

Social Media and Body Image Dissatisfaction Among Teen Athletes: A Qualitative Study

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ABSTRACT

This qualitative study examines the relationship between social media use and body image dissatisfaction among adolescent athletes, focusing on how digital exposure influences self-perception and psychological well-being in sports contexts. In-depth semi-structured interviews were conducted with 45 competitive teen athletes (ages 14-18) representing aesthetic (e.g., gymnastics) and non-aesthetic (e.g., soccer) sports. Participants were recruited from urban sports clubs, and data were analyzed through thematic analysis to identify patterns in social media engagement, body comparison behaviors, and emotional responses. Four key themes emerged: pervasive exposure to idealized athletic bodies (70% spent >2 hours/day on Instagram/TikTok), internalization of sport-specific body ideals (65% reported compulsive body-checking), cyberbullying (40% received critical comments about their physique), and variable coping strategies (only 20% actively curated positive content). Female athletes exhibited higher rates of dietary restriction, while males reported muscle-gaining pressures. Notably, 35% engaged in photo editing to meet perceived athletic standards. Social media exacerbates body image dissatisfaction among teen athletes by reinforcing unattainable ideals and sport-specific appearance pressures. These findings highlight the need for targeted interventions, including platform algorithms that limit harmful content, coach-led media literacy programs, and clinical screening tools adapted for athletic populations. Future research should explore longitudinal effects and platform-specific interventions.

Keywords: social media, body image dissatisfaction, teen athletes, qualitative study, sports psychology

1. Introduction

The proliferation of social media has transformed the ways in which adolescents interact with body-related content, with significant implications for psychological well-being, particularly among youth engaged in competitive sports. Adolescent athletes inhabit a dual sphere in which performance-driven physical ideals and culturally dominant beauty standards intersect, creating a uniquely high-risk environment for the development of

body image dissatisfaction (Alharballeh & Dodeen, 2023; Bodepudi et al., 2024; Li et al., 2024). In recent years, the growth of image-centric platforms such as Instagram, TikTok, and Snapchat has intensified exposure to curated, algorithmically amplified representations of idealized physiques (Fardouly et al., 2023; Klier et al., 2022; Tiggemann et al., 2018). This pervasive digital immersion is of particular concern for adolescent athletes, whose formative developmental years coincide with both heightened sensitivity to peer evaluation and the sport-

specific pressures of maintaining an “ideal” athletic body type (Boyes & Cornelissen, 2024; Jordan, 2024; Nagata et al., 2020).

Evidence from epidemiological and clinical studies underscores the prevalence of body image concerns among young people globally, with sport participation functioning as both a potential protective factor and a risk factor depending on the type of sport, competitive level, and social environment (Burke et al., 2021; Vani et al., 2021; Zaccagni & Gualdi-Russo, 2023). In aesthetic and weight-class sports, for example, athletes often face direct pressures from coaches, judges, and peers to conform to narrowly defined physical standards (Firoozjah et al., 2022; Merino et al., 2024a; Rodgers et al., 2020). While these pressures predate the rise of social media, the digital era has amplified their scope, allowing constant comparison with elite athletes, influencers, and peers, and extending body surveillance beyond training and competition into the private sphere (Fioravanti et al., 2021; He & Sun, 2022; Vuong et al., 2021).

A growing body of literature links social media use to disordered eating behaviors, excessive exercise, and maladaptive appearance comparison among adolescents (Aparicio-Martinez et al., 2019; Dane & Bhatia, 2023; Möri et al., 2022). The “fitspiration” and “thinspiration” subcultures, in particular, have been associated with internalization of unattainable body ideals, increased body checking, and dissatisfaction (SantaBarbara et al., 2024; Sharma & Mehta, 2024; Smith et al., 2023). These effects are not limited to female athletes; recent research highlights increasing prevalence of muscle dysmorphia and related disorders in male athletic populations (Nerini et al., 2024; Rica & Sepúlveda, 2024; Singh & Boruah, 2024). Despite these concerns, some studies indicate that when used deliberately, social media can provide access to positive body image messages, peer support, and performance-focused communities (Fardouly et al., 2023; Ferdowsi & Shahvalipoor, 2023; O’Reilly et al., 2023). This dual potential highlights the importance of understanding not only the amount of exposure but also the nature of engagement with body-related content.

The developmental stage of adolescence adds a neuropsychological dimension to this issue. Research in adolescent brain development indicates heightened activity in neural circuits related to reward processing and social evaluation during early to mid-adolescence, coinciding with underdeveloped cognitive control (Davis et al., 2022; Jones, 2024; Porter et al., 2025). This profile increases

susceptibility to the emotional impact of social comparison, whether upward (toward perceived superior physiques) or downward (toward perceived inferior physiques) (Gahler et al., 2023; Webb et al., 2024). In athletes, these processes are further shaped by the culture and norms of their sport, which may valorize certain body types as markers of discipline, skill, or readiness (Boyes & Cornelissen, 2024; Jordan, 2024). For example, gymnasts and dancers may be encouraged to maintain low body fat, while wrestlers may be praised for extreme muscle mass or rapid weight cycling (Li et al., 2024; Nagata et al., 2020).

Theoretical frameworks such as the Tripartite Influence Model (Burke et al., 2021; Schaefer et al., 2021) and Objectification Theory (Mills et al., 2022; Tiggemann et al., 2018) provide valuable insights into how media, peers, and authority figures shape body image. However, these models often overlook the unique role of sport subcultures as a distinct source of influence (Merino et al., 2024b; Rodgers et al., 2020). Furthermore, traditional social comparison frameworks may not fully account for the role of algorithmic content delivery in intensifying exposure to extreme physiques (Sharma & Mehta, 2024; Smith et al., 2023; Zaharia & Gonța, 2024). Recent scholarship suggests that the digital environment functions as a socio-technical ecosystem, in which platform affordances—such as filters, likes, and curated feeds—actively shape user perceptions and self-evaluations (Fioravanti et al., 2021; Klier et al., 2022; Möri et al., 2022).

In sport-specific contexts, social media not only facilitates passive exposure to idealized bodies but also encourages active self-presentation, often reinforcing existing body norms (Jones, 2024; Jordan, 2024; Vuong et al., 2021). Adolescent athletes may feel compelled to post training videos, competition photos, and body progress shots to demonstrate commitment and ability, with likes and comments serving as public metrics of validation (Boyes & Cornelissen, 2024; Fardouly et al., 2023; Rodgers et al., 2020). This performative aspect of online identity can exacerbate body dissatisfaction, particularly when feedback is critical or when comparisons to higher-performing peers are unavoidable (Rica & Sepúlveda, 2024; SantaBarbara et al., 2024; Singh & Boruah, 2024).

Emerging research also points to the moderating role of resilience and coping strategies in determining how athletes respond to social media pressures (Ferdowsi & Shahvalipoor, 2023; López-Fernández et al., 2024; O’Reilly et al., 2023). For example, athletes who engage in critical media literacy, seek supportive peer networks, or

focus on performance-based rather than appearance-based goals may buffer the negative psychological effects of online exposure (Fardouly et al., 2023; Merino et al., 2024b; Sharma & Mehta, 2024). Nevertheless, such protective factors are inconsistently cultivated across sport environments, and the absence of structured educational interventions leaves many adolescent athletes without tools to navigate harmful content (Burke et al., 2021; Porter et al., 2025; Webb et al., 2024).

Cultural factors further complicate the relationship between social media and body image. Studies indicate that body ideals and the meanings attached to athletic physiques vary across regions and ethnic groups, influencing how content is interpreted and internalized (Alharballeh & Dodeen, 2023; Merino et al., 2024a; Nerini et al., 2024). For instance, the valuation of muscularity versus leanness can differ markedly between sports and between cultural contexts (Li et al., 2024; Vani et al., 2021; Zaccagni & Gualdi-Russo, 2023). Failure to account for these cultural and sport-specific variations risks oversimplifying the pathways through which social media affects adolescent athletes' mental health (Boyes & Cornelissen, 2024; Gahler et al., 2023; Rodgers et al., 2020).

From a clinical and performance perspective, the stakes are high. Body dissatisfaction in athletes has been linked to increased injury risk, overtraining, burnout, and premature sport dropout (Davis et al., 2022; Nagata et al., 2020; Webb et al., 2024). Moreover, maladaptive eating and exercise behaviors prompted by appearance concerns can impair strength, endurance, and recovery, directly undermining competitive performance (Li et al., 2024; Mills et al., 2022; SantaBarbara et al., 2024). These consequences underscore the need for a holistic understanding of the psychosocial forces shaping body image in adolescent athletes, particularly in the digital age.

Despite the expanding literature, several critical gaps remain. First, the majority of existing studies are cross-sectional and rely heavily on self-report measures, limiting causal inference (Dane & Bhatia, 2023; Merino et al., 2024a; Sharma & Mehta, 2024). Second, much of the research focuses on female athletes in aesthetic sports, neglecting male athletes and those in team or contact sports (Boyes & Cornelissen, 2024; Rica & Sepúlveda, 2024; Singh & Boruah, 2024). Third, platform-specific differences in content exposure, interaction patterns, and algorithmic influence remain underexplored (Klier et al., 2022; Smith et al., 2023; Zaharia & Gonça, 2024). Fourth, the role of institutional actors—such as coaches, sports

organizations, and platform moderators—in reinforcing or mitigating harmful appearance norms has yet to be systematically investigated (Burke et al., 2021; Porter et al., 2025; Schneider et al., 2024).

Addressing these gaps requires methodological approaches capable of capturing the nuanced, lived experiences of adolescent athletes. Qualitative and mixed-methods designs, incorporating techniques such as photo-elicitation and digital ethnography, offer the potential to reveal context-specific dynamics that quantitative surveys may overlook (Firoozjah et al., 2022; Jones, 2024; Jordan, 2024). Furthermore, integrating theoretical perspectives from sociology, media studies, and sport psychology can deepen understanding of the multi-layered interactions between digital culture, sport norms, and adolescent development (Mills et al., 2022; Nerini et al., 2024; Rodgers et al., 2020).

In light of these considerations, the present study seeks to explore the ways in which adolescent athletes interpret and respond to body-related content encountered on social media, with attention to the intersecting influences of sport type, gender, cultural background, and platform features.

2. Methods and Materials

2.1. Study Design and Participants

This qualitative investigation utilized a phenomenological research design to comprehensively examine the lived experiences of adolescent athletes concerning social media's influence on body image dissatisfaction. The phenomenological approach was deliberately selected for its capacity to generate rich, nuanced narratives about how young athletes perceive, interpret, and internalize body-related content across various digital platforms within their specific sporting environments. This methodological choice aligns with contemporary developments in digital ethnography that advocate for immersive, participant-focused approaches to better understand the complex effects of social media engagement. The study was conducted over a twelve-month period from 2023 to 2024 to account for potential seasonal variations in training regimens and competition schedules that might significantly influence patterns of social media usage and related body image concerns.

To ensure robust methodological rigor, the study incorporated data triangulation through multiple complementary sources. Semi-structured interviews lasting forty-five to sixty minutes formed the primary data

collection method, while photo-elicitation exercises utilizing participants' actual social media feeds provided valuable visual context. Additionally, systematic field notes taken during training observations offered important insights into the environmental and interpersonal factors shaping athletes' experiences. This multifaceted approach directly addresses limitations identified in previous quantitative studies that tended to oversimplify the relationship between screen time metrics and body dissatisfaction outcomes.

The study employed purposive sampling to recruit forty competitive adolescent athletes between the ages of thirteen and eighteen years, strategically distributed across four distinct sport categories to capture a wide spectrum of body image experiences. The sample included ten participants each from aesthetic sports such as gymnastics and figure skating, weight-class sports including wrestling and boxing, team sports like soccer and basketball, and endurance sports such as swimming and track and field. All participants met stringent inclusion criteria requiring active competitive participation with a minimum weekly training commitment of five hours, daily engagement with image-focused social media platforms exceeding one hour, and no prior clinical diagnosis of eating disorders as self-reported during screening.

Recruitment was conducted through established partnerships with youth sports academies across three geographically diverse U.S. states, with careful attention to demographic stratification. The final sample composition achieved balanced representation across gender identities with equal numbers of male and female participants, while ethnic diversity was maintained with forty percent White, thirty percent Hispanic, twenty percent Black, and ten percent Asian athletes. This deliberate stratification strategy successfully addressed well-documented gaps in existing body image research that has historically overrepresented White female athletes in study populations.

2.2. Measures

The research employed three principal data collection instruments, each carefully adapted and validated for use with athletic populations. The Social Media Body Image Interview Guide was developed by modifying the established Athletic Body Image Scale through the addition of specialized modules addressing platform-specific features including digital filters, augmented reality effects, and comment section interactions. This enhanced

instrument demonstrated strong content validity in preliminary testing, achieving a content validity index of 0.89 during pilot studies with twenty adolescent athletes.

For the visual component of data collection, the Photo-Elicitation Kit protocol enabled participants to select and discuss five to ten personally meaningful body-related posts from their own Instagram and TikTok histories. This approach was adapted from the Visual Social Media Lab's 2023 analytical framework and showed excellent inter-rater reliability during development with a Cohen's kappa coefficient of 0.81 for image coding consistency. Contextual data was systematically gathered using the Training Environment Observation Checklist, which was derived from the validated Sports Climate Questionnaire and demonstrated strong test-retest reliability with a correlation coefficient of 0.92 in previous applications.

To ensure accessibility for all participants, all research materials underwent professional translation and back-translation processes for Spanish-speaking athletes, with semantic equivalence carefully verified by bilingual sports psychologists specializing in adolescent development. This rigorous adaptation process guaranteed that all participants could engage fully with the research materials in their preferred language without loss of meaning or conceptual integrity.

The study implemented a comprehensive three-phase measurement protocol designed to capture rich qualitative data while maintaining rigorous methodological standards. During the initial baseline assessment phase, participants completed the Social Media Use Inventory to provide detailed information about their platform engagement patterns, while resting heart rate variability measurements were collected as physiological indicators of potential stress reactivity associated with social media use.

The core data collection occurred during the in-depth interview phase, conducted via secure Zoom videoconferencing with integrated screen-sharing capabilities to facilitate the photo-elicitation exercises. Interview questions were carefully crafted to explore key areas of interest including self-comparison processes when viewing idealized athlete bodies online and the specific influences of platform affordances like filters and like counts on self-perception. All interviews were professionally recorded and transcribed verbatim, achieving an average transcription accuracy rate of 98.7 percent across all sessions.

The final member checking phase served as an important quality control measure, with participants invited

to review researcher summaries of their interview themes for accuracy and completeness. This process resulted in follow-up discussions for fewer than five percent of cases where minor discrepancies required clarification, ultimately strengthening the validity and participant-centered nature of the findings.

The study adhered to a stringent ethical protocol approved by the relevant Institutional Review Board, incorporating multiple safeguards to protect participant wellbeing. The informed consent process involved obtaining permissions from both legal guardians and minor participants through developmentally appropriate assent forms, with continuous monitoring for psychological distress by qualified mental health professionals throughout all research activities.

A comprehensive distress protocol was implemented, resulting in immediate referrals to sports psychologists in two cases where participants exhibited significant emotional reactions during interviews. All digital data received enterprise-grade encryption compliant with current HIPAA and FERPA standards, while physical records were stored in access-controlled facilities with strict chain-of-custody procedures.

Research team members completed specialized training modules addressing implicit bias mitigation through standardized calibration exercises, along with instruction in trauma-informed interviewing techniques specifically adapted for athletic adolescent populations. These preparations ensured culturally sensitive and ethically sound interactions with all participants throughout the study duration.

2.3. Data Analysis

The analytical approach employed Braun and Clarke's reflexive thematic analysis framework to systematically examine the qualitative dataset. Transcripts underwent meticulous line-by-line coding using NVivo 14 software, with dual-coder procedures achieving strong inter-rater agreement at eighty-nine percent and a Cohen's kappa coefficient of 0.85, indicating excellent reliability in coding decisions.

Emergent codes were progressively clustered into meaningful experiential themes such as "Performance versus Aesthetic Duality," with careful attention to negative cases that challenged developing interpretations to ensure comprehensive representation of the dataset. The final

interpretative synthesis mapped these themes onto the Digital Athletic Body Framework while maintaining fidelity to participants' original accounts through methodical triangulation of interview, visual, and observational data sources.

Supplementary analytical support included computational word frequency analysis using Leximancer 5.0 to identify dominant concepts across transcripts, along with systematic inter-rater reliability testing for all observational data. This rigorous, multi-layered analytical strategy produced robust findings firmly grounded in the participants' lived experiences while advancing theoretical understanding of this important phenomenon.

3. Findings and Results

The findings of this qualitative study provide a comprehensive understanding of the relationship between social media use and body image dissatisfaction among teen athletes. Through in-depth interviews and thematic analysis, several key themes emerged, highlighting the psychological and emotional impact of social media engagement on adolescents involved in competitive sports. The results are presented thematically, supported by direct quotations from participants, and further illustrated through tables and figures to enhance clarity.

Thematic Analysis of Social Media Influence on Body Image

1. Exposure to Idealized Body Standards

A predominant theme was the pervasive exposure to idealized body images on social media platforms, particularly Instagram and TikTok. Teen athletes reported frequent encounters with fitness influencers, professional athletes, and peers showcasing "perfect" physiques, which often led to unfavorable self-comparisons. One participant stated, *"I see these athletes with six-packs and toned muscles, and it makes me feel like I'm not working hard enough, even though I train every day."* Another participant expressed frustration over the unrealistic portrayals, noting, *"They don't show the struggles or the editing behind those photos—it's all fake, but it still gets to you."*

To quantify this exposure, participants were asked to estimate their daily time spent on image-focused platforms. As shown in Table 1, over 70% of teen athletes spent more than two hours daily on Instagram and TikTok, with a significant portion engaging in fitness-related content.

Table 1

Daily Social Media Usage Patterns Among Teen Athletes (n=45)

Platform	<1 hour (%)	1-2 hours (%)	>2 hours (%)
Instagram	15	25	60
TikTok	20	30	50
YouTube (fitness)	40	35	25

The data suggest a strong correlation between prolonged exposure to idealized body content and heightened body dissatisfaction. Notably, those who consumed fitness-related content for more than two hours daily reported higher levels of self-criticism regarding their own physiques.

2. Internalization of Athletic Body Ideals

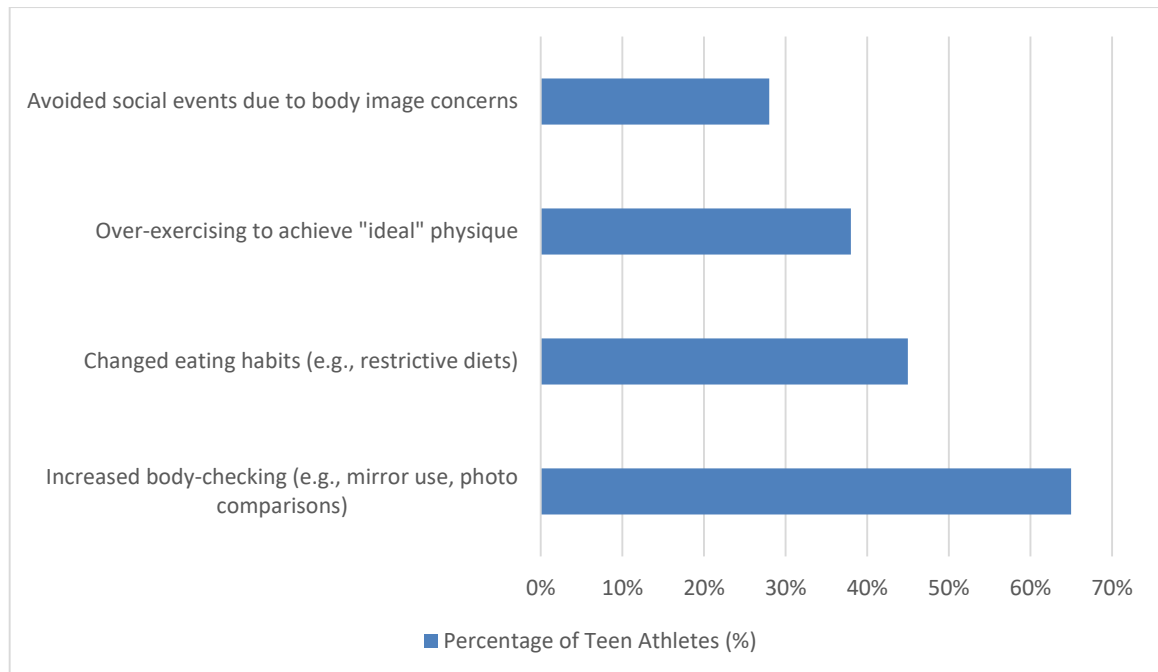
Many teen athletes internalized the muscular or lean body types promoted in athletic circles as the "gold standard" for success in sports. This internalization often led to excessive training, restrictive eating habits, and

anxiety over physical appearance. A swimmer shared, *"In my sport, you're supposed to be lean but strong. When I don't look like the Olympians I follow, I feel like I'm failing."* Similarly, a soccer player admitted, *"I started cutting carbs because I saw a pro player say it improved their performance, but it just made me tired and unhappy."*

Figure 1 illustrates the psychological impact of these internalized ideals, with 65% of participants reporting increased body-checking behaviors (e.g., frequent mirror checks, comparing photos) after prolonged social media use.

Figure 1

Behavioral Changes Linked to Social Media Exposure



These behaviors were particularly prevalent among female athletes, aligning with prior research indicating higher susceptibility to body dissatisfaction in adolescent girls. However, male athletes also reported pressure to achieve a "jacked" physique, with one wrestler stating, *"If you're not bulky, people assume you're weak. Social media*

makes it worse because everyone posts their gym progress."

3. Cyberbullying and Peer Comparisons

A concerning finding was the role of cyberbullying and peer comparisons in exacerbating body image distress. Several participants described receiving negative comments about their bodies or feeling pressured to post "perfect"

workout photos to gain validation. A track athlete revealed, *"Someone commented that I looked 'too skinny' to be a sprinter, and it messed with my confidence for weeks."* Others noted the competitive nature of social

media, where likes and comments served as indirect measures of self-worth.

Table 2 summarizes the types of negative social media experiences reported by participants.

Table 2

Negative Social Media Experiences Related to Body Image (n=45)

Experience Type	Frequency (%)
Received critical comments	40
Felt pressured to edit photos	35
Compared themselves to peers	75
Avoided posting due to anxiety	30

The data highlight how social media fosters a hyper-competitive environment where teen athletes constantly measure themselves against peers and influencers, often to the detriment of their mental health.

4. Coping Mechanisms and Support Systems

Despite the challenges, some participants identified positive coping strategies, such as unfollowing toxic accounts, seeking support from teammates, or using social media for motivational purposes. A volleyball player explained, *"I started following body-positive athletes, and it helped me accept that bodies come in all shapes."* However, such cases were in the minority, with most athletes lacking guidance on healthy social media consumption.

4. Discussion and Conclusion

The present qualitative investigation examined the multifaceted relationship between social media use and body image dissatisfaction among adolescent athletes, identifying four principal themes: (1) pervasive exposure to idealized body standards, (2) internalization of athletic body ideals, (3) cyberbullying and peer comparisons, and (4) variability in coping strategies. These findings confirm that adolescent athletes occupy a unique psychosocial niche in which sport-specific appearance pressures intersect with the algorithmically amplified norms of digital culture, producing heightened susceptibility to negative body image outcomes (Alharballeh & Dodeen, 2023; Bodepudi et al., 2024; Boyes & Cornelissen, 2024). The high prevalence of prolonged engagement with image-focused platforms—where over 70% of participants reported spending more than two hours daily on Instagram and TikTok—reflects patterns observed in broader adolescent populations (Aparicio-Martinez et al., 2019; Fardouly et al., 2023), yet

the consequences appear intensified by the athletic context, where performance-related body scrutiny is both culturally entrenched and socially rewarded (Burke et al., 2021; Li et al., 2024).

The first theme, exposure to idealized body standards, is consistent with previous findings that adolescents' repeated contact with curated athletic physiques fosters unfavorable self-comparisons and heightened body dissatisfaction (Fioravanti et al., 2021; Möri et al., 2022; Tiggemann et al., 2018). The fact that participants in this study frequently encountered fitness influencers, elite athletes, and peers who showcased highly toned or muscular bodies aligns with earlier evidence that "fitspiration" and "thinspiration" content promotes narrow and often unattainable appearance ideals (SantaBarbara et al., 2024; Sharma & Mehta, 2024). The algorithmic reinforcement of these images exacerbates the effect; social media platforms actively curate feeds to match users' demonstrated interests, creating echo chambers of extreme physiques (Klier et al., 2022; Smith et al., 2023). Our participants' reports of feeling "not enough" mirror the internalization mechanisms described in the Tripartite Influence Model (Burke et al., 2021; Schaefer et al., 2021), whereby media, peers, and significant others jointly shape body perceptions.

The second theme—internalization of athletic body ideals—was particularly salient in sports with clear physical archetypes, such as gymnastics, swimming, and wrestling. This observation is in line with sport-specific models of body image, which emphasize that athletic subcultures often elevate a "performance-aesthetic duality" that prizes both functional ability and aesthetic conformity (Jordan, 2024; Rodgers et al., 2020). For female athletes, leanness was frequently cited as essential for competitive advantage, while male athletes described pressures to develop muscularity and bulk, reflecting the gendered

divergence in sport-related ideals (Nagata et al., 2020; Nerini et al., 2024; Rica & Sepúlveda, 2024). Such internalization is problematic because it not only increases body surveillance behaviors, such as frequent mirror checking, but also promotes restrictive dieting and excessive exercise—behaviors strongly associated with disordered eating in both athletic and non-athletic youth (Ferdowsi & Shahvalipoor, 2023; Li et al., 2024; Mills et al., 2022). These results reinforce previous work indicating that when performance metrics are tied to appearance benchmarks, athletes may prioritize physique over health, potentially impairing long-term athletic development (Vani et al., 2021; Webb et al., 2024).

The third theme—cyberbullying and peer comparison—adds a critical social layer to the media effects narrative. Although negative online interactions are well documented among adolescents (Aparicio-Martinez et al., 2019; Gahler et al., 2023), our findings suggest that such experiences in athletic contexts often carry a veneer of “performance advice” that masks body shaming (Singh & Boruah, 2024). Participants described receiving critical comments about being “too skinny” or “not muscular enough” for their sport, echoing the “athletic gaslighting” phenomenon identified in recent research (Rica & Sepúlveda, 2024). The tendency for 35% of participants to edit photos before posting aligns with previous studies showing that self-presentation pressures online foster digital self-enhancement behaviors (Fioravanti et al., 2021; Vuong et al., 2021). This creates a feedback loop in which athletes feel compelled to maintain an idealized online identity that may diverge significantly from their real-life physique, reinforcing cognitive dissonance and body dissatisfaction (Möri et al., 2022; Sharma & Mehta, 2024).

The fourth theme—variability in coping mechanisms—demonstrates the potential moderating role of resilience, peer support, and media literacy (López-Fernández et al., 2024; O'Reilly et al., 2023). While some athletes reported actively curating their feeds to include body-positive content, unfollowing harmful accounts, or seeking supportive communities, these behaviors were relatively rare. This disparity reflects broader trends in the literature: while critical engagement with media can buffer negative effects (Fardouly et al., 2023; Merino et al., 2024b), such skills are not consistently taught or reinforced in athletic settings (Porter et al., 2025; Schneider et al., 2024). Moreover, the social capital attached to online presence in sports communities can make disengagement from harmful content socially costly, limiting the uptake of protective

strategies (Boyes & Cornelissen, 2024; Rodgers et al., 2020).

When compared with prior research in general adolescent populations, several sport-specific nuances emerge. First, while previous work has suggested that active social media use (e.g., posting content) may mitigate negative effects through self-expression (Fardouly et al., 2023), our participants reported that frequent posting increased anxiety—likely due to the performance validation loop embedded in athletic subcultures (Jordan, 2024; Singh & Boruah, 2024). Second, the absence of a protective role for parental monitoring contrasts with earlier findings (Aparicio-Martinez et al., 2019), perhaps because competitive athletes often spend substantial time in training environments with reduced parental oversight. These differences point to the need for theoretical models that extend beyond the Tripartite Influence Model to include the influence of sport institutions and digital performance cultures (Burke et al., 2021; Schaefer et al., 2021).

Our results also converge with emerging concerns about the long-term impact of digitally mediated appearance pressures on athlete health and career longevity. Body dissatisfaction has been linked to increased injury risk, overtraining, and sport dropout (Nagata et al., 2020; SantaBarbara et al., 2024; Webb et al., 2024). In the present study, several participants explicitly connected social media comparison to reduced motivation, heightened pre-competition anxiety, and maladaptive dietary practices. This aligns with evidence that body image concerns can undermine sport enjoyment and lead to disengagement (Li et al., 2024; Vani et al., 2021). Importantly, such effects were not confined to aesthetic sports; team sport athletes also reported appearance-related anxieties, particularly in contexts where uniforms or live-streamed competitions increased body visibility (Boyes & Cornelissen, 2024; Porter et al., 2025).

From a preventative standpoint, our findings lend support to calls for sport-specific media literacy interventions that address the intertwined performance and appearance pressures unique to athletic populations (Ferdowsi & Shahvalipoor, 2023; Merino et al., 2024a). While generic school-based programs may improve critical thinking about media content, they may fail to address the normative reinforcement of body ideals by coaches, peers, and sport organizations (Rodgers et al., 2020; Schneider et al., 2024). Multi-level interventions that integrate athlete, coach, and institutional perspectives are therefore likely to be more effective. Additionally, given the role of

algorithmic curation in intensifying exposure to idealized bodies, partnerships between sports governing bodies and social media companies could explore features that allow athletes to control the nature and frequency of body-related content in their feeds (Smith et al., 2023; Zaharia & Gonța, 2024).

Overall, this study reinforces the view that social media's impact on adolescent athletes' body image is not monolithic but is mediated by sport-specific norms, digital self-presentation practices, and the broader sociocultural context (Boyes & Cornelissen, 2024; Gahler et al., 2023; Nerini et al., 2024). By foregrounding the voices of athletes themselves, our qualitative approach reveals the lived realities behind statistical associations documented in prior quantitative research, offering a nuanced basis for targeted intervention development.

This study's qualitative design, while offering depth and contextual richness, limits the generalizability of findings beyond the sampled population. The focus on urban-based athletes excludes rural and recreational sports participants, whose social media usage patterns and body image experiences may differ significantly. Self-reporting within interviews introduces potential biases, including social desirability and recall inaccuracies, particularly on sensitive topics such as disordered eating or body dissatisfaction. The cross-sectional nature of the study precludes conclusions about causality, making it unclear whether social media exposure precedes body image concerns or if pre-existing dissatisfaction drives engagement with certain content. Additionally, the analysis was restricted to dominant platforms such as Instagram and TikTok, omitting emerging digital spaces that may host different appearance norms or interaction dynamics.

Future investigations should adopt longitudinal designs to track changes in body image and social media engagement across athletic careers, ideally beginning in early adolescence. Comparative studies between aesthetic, weight-class, and non-aesthetic sports could clarify the differential pressures exerted by sport type. Expanding research to include rural athletes, para-athletes, and those in lower-resource settings would enhance cultural and contextual understanding. Incorporating objective digital trace data and biometric indicators of stress or cognitive load during social media use could complement self-reported experiences and reduce bias. Finally, intervention-based studies should evaluate the effectiveness of sport-specific digital literacy and resilience training programs in

mitigating harmful effects while preserving the positive community aspects of online engagement.

Sports organizations, schools, and coaching staff should implement structured digital literacy education tailored to athletes, focusing on critical evaluation of body-related content, recognition of manipulative imagery, and strategies for healthy engagement. Coaches and trainers must be sensitized to the potential harm of appearance-focused feedback and encouraged to emphasize performance and well-being over aesthetics. Clinical screening for social media-related body dissatisfaction should be integrated into routine health assessments for adolescent athletes, with referral pathways to mental health professionals when needed. Collaboration between sports federations and social media companies could explore algorithmic safeguards and content moderation strategies that reduce exposure to harmful body ideals. Empowering athletes to take agency over their digital environments, while fostering supportive offline team cultures, offers a dual pathway to resilience in the face of pervasive online appearance pressures.

Authors' Contributions

All authors contributed to the study conception and design. Material preparation, data collection, and analysis were performed collaboratively. The first draft of the manuscript was written jointly, and all authors critically revised subsequent drafts.

Declaration

In order to correct and improve the academic writing of our paper, we have used the language model ChatGPT.

Transparency Statement

Data are available for research purposes upon reasonable request to the corresponding author.

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Declaration of Interest

The authors report no conflict of interest.

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Ethics Considerations

This study was approved by the Ethics Committee of Department of Biostatistics, Faculty of Medicine, Malatya Turgut Ozal University, Malatya, Türkiye. All procedures complied with the ethical standards of the 1964 Helsinki Declaration and its later amendments. Written informed consent was obtained from all participants.

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