Thooba and A. Nasheeda (2023). Investigating the Relationship between Frequent use of Instagram and Body Image Issues in Young Women. *International Journal of Social Research and Innovation*, 7(1), 29–47. <https://doi.org/10.55712/ijrsi.v7i1.71>
- [74] M. Tiggemann and I. Anderberg (2019). Social media is not real: The effect of 'Instagram vs reality' images on women's social comparison and body image. *New Media & Society*, 22(12), 2183–2199. <https://doi.org/10.1177/1461444819888720>
- [75] M. Tiggemann and I. Barbato (2018). "You look great!": The effect of viewing appearance-related Instagram comments on women's body image. *Body Image*, 27, 61–66. <https://doi.org/10.1016/j.bodyim.2018.08.009>
- [76] L. Tomas-Aragones and S.E. Marron (2016). Body Image and Body Dysmorphic Concerns. *Acta Derm Venereol*, 96(217), 47–50. <https://doi.org/10.2340/00015555-2368>
- [77] A.C. Tricco, E. Lillie, W. Zarin, K.K. O'Brien, H. Colquhoun, D. Levac, D. Moher, M.D.J. Peters, T. Horsley, L. Weeks, S. Hempel, E.A. Akl, C. Chang, J. McGowan, L. Stewart, L. Hartling, A. Aldcroft, M.G. Wilson, C. Garrity, ... S.E. Straus (2018). PRISMA Extension for Scoping Reviews (PRISMA-ScR): Checklist and Explanation. *Annals of Internal Medicine*, 169(7), 467–473. <https://doi.org/10.7326/M18-0850>
- [78] H. Vall-Roque, A. Andres, H. Gonzalez-Pacheco and C. Saldana (2023). Women's body dissatisfaction, physical appearance comparisons, and Instagram use throughout the COVID-19 pandemic: A longitudinal study. *Int J Eat Disord*, 56(1), 118–131. <https://doi.org/10.1002/eat.23827>
- [79] R.M. Varman, N. Van Spronsen, M. Ivos and J. Demke (2021). Social Media Filter Use and Interest to Pursue Cosmetic Facial Plastic Procedures. *The American Journal of Cosmetic Surgery*, 38(3), 181–186. <https://doi.org/10.1177/0748806820985751>
- [80] D. Veale, and A. Bewley (2015). Body dysmorphic disorder. *BMJ*, 350, h2278. <https://doi.org/10.1136/bmj.h2278>
- [81] C.E. Walker, E.G. Krumhuber, S. Dayan and A. Furnham (2019). Effects of social media use on desire for cosmetic surgery among young women. *Current Psychology*, 40(7), 3355–3364. <https://doi.org/10.1007/s12144-019-00282-1>
- [82] S.M. Wilksch, A. O'Shea, P. Ho, S. Byrne and T.D. Wade (2020). The relationship between social media use and disordered eating in young adolescents. *Int J Eat Disord*, 53(1), 96–106. <https://doi.org/10.1002/eat.23198>
- [83] W.-W. Wong, D. Rangaprakash, J.P. Diaz-Fong, N.M. Rotstein, G.S. Hellemann and J.D. Feusner (2022). Neural and behavioral effects of modification of visual attention in body dysmorphic disorder. *Transl Psychiatry*, 12(1), 325. <https://doi.org/10.1038/s41398-022-02099-2>
- [84] Z. Zafar, M.K. Khan, U. Hayat, S. Idrees, Z.K. Khan and S. Chaudhary (2015). Impact of Social Media and Body Dysmorphic Disorder. *Bulletin of Business and Economics*, 14(2), 6–10. <https://doi.org/10.61506/01.00585>