



UNIVERSITÀ DEGLI STUDI DI
CASSINO E DEL LAZIO MERIDIONALE

Doctoral course in

Educational models and contexts: Sport, Inclusion and
Technology

Cycle XXXVIII

**Diachronic study on the relationship between body image,
social media use, and active lifestyles in a sample of Italian
preadolescents**

Scientific/Disciplinary Sector (SDS): M-EDF/01

Coordinator
Prof.ssa Cristina Cortis

Candidate
Dott.ssa Angela Visocchi

Supervisor
Prof. Simone Digennaro

Academic year
2024/2025

DEDICATION

“Every person born into this world represents something new, something that never existed before.” - Martin Buber

ABSTRACT

The pervasive influence of social media on young people's daily lives has captured the attention of numerous researchers and has become a widely discussed topic. With many children and preadolescents engaging with platforms such as Instagram, TikTok, and Snapchat on a daily basis, this constant exposure to digital content increasingly shapes their self-image, body perception, and relationship with their physical appearance.

At the same time, these platforms often promote unattainable beauty ideals, creating pressures that extend beyond traditional sociocultural norms to influence personal appearance standards. For those who do not conform to these digitally imposed standards, the result can be a growing sense of body dissatisfaction, isolation, and discomfort with their own physical appearance.

Among children and preadolescents, there is a growing tendency to share personal aspects of their lives publicly in pursuit of popularity and social validation—often without full awareness of the risks involved. Given their ongoing cognitive and emotional development, these age groups are particularly susceptible to internalizing unrealistic beauty standards, potentially leading to negative body image, reduced self-esteem, and various psychological challenges.

This dissertation explores in depth the relationship between body image development and social media use among Italian primary school children through qualitative research methods that privilege children's own voices, perspectives, and lived experiences. The research is structured around an extensive theoretical framework and three interconnected empirical studies that progressively build knowledge on this critical topic through the authentic accounts of children themselves.

The dissertation begins with a comprehensive theoretical foundation that examines body image development from classical theories to contemporary digital contexts, establishing the conceptual framework for understanding how social

media influences young people's self-perception and relationship with their bodies. This theoretical introduction provides essential background on the digital transformation of childhood, the mechanisms through which social media affects body image, and the concept of body literacy as an educational approach for promoting positive body relationships.

Following this theoretical grounding, the dissertation presents three empirical studies, each addressing different aspects of the research questions through qualitative action research employing focus group methodology. The first study develops a conceptual and educational framework for promoting positive body image among children, identifying critical components including self-awareness, emotional literacy, gender considerations, and the relationship between actual and perceived bodies.

The second study investigates how children perceive image stereotypes and how educational interventions can enhance their critical awareness and body literacy. Through focus groups with 111 primary school students, this research examines children's understanding of beauty standards, their experiences with social media, and their responses to workshops designed to deconstruct harmful appearance norms.

The third study extends this inquiry through comprehensive longitudinal qualitative research involving 255 primary school students, with intensive focus group discussions conducted with 50 participants across two time points. This investigation tracks changes over time in children's body perceptions, critical media awareness, digital engagement practices, and emotional responses following participation in an eight-workshop body literacy program.

All empirical investigations employed focus group methodology as the primary data collection approach, recognizing this method's particular suitability for accessing children's subjective experiences, facilitating peer dialogue about sensitive topics, and generating rich, contextualized data about body image and

social media use. Focus groups enabled exploration of how children collectively make sense of appearance pressures, interpret media messages, navigate peer dynamics, and respond to educational interventions within supportive peer contexts.

The findings highlight the complex challenges surrounding young people's digital experiences and underscore the critical importance of centering children's voices when studying body image development in the digital age. Results demonstrate that children possess sophisticated awareness of appearance pressures, image manipulation, and beauty standards conveyed through social media. However, they simultaneously struggle to translate this cognitive awareness into sustained behavioral resistance against sociocultural beauty norms due to persistent peer influence, pervasive media messages, and deeply ingrained cultural values around appearance.

The research reveals that educational interventions can effectively enhance children's critical media literacy, promote initial attitudinal shifts toward greater body acceptance and appreciation for diversity, and increase recognition of image manipulation techniques. However, sustaining these positive changes over time requires ongoing support, reinforcement through multiple contexts (family, school, peer groups), and addressing the systemic sociocultural factors that perpetuate narrow beauty ideals and appearance-based evaluation.

This dissertation aims to serve as a foundation for future research and intervention development addressing the effects of media portrayals on body image across developmental stages—a pressing issue that warrants continued exploration and evidence-based action. The integration of theoretical analysis with participatory qualitative research provides a comprehensive understanding of this phenomenon from children's own perspectives and offers practical implications for educators, parents, policymakers, and mental health professionals working with young people in contemporary digital environments.

By centering children's voices and lived experiences throughout the research process, this work contributes to a more nuanced, authentic understanding of how young people navigate appearance pressures in digital contexts. It demonstrates both the vulnerabilities that digital culture creates for developing children and the potential for thoughtfully designed educational interventions to empower children as critical consumers of media, appreciative inhabitants of their own bodies, and agents capable of resisting harmful appearance norms. Ultimately, the research underscores that promoting positive body image in the digital age requires not only individual-level education but also broader cultural transformation toward valuing diverse bodies, challenging restrictive beauty standards, and prioritizing human worth beyond physical appearance.

TABLE OF CONTENTS

ABSTRACT

DEDICATION

**INTRODUCTION: Body Image and Social Media in Contemporary
Childhood**

PART I: Three Empirical Studies

**Study 1: Developing a Positive Body Image Among Children: A Proposal for
an Educational Intervention**

**Study 2: Educating the Body and the Mind: The Effects of an Intervention
on Children's Body Literacy and Stereotype Awareness**

**Study 3: Fostering Body Literacy and Media Awareness in Primary
Education: Insights from a Qualitative Action Research Study**

CONCLUSION: Synthesis, Implications, and Future Directions

REFERENCES

INTRODUCTION

Body Image and Social Media in Contemporary Childhood

The Digital Revolution and Its Impact on Children's Lives

We live in an era of unprecedented technological transformation. In less than two decades, digital technologies have fundamentally reshaped how we communicate, work, learn, and understand ourselves. For children born into this digital age, the experience of childhood itself has been transformed in ways previous generations could scarcely have imagined. Today's children grow up surrounded by screens, constantly connected to virtual networks, and immersed in digital cultures that profoundly shape their identities, relationships, and self-perceptions.

The smartphone, introduced in 2007, represents perhaps the most significant technological innovation of the 21st century in terms of its impact on daily life. Adopted faster than any previous communication technology in human history, smartphones have become ubiquitous extensions of ourselves—devices through which we navigate the world, manage relationships, access information, and construct identities. By 2016, just nine years after the iPhone's introduction, 79% of adolescents already owned smartphones, and remarkably, 28% of children aged 8-12 possessed their own devices. These numbers have only increased in subsequent years, with smartphone ownership now nearly universal among adolescents and increasingly common among younger children.

The rapid proliferation of smartphones occurred simultaneously with the explosive growth of social media platforms specifically designed for visual content sharing and social interaction. Instagram, launched in 2010, reached one billion active users within eight years. Snapchat, introduced in 2011, pioneered ephemeral content and augmented reality filters that would revolutionize how people present themselves online. TikTok, launched internationally in 2016, became the fastest-growing social media platform in history, particularly popular among children and adolescents. These platforms, along with YouTube,

WhatsApp, and others, have created entirely new social environments where appearance is constantly displayed, evaluated, and compared.

For contemporary children, these technologies are not external tools but integral components of their social worlds. Social media platforms serve as primary spaces for peer interaction, identity exploration, and social validation. They enable continuous connection with friends, access to global communities, creative self-expression, and participation in shared cultural moments. Children use these platforms to communicate, entertain themselves, learn, and construct identities. The boundaries between "online" and "offline" life have become increasingly meaningless, as digital and physical experiences are seamlessly interwoven into what philosopher Luciano Floridi calls the "onlife" dimension—a hybrid existence where virtual and real are inseparably connected.

This digital transformation offers numerous benefits. Children today have access to information and educational resources that previous generations could never have imagined. They can maintain friendships across geographical distances, find communities of shared interests regardless of physical location, develop technological literacies essential for modern citizenship and employment, and explore aspects of identity in relatively safe virtual spaces. For marginalized youth, online communities may provide crucial support and validation unavailable in their immediate physical environments.

However, alongside these opportunities come significant risks, particularly regarding mental health and self-perception. A growing body of research documents associations between intensive social media use and increased rates of anxiety, depression, loneliness, sleep disturbances, and reduced well-being among young people. Of particular concern—and the focus of this dissertation—is the relationship between social media engagement and body image disturbance. As visual, appearance-focused platforms have gained dominance, their influence on how young people perceive, evaluate, and experience their bodies has become increasingly apparent and increasingly troubling.

Understanding Body Image: A Multidimensional Construct

Before examining how social media affects body image, we must first understand what body image is. Body image refers to the mental representation an individual forms of their own body—the subjective experience of embodiment that may or may not correspond to objective physical characteristics. Far from being a simple concept, body image is recognized as a complex, multidimensional construct encompassing perceptual, cognitive, affective, and behavioral dimensions.

The **perceptual dimension** involves how accurately individuals perceive their body size, shape, and proportions. Many people, particularly those with body image disturbances, demonstrate perceptual inaccuracy, typically overestimating body size. However, even among individuals without clinical disorders, perfect perceptual accuracy is rare—most people show at least some distortion in how they perceive their bodies.

The **cognitive dimension** encompasses thoughts, beliefs, attitudes, and mental schemas related to one's body and appearance. This includes evaluative judgments (satisfaction or dissatisfaction with appearance), the importance or "investment" placed on appearance in one's overall self-concept, and organized knowledge structures that filter and interpret body-related information. Some individuals possess highly developed appearance schemas that cause them to notice, remember, and worry about appearance-related information far more than others.

The **affective dimension** involves the emotions and feelings associated with one's body. These emotional experiences may range from positive emotions like pride, confidence, and comfort to negative emotions, including shame, disgust, anxiety, and sadness. Importantly, the emotional dimension is distinct from cognitive evaluation—two people may hold similar beliefs about their bodies while experiencing very different emotional responses.

The **behavioral dimension** encompasses actions related to one's body and appearance, including repeatedly checking or examining one's body, avoiding

situations that involve body exposure, grooming and appearance management efforts, body modification attempts (dieting, exercise, cosmetic procedures), and comparing one's appearance to others.

Contemporary researchers recognize that body image exists on a continuum. At one end lies profoundly negative body image, characterized by severe dissatisfaction, perceptual distortion, obsessive preoccupation with appearance, and dysfunctional behaviors that impair daily life. At the other end lies positive body image, characterized by appreciation for one's body, acceptance of imperfections, respect for body diversity, functionality-focused body orientation, and resilience against sociocultural pressures to conform to narrow beauty ideals.

This spectrum perspective proves particularly important when considering children's body image development. Children typically begin life with relatively positive, uncomplicated relationships with their bodies. Young children experience their bodies primarily through sensation, movement, and capability—what their bodies can do—rather than through aesthetic evaluation—how their bodies look. However, as children develop cognitively and become socialized into cultural norms, this positive foundation often erodes. Many children develop body dissatisfaction, and for some, this dissatisfaction intensifies into clinical disorders requiring professional intervention.

The Developmental Trajectory of Body Image

Body image is not present at birth but develops progressively through childhood and adolescence through accumulating experiences with one's own body, observations of others' bodies, social feedback, media exposure, and cognitive maturation, enabling increasingly sophisticated body-related thought.

During infancy and toddlerhood (ages 0-3), awareness is primarily sensorimotor. Babies experience their bodies through sensation and movement, gradually developing body awareness through exploring their own bodies, distinguishing themselves from others, and recognizing themselves in mirrors. Toddlers delight

in bodily mastery—running, climbing, jumping—establishing early feelings of body competence. They begin using simple language to describe bodies, but lack appearance-based evaluations and characteristics of older children.

Early childhood (ages 3-5) brings increasing body awareness and more sophisticated language for describing bodies. Young children develop gender awareness, recognizing boys and girls as categories defined partly through bodily differences. Research has documented that children as young as 3 years old demonstrate weight bias, attributing negative characteristics to larger bodies and positive traits to thinner bodies. This early bias indicates absorption of cultural weight stigma even before children possess mature appearance concerns regarding their own bodies. However, most preschool children still evaluate bodies primarily through functional rather than aesthetic lenses.

Middle childhood (ages 6-11) represents a critical transitional period when appearance awareness intensifies dramatically. Children develop the cognitive capacity for social comparison, recognizing that others evaluate them and that their bodies may not match idealized standards. By age 6, most children understand cultural appearance ideals and can identify which bodies are considered attractive. Research consistently documents that between 40-50% of children aged 6-12 express dissatisfaction with their body weight, shape, or specific physical features. Girls typically desire thinner bodies, while boys express desires for more muscular physiques. Body dissatisfaction intensifies through middle childhood, with older children reporting greater concerns than younger ones.

Preadolescence (ages 9-12) represents a particularly vulnerable developmental window. This transitional period precedes puberty's physical changes while encompassing significant cognitive, social, and emotional developments. Preadolescents possess sufficient cognitive sophistication to engage in complex social comparison and to recognize discrepancies between their actual bodies and internalized ideal bodies, yet they lack the fully developed executive functions

that enable effective emotional regulation and realistic perspective-taking. Social dynamics intensify dramatically during this period, with peer acceptance assuming paramount importance and appearance increasingly recognized as a factor affecting social status. For many children, preadolescence marks the emergence of significant body image concerns that, without intervention, may intensify further during adolescence and persist in adulthood.

Adolescence proper (ages 12-18) has traditionally received the most research attention regarding body image, as puberty creates objective physical changes requiring psychological adjustment. The timing, pace, and nature of pubertal development significantly affects body image, with early-maturing girls and late-maturing boys often experiencing heightened dissatisfaction. For many individuals, body dissatisfaction that emerges during childhood and preadolescence intensifies during adolescence, sometimes triggering clinical disorders including eating disorders, body dysmorphic disorder, anxiety, and depression.

Understanding these developmental trajectories suggests that interventions may prove most effective during middle childhood and preadolescence—after children have developed sufficient cognitive capacity to understand body image concepts but before negative patterns have fully crystallized. This developmental logic informs the present research's focus on primary school children, specifically those in fourth and fifth grades (ages 9-11), who occupy this critical intervention window.

Factors Shaping Body Image: A Complex Interplay of Influences

Body image does not develop in isolation but emerges through complex interactions among multiple influences operating at various levels—individual (biological, psychological), interpersonal (family, peers), sociocultural (media, cultural norms), and temporal (developmental stage, historical period).

Family influences operate through multiple pathways. Parents and other family members may comment directly on children's appearance or weight, with research demonstrating that such commentary—even when well-intentioned—predicts children's body dissatisfaction and disordered eating. Parents also influence children through modeling, as children observe and imitate parental attitudes and behaviors regarding bodies, food, and appearance. Families create broader emotional climates and value systems that shape how children come to understand bodies. Families emphasizing appearance, status, and conformity socialize children to value these attributes, while families emphasizing health, capability, relationships, and internal qualities orient children toward alternative values.

Peer influences intensify dramatically during middle childhood and preadolescence. Appearance-based teasing represents one of the strongest predictors of body dissatisfaction, with children who experience such teasing reporting significantly lower body satisfaction and greater risk for eating disorders. Peer groups engage in conversations expressing body dissatisfaction, comparing bodies, and discussing weight loss, normalizing dissatisfaction and reinforcing restrictive beauty standards. Peer groups often organize partly around attractiveness, with conventionally attractive children receiving more positive attention and higher social status. This appearance-based social hierarchy creates strong incentives to conform to beauty standards.

Media influences have long been recognized as powerful shapers of body image. Traditional media—television, magazines, movies, advertising—consistently promote narrow beauty ideals, predominantly emphasizing thinness for females and muscularity for males. Decades of research document clear associations between media exposure and body dissatisfaction, with particularly strong effects for appearance-focused media content. However, traditional media influence pales in comparison to the impact of contemporary social media.

Social Media: Amplifying and Transforming Appearance Pressures

Social media platforms represent fundamentally different environments than traditional media. Unlike the passive consumption characteristic of television or magazine reading, social media involve active participation, content creation, social interaction, and continuous engagement. Unlike traditional media featuring distant celebrities and professional models, social media prominently features peers, acquaintances, and "relatable" influencers. Unlike traditional media's one-way communication, social media enables bidirectional interaction with immediate feedback. These distinctive features create novel and potentially more powerful influences on body image.

The Mechanisms of Social Media Influence

Social media affects body image through several interconnected psychological mechanisms, most notably social comparison and internalization of appearance ideals.

Social comparison is a fundamental human tendency. As psychologist Leon Festinger articulated in his 1954 Social Comparison Theory, people possess an innate drive to evaluate themselves, and in the absence of objective standards, they do so by comparing themselves to others. Appearance represents a domain particularly susceptible to social comparison because "attractiveness" has no objective standard—it can only be judged relative to others or to internalized ideals derived from observing others.

Social media dramatically amplifies comparison opportunities. Traditional media exposed individuals to appearance ideals through relatively bounded episodes of television viewing or magazine reading. Social media provide unlimited, constantly updated streams of appearance-focused content available 24/7 through devices people carry everywhere. Algorithmic curation personalizes these streams, ensuring users encounter content the algorithm predicts will engage them—often meaning attractive images that provoke strong reactions. The result

is an environment where appearance comparison becomes nearly constant and unavoidable.

Crucially, research demonstrates that comparison with peers on social media proves particularly influential for body image, often exceeding the impact of comparison with celebrities. This likely reflects peers' greater perceived similarity and relevance—peers serve as more realistic comparison standards than distant celebrities. However, the "peers" encountered on social media present highly curated, carefully selected, and often digitally enhanced versions of themselves. Users compare their everyday, unedited reality not to peers' actual appearances but to idealized versions that may bear little resemblance to how peers look in ordinary life.

Internalization represents the second key mechanism. The Tripartite Influence Model, developed by Thompson and colleagues (1999), proposes that sociocultural influences (from parents, peers, and media) affect body image partly by promoting internalization of appearance ideals. Internalization refers to the extent to which individuals cognitively "buy into" socially prescribed beauty standards, accepting these ideals as personal standards for self-evaluation. When individuals internalize thin ideal or muscular-ideal standards, they judge themselves harshly for failing to meet these often-unattainable ideals.

Social media appear remarkably effective at promoting internalization through several mechanisms: repeated, frequent exposure creating familiarity and perceived normalcy, algorithmic personalization creating streams of idealized content tailored to individual interests, influencer culture presenting ideals as achievable through products or behaviors, and interactive features enabling direct engagement with appearance-focused content.

Quantified Validation and the Metrics of Self-Worth

Beyond comparison and internalization, social media introduce entirely novel dynamics through the quantification of social approval. Likes, comments, shares,

followers, and views transform abstract social validation into concrete, visible metrics. For appearance-related content, this creates direct feedback loops linking physical presentation to measurable social reward.

The psychological impact of these quantified metrics is substantial. Research documents that adolescents receiving fewer likes than peers on social media posts experience measurable emotional distress. The public, visible nature of these metrics amplifies their impact—not only does an individual know how much validation they receive, but their entire social network can observe this as well. Low engagement becomes public evidence of social failure.

Children internalize these dynamics early. Even quite young children monitor likes and comments, compare their engagement metrics to peers', and experience disappointment or shame when posts underperform. Some children describe strategic efforts to maximize likes through careful image selection, optimal posting times, and hashtag use. Others report removing posts that receive insufficient validation, effectively erasing aspects of self-presentation deemed socially unsuccessful.

Digital Self-Modification: Filters and the Distortion of Reality

Perhaps the most concerning development in social media culture is the normalization of digital self-modification through beauty filters and photo editing. Augmented reality filters, pioneered by Snapchat and now ubiquitous across platforms, enable real-time alteration of facial features including eye size and color, skin texture and tone, face shape, teeth appearance, and overall proportions. Photo editing applications provide even more extensive modification capabilities, allowing users to slim bodies, enhance muscles, remove "imperfections," and fundamentally transform their appearance.

What began as playful experimentation has evolved into habitual, normalized practice. Many young users report discomfort posting unfiltered, unedited images. Some describe feeling their "real" faces look wrong or flawed compared to filtered

versions they've grown accustomed to seeing. This phenomenon has led mental health professionals to identify "Snapchat dysmorphia"—individuals seeking cosmetic procedures to make their real faces resemble their filtered appearance.

For children with developing media literacy capacities and incomplete understanding of image manipulation, the normalization of filters creates profound risks. Habitual exposure to edited images—both of others and of oneself—may distort perceptions of what normal, unmodified human faces and bodies look like. Children may unconsciously recalibrate their standards, coming to perceive digitally enhanced appearances as realistic goals rather than technological fabrications. The gap between filtered digital presentation and physical reality may intensify body dissatisfaction, as children compare their unmodified reflections to their digitally "perfected" selves.

Gender and Body Image: Different Pressures, Shared Struggles

While both boys and girls experience body image concerns in relation to social media, these concerns manifest somewhat differently, reflecting broader gendered sociocultural beauty ideals.

For girls, societal appearance pressures have historically been intense and unrelenting. From early childhood, girls receive messages that physical attractiveness represents their primary value and that conforming to narrow beauty standards is essential for social acceptance, romantic success, and personal worth. These messages are amplified on social media, where girls encounter endless streams of thin, conventionally attractive female bodies, engage in appearance-focused conversations with peers, receive appearance-based feedback and evaluation, and internalize ideals emphasizing thinness, flawlessness, and perpetual youthfulness.

Research consistently demonstrates that girls show higher levels of appearance investment, engage more frequently in appearance comparison, report greater body dissatisfaction, and demonstrate stronger associations between social media

use and negative body image compared to boys. Girls are more likely to use visual, appearance-focused platforms like Instagram, more likely to post selfies and appearance-related content, more likely to use beauty filters and editing applications, and more likely to experience appearance-based cyberbullying.

For boys, traditional appearance pressures emphasize strength and athletic prowess more than aesthetic attractiveness. However, contemporary culture increasingly applies appearance scrutiny to male bodies as well. Boys face pressures to achieve muscular, lean physiques promoted through fitness culture, superhero movies, and social media fitness influencers. While boys report somewhat lower body dissatisfaction overall than girls, rates have been increasing, and boys show concerns regarding muscularity and perceived physical weakness.

Boys' social media use patterns differ from girls', with boys showing greater engagement with gaming, sports, and comedy content. However, boys increasingly encounter appearance-focused content, particularly fitness and bodybuilding material promoting muscular ideals. Boys may be less likely to discuss body image concerns openly due to masculine norms discouraging emotional vulnerability, potentially masking the extent of their struggles.

Body Literacy: An Educational Response

In response to the mounting evidence of social media's harmful effects on young people's body image, educators and researchers have sought to develop effective interventions. Body literacy emerges as a promising comprehensive framework that extends beyond traditional body image interventions.

Body literacy encompasses multiple interconnected competencies: body awareness (perceiving and understanding one's body in space and context), interoception (recognizing internal bodily sensations and responding appropriately to body's needs), body comprehension (knowledge about how bodies function and change), critical media literacy (analyzing media messages and recognizing manipulation), emotional literacy (recognizing, understanding,

expressing, and regulating emotions), and body appreciation (valuing body for its capabilities and intrinsic worth rather than evaluating it solely on appearance).

In digital contexts characterized by constant exposure to idealized images and quantified social validation, body literacy serves crucial protective functions. Critical analysis skills enable recognition of editing, filtering, and curation in social media content, reducing the likelihood of using manipulated images as realistic comparison standards. Interoceptive and embodied awareness provides alternative bases for body evaluation beyond appearance—rather than judging bodies primarily on how they look, body-literate individuals can appreciate what bodies enable them to do and experience. Emotional regulation skills enable adaptive responses to appearance-related distress encountered online. Body appreciation provides positive body-related thoughts and feelings that counterbalance negative media messages.

Body literacy interventions emphasize fostering appreciation for body diversity, critically examining unattainable beauty ideals, cultivating analytical competencies for evaluating media content, developing emotional awareness and regulation, and promoting functionality-focused rather than appearance-focused body relationships.

Schools represent ideal contexts for implementing body literacy programs due to their universal reach (accessing diverse student populations), developmental timing (engaging children during formative periods), educational mission (promoting knowledge and skills for well-being), and social context (enabling peer dialogue and collective norm change). Effective school-based programs integrate content across curriculum rather than isolating it in single lessons, employ age-appropriate and sequential content building across grades, utilize interactive and experiential rather than didactic approaches, adopt strength-based and empowering rather than deficit-focused perspectives, and remain culturally responsive to diverse students' experiences.

Research Gaps and the Present Investigation

Despite growing research on social media and body image, significant gaps remain. Most research focuses on adolescent rather than younger populations, leaving childhood body image development in digital contexts understudied. Most research employs quantitative survey methods that, while valuable for documenting patterns and prevalence, cannot capture the nuanced, subjective experiences of living with body image concerns in digital environments. Most research examines correlations between variables but cannot illuminate the processes through which social media affects body image—the mechanisms, meanings, and lived experiences.

Perhaps most critically, most research studies children without adequately incorporating their own perspectives, imposing adult-constructed frameworks that may not align with how children themselves understand and experience their bodies and digital lives. Children's voices are frequently absent from research that purports to understand and help them.

The present dissertation addresses these gaps through comprehensive qualitative research centered on children's own voices and experiences. By conducting extensive focus group research with Italian primary school children, this work explores how children perceive their bodies, understand appearance pressures, engage with social media, interpret media messages, navigate peer dynamics, experience educational interventions, and attempt to apply learning in everyday contexts.

The research employs action research methodology, recognizing that understanding and intervention are inseparably linked—we learn about children's needs by attempting to support them, and we improve our support through careful attention to children's responses. By documenting not only what children learn from body literacy education but how they experience educational content, what resonates with their concerns, what challenges their thinking, and what barriers

prevent sustained change, this research generates knowledge immediately applicable to improving educational practice while also contributing to theoretical understanding of body image development in digital contexts.

Organization of This Dissertation

This dissertation is organized into three main parts. Following this introduction, which has established the theoretical and empirical foundations, Part I presents three empirical studies, each addressing different aspects of the research questions through qualitative investigation.

The first study, "Developing a Positive Body Image Among Children: A Proposal for an Educational Intervention," establishes the conceptual framework guiding the subsequent intervention research. This study synthesizes multidisciplinary literature to identify critical components of positive body image development, examines factors affecting body image with particular attention to social media influences, and proposes an integrated educational framework addressing these factors comprehensively.

The second study, "Educating the Body and the Mind: The Effects of an Intervention on Children's Body Literacy and Stereotype Awareness," investigates how children perceive image stereotypes and how educational interventions can enhance their critical awareness. Through focus group research with 111 primary school students, this study examines children's baseline understandings of beauty standards and media messages, documents their experiences with an educational workshop series, and evaluates changes in their perceptions and awareness following intervention.

The third study, "Fostering Body Literacy and Media Awareness in Primary Education: Insights from a Qualitative Action Research Study," extends the inquiry through comprehensive longitudinal investigation. Involving 255 students in preliminary activities with intensive focus group research with 50 participants across two points, this study tracks changes in children's body perceptions, critical

media awareness, emotional responses, and digital practices following participation in an extended body literacy program. It provides detailed analysis of intervention processes and outcomes, identifies barriers to sustained change, and explores individual and gender differences in responses.

Following these three studies, the dissertation concludes with a comprehensive synthesis integrating findings across studies, discussing theoretical contributions, articulating practical implications for multiple stakeholders, reflecting on methodological approaches and lessons learned, acknowledging limitations, and proposing directions for future research. Together, these components provide a thorough, nuanced examination of body image and social media in contemporary childhood, grounded firmly in children's own perspectives and experiences.

PART I: Three Empirical Studies

Connecting the Studies

The three studies presented in this section represent an integrated research program examining body image and social media use among Italian primary school children. While each study stands as an independent contribution with its own specific focus and findings, together they form a coherent progression addressing the overarching research questions from complementary angles.

The first study establishes theoretical and conceptual foundations, synthesizing existing knowledge to identify what aspects of body image development require educational attention and proposing a comprehensive framework for intervention. This conceptual work provides the blueprint that guides the design of the educational workshops evaluated in the subsequent studies.

The second study operationalizes this framework through concrete educational practice, implementing workshops with a substantial sample of children and evaluating their responses through qualitative focus group methodology. This

study demonstrates the feasibility and acceptability of body literacy education in Italian primary schools while generating initial insights into what children learn, how their thinking changes, and what challenges persist.

The third study extends and deepens this investigation through a larger-scale, longitudinal design that tracks children's responses across time. By examining not only immediate responses to workshops but also whether and how changes endure, this study provides crucial information about the sustainability of intervention effects and the factors that facilitate or impede lasting transformation.

Throughout all three studies, methodological consistency is maintained through reliance on focus group methodology, ensuring that children's authentic voices remain central to the research. Each study contributes unique insights while building cumulatively toward comprehensive understanding of how to support positive body image development in the digital age.

The studies are presented here in their entirety as originally published or prepared for publication, allowing readers to engage directly with the complete research reports including detailed methodologies, comprehensive findings, and nuanced discussions. Brief connecting passages between studies orient readers to how each contributes to the overall dissertation narrative.

STUDY 1

The following article establishes the conceptual foundation for the educational intervention research that follows, identifying critical components of body image development and proposing an integrated educational framework.

Developing a Positive Body Image Among Children: A Proposal for an Educational Intervention

ABSTRACT

Social media impacts body perception because it conveys unattainable appearance models, vulnerable to developing body image dissatisfaction. Based on a

qualitative study carried out among 111 primary school students, the Authors will propose the framework for an educational intervention aimed to enhance some critical aspects of body image, such as self-awareness, emotional literacy, natural body-perceived body, dysmorphophobia, and gender.

KEYWORDS: Body Image, Children, Educational Intervention, Primary School

Introduction Body image is the mental representation of individuals of their bodies, irrespective of their appearance. Body image is a complex construct which includes cognitive, perceptual, affective, and behavioural dimensions; thus, it refers to thoughts, feelings, evaluations, and behaviours related to one's body. (Cash, 2012).

Furthermore, body image is defined by how people experience their embodiment, especially, but not exclusively, their physical appearance. The appearance-related experiences consist of a perceptual component that has to do with the accuracy with which a person can judge the dimensions of their physical appearance (mental representations of one's size, shape, and facial characteristics), and an attitudinal component which captures the feelings that a person has about their body size and shape. Thus, body image attitudes can be considered dispositional ways of thinking (cognitions), feeling (affect or emotions), and behaving about one's physical appearance (Cash, 2012; Irvine et al., 2019).

Disturbances in body image perception are one of the central aspects of one's mental health. Distortions in body perception are displeasing and can have tragic consequences. Poor body image can impact one's general well-being and it can exert a significant influence on self-esteem, mood, skills and social functioning (Hosseini & Padhy, 2022). Body image is one of the multiple components of personal identity and can be considered a multidimensional concept. The intricacy of body image can be appreciated by carefully analysing its components. These components belong to everyone, regardless of the healthy or unhealthy perception of one's body, and include:

- Cognitive: thoughts and beliefs about own body
- Perceptual: perception of the size and shape of own body and body parts
- Affective: feelings about own body
- Behavioral: the actions that people perform to check on, tend to, alter, or conceal their body (Yamamotova et al., 2017).

Body image distortion is a multifaceted condition that includes different body image elements. This condition can involve the cognitive, perceptive, and affective components of body image. The cognitive component can be interpreted as the mental representation of the body and thoughts and beliefs about body shape and appearance. The perceptive component includes identifying and estimating the body, and it evaluates how accurately people estimate their weight, size, and shape about their actual proportions. The affective component also involves how people feel about their bodies, including their satisfaction or dissatisfaction with them (Gaudio et al., 2014).

Body image disturbance can show up as a disturbance of percept (i.e., distortion) and concept (i.e., body dissatisfaction). The inaccuracy in estimating one's physical size is a sign of perceptual disturbance. Body dissatisfaction includes the attitudinal or affective perception of own body and negative feelings and cognitions. Body dissatisfaction is attributable to a discrepancy between the perception of body image and its idealized image. Body image disturbances also manifest themselves at the behavioural level, such as body avoidance, body checking, or diet (Lewer et al., 2017).

1. Body image development

The development and maintenance of body image are influenced by intricate interactions among neurophysiological, sociocultural, and cognitive factors. A variety of elements such as gender, fashion, peer groups, educational and familial influences, evolving socialization, and physical changes (hair growth, acne, breast

development, menstruation) make children vulnerable to the development of negative perceptions of their bodies (King, 2018).

Children in the early years become aware of their gender. Once children become conscious of their body appearance, they try to manipulate their parents to receive admiration and assent. This need for assent grows when starting school, exhibiting a need for social approval. Cash assumes body image as a learned behaviour (Body image, 2011). During growth and socialization, children begin to compare themselves with others, especially regarding appearance. By the age of 6, body shape becomes downright important (especially muscle and weight) (King, 2018). Adolescence represents the transition from childhood to adulthood and is associated with physical and social changes, so it is a critical period in body image development. Parents exert a significant impact on their children's body image if they send sociocultural or critical messages about body appearance ideals to them; therefore, they have a considerable influence on the potential beginning of body dissatisfaction in their children. Although in younger children, the predominance of families on body image development is more relevant than friends, the role of parents decreases as children get older and peer responses become more important than families (Bearman et al., 2006).

2. Factors Affecting Body Image and Body Image Disorders

To date, various factors that influence body image have been identified such as BMI, family, peers, society, media and social media, culture, self-esteem, psychopathology, gender, age, education level, physical activity, and weight control behaviour (Hosseini & Padhy, 2022). In according to one social influence model from the name "Tripartite Influence Model" they have been highlighted three social influences (peers, parents, and media) have a direct impact on body dissatisfaction as well as an indirect impact through two variables: internalization of the social ideal body type and appearance comparison. Among these, social media assumes a critical role in body image disorders (J. K. Thompson et al., 1999).

- **Family**

Family plays a fundamental role in the development of children's body image, body size attitudes and food intake patterns. Family exerts a prominent and continuing influence, as children develop a need for their parents' admiration and assent. Parents can increase or decrease the risk of body image development and food intake issues in their children, directly or indirectly. Parents who pay particular attention to weight control behaviours have a significant prevalence in children's body satisfaction. Direct reactions from parents can include commenting on a child's weight or appearance, joking about a child's weight, pressuring a child to lose weight, or encouraging a child to diet. Indirect parental behaviours are activities or reactions that are not precisely planned to influence the child, including parental negative comments about their bodies and parental involvement in excessive exercise or diet. These behaviours have the potential to model self criticism and inspire children to judge themselves or others based on appearance and stress the value of adhering to social and cultural ideals of body size. Several other relative properties can also help body satisfaction, such as the socioeconomic status of the family nucleus and living in giant cities (Damiano et al., 2015; Shoraka et al., 2019).

- **Social Pressures**

Although body image is a mental concept, it is observable as a social phenomenon. Both women and men attempt to present and maintain themselves in socially desirable body shapes. Social assent is a critical component of the lifecycle and is essential to well-being. In response to the need for social acceptance, people develop behavioural responses that enhance their social desirability. Through the social learning process, individuals observe, imitate, and reinforce their behaviour to increase the possibility of social acceptance; this is particularly important in adolescents for attaining acceptance in peer groups (Jang et al., 2018; Shoraka et al., 2019). Weight-related bullying throughout youth significantly contributes to

the development of negative body perceptions and body dissatisfaction. The pressure to lose weight or gain muscle that pre-adolescents and adolescents experience from the social environment in which they are placed is linked to body dissatisfaction (Xu et al., 2010).

Given the growing influence of social media use on body image and body image disorders, this issue will be discussed in detail in the next paragraph.

3. Social media influence on Body Image and Body Image Disorders

Social media is mainly described as those forms of electronic communication through which users create personal profiles wherewith they can share information, ideas, personal messages, opinions, and other content such as pictures or videos (Social media Definition & Meaning - Merriam-Webster, s.d.); viewing others' profiles people can give or receive different sorts of feedback (e.g., likes or comments) (Perloff, 2014).

Although social media use has several benefits as well as optimizing communication, maintaining existing relationships, and preserving updated information (Horzum, 2016), a minority of its users seem to be unable to control themselves and inappropriate use of social networks entails a variety of mental health problems, such as body image disorders. In support of this it can be stated that social media has become increasingly popular worldwide, and nowadays, messages regarding appearance ideals are delivered through it. Due to its continuous availability (e.g., on smartphones), the influences of social media on body perception may be more potent than traditional forms of media. Several studies have suggested that active social media engagement may negatively influence body image and appears to be linked with body dissatisfaction and eating disorders (Griffiths et al., 2018). On social media, users post their photographs and view photos of others; physical appearance is an important factor in these activities. The appearance models conveyed by social networks are difficult to achieve (McLean et al., 2019) because the contents posted online are

often carefully selected or modified using beauty filters to maximize attractive self-presentations (Yau & Reich, 2019). A beauty filter is a photo-editing tool that allows users to smooth out their skin, enhance their lips and eyes, contour their nose, and alter their jawline and cheekbones; therefore, it has considered normal, and it is usual for people to use beauty filters to alter their appearance and hide their imperfections. Besides receiving messages and comments about their bodies on social media, users see carefully modified and selected social media imagery including depictions of thin bodies (thinspiration) or lean and muscular bodies (fitspiration). Users might frequently compare themselves with appearance ideals conveyed to them through social media and internalize these ideals as the standards for their bodies. When their physical appearance is not on par with the internalized expectations, this may result in body dissatisfaction. This concept is particularly important in adolescents who spend more time and receive more feedback about their appearance on social media. Given the growing use of the internet and social media by pre-adolescents, this phenomenon can be considered anticipated in childhood (de Vries et al., 2019).

4. Critical aspects for the development of a positive body image

Based on a qualitative study carried out among 111 primary school students, recruited in a primary school in Cassino (Italy), the Authors will propose the framework for an educational intervention aimed to enable the development and maintenance of a positive body image among children. For achieving this goal some critical influencing factors which can be enhanced have been highlighted. Among these, they may be mentioned the following: self-awareness, emotional literacy, the relationship between the natural body and the perceived body, dysmorphophobia, and gender. These elements will be explained in detail individually below.

- **Self-awareness**

Self-awareness can be conceptualized as involving expert knowledge of oneself as a defined entity, without independence from other individuals, unified, consistent, and stable over time and space. Self-awareness further enables one to be the subject of one's attention (Legrain et al., 2011). Moreover, self-awareness refers to the ability to become consciously aware of one's own bodily and mental states (e.g., perceptions, attitudes, opinions, intentions for actions, emotions) as belonging to the self (Geangu, 2008).

The "body awareness" construct has been described as "an innate tendency of our organism to self-organize and to feel the unity with oneself" (Mehling et al., 2012). Body awareness is more than the simple focus on one's own body as it needs to recognize the interaction between body states and the cognitive appraisal of those body states. Therefore, it can be defined as the subjective perception of one's own body and the ability to accurately identify the internal body states (Farb et al., 2015).

Body awareness is a key factor for affect regulation and for the sense of self and it is strictly dependent on mental processes, including attitudes, affects, beliefs, memories, and cultural imprints (Damasio, 2003). It seems that those mental processes have the possibility of modifying the subjective experience of body parts and the body in general. It can be ensured that body awareness has a decisive influence on body image as it involves cognitive, emotional, and cultural aspects (Boldi & Rapp, 2022).

• **Gender**

There exist differences between men and women regarding developing a positive body image and concerns about body satisfaction. It has been argued that mass media is a key factor in the development of body image dissatisfaction as it represents the main tool containing idealistic representations of the body ideals with which men and women are constantly confronted (Brennan et al., 2010). Thus, awareness and internalization of society's appearance models may

contribute to body image dissatisfaction. Several studies highlight that a perceived lack of muscle represents a central factor in male body image dissatisfaction whereas women's determining element is perceived excess weight (Brennan et al., 2010). These findings are consistent with media messages that emphasize a thin ideal for women (Morrison et al., 2003) while promoting a V-shaped figure for men, with emphasis on having a larger, more muscular upper body (Furnham et al., 2002). Differences between men and women continue to be evident regarding concerns about weight regulation and dieting practices. Men are more likely to increase physical activity as their method of dieting, whereas women dieters are more likely to restrict food intake. These differing weight loss practices suggest that when men diet, they often intend to enhance their body build by becoming more muscular, rather than thinner as women dieters aim to do (Pingitore et al., 1997).

Nowadays, body image disturbance and poor self-esteem appear to develop concurrently and precociously in young boys and girls. Compared to boys, girls are more concerned about their body weight and are more likely to be influenced by peers, mass media, parents, and other sociocultural factors that promote thinness ideal models, even if they are of normal weight. This may be the reason for girls' higher prevalence of body dissatisfaction (Ren et al., 2018). Although there are differences in male and female body ideals, excessive preoccupation with and internalization of stereotypical appearance models leads both genders to body dissatisfaction. Lastly, not only does body image dissatisfaction affect one's behaviours, but it also affects how one feels about oneself. It is associated with other mental problems such as depression, low self-esteem, feelings of shame, body surveillance, diminished quality of life, anxious self-focus and avoidance of body exposure (Brennan et al., 2010).

- **Emotional literacy**

As mentioned earlier, many critical elements play a key role in the onset of body image disturbances. Two factors known to be of importance for mental health, but

which have received little attention about body image are emotional intelligence and emotion regulation. Emotion regulation (ER) refers to the processes by which emotional experiences are evaluated, monitored, maintained, and modified (R. A. Thompson, 1994). Therefore, the construct of emotion regulation includes the ability to adaptively recognize and cope with negative emotions. Emotional intelligence (EI) is considered as: “the ability to perceive accurately, appraise and express emotion; the ability to access and/or generate feelings when they facilitate thought; the ability to understand emotion and emotional knowledge; and the ability to regulate emotions to promote emotional and intellectual growth” (Mayer, s.d.).

Higher levels of EI are associated with more positive attitudes, more successful relationships, greater adaptability, higher orientation towards positive values as well as fewer difficulties in expressing, evaluating, and regulating emotions. Aspects of psychological well-being, such as life satisfaction and happiness, are related to EI, as well as higher levels of subjective physical health (Akerjordet & Severinsson, 2007).

Low levels of EI predicted body dissatisfaction as well as eating disorder symptoms in preadolescents and adolescents. At the same time, deficits in various aspects of emotional intelligence are positively associated with binge eating, body weight, and body shape problems. Hence, this suggests an indirect interaction between emotion processing and body perception/image (Cuesta-Zamora et al., 2018). What has just been highlighted shows the correlation between emotional intelligence and body image.

• **Dysmorphophobia**

Body dysmorphic disorder (BDD) is a chronic mental condition characterized by a preoccupation with perceived defects or flaws in physical appearance that are unobservable or appear insignificant to others. The most affected body parts of concern are the skin, hair, or nose, but any part of the body may be involved and

often the preoccupation interests several body parts. This preoccupation entails significant distress and dysfunction, time-consuming repetitive behaviours (i.e., mirror checking, camouflaging), and a high degree of avoidance. Distressing, recurrent, and intrusive thoughts related to appearance are reported to be common in BDD as well as feelings of shame, anxiety, hopelessness, anger, and guilt. BDD is typically a disorder of adolescence, prepubertal onset is also possible; this disorder is a serious psychiatric condition causing a severe impact on global functioning and it appears to be connected to past or current self-harm, suicide attempts, current desire for cosmetic procedures and complete school dropout (Rautio et al., 2022).

- **Relation between the natural body and perceived body**

The continuous use of social media and the dissemination of altered virtual body images by pre-adolescents and adolescents highlights a new form of dualism between the virtual and the real body. The appearance comparison processes that take place via social media and the constant engagement and exposure to content promoting specific societal appearance standards induce preadolescents to have an excessive investment in their virtual body and social reputation so much so that they cannot differentiate the “real body” from the “virtual body”. Virtual reality is completely merged with real life; therefore, the virtual body is considered part of its existence. Individuals who strongly invest in their appearance and their social reputation, tend to engage in appearance-related comparison. Social media use facilitates comparisons and is likely to promote the internalization of idealized body image, leading to less body satisfaction over time (Digennaro, 2022).

Conclusions

Body image is the mental representation of individuals of their bodies, irrespective of their appearance. Body image is a complex construct which includes cognitive, perceptual, affective, and behavioural dimensions; thus, it refers to thoughts, feelings, evaluations, and behaviours related to one’s body (Cash, 2012).

Disturbances in body image perception are one of the central aspects of one's mental health. This condition can involve the cognitive, perceptive, and affective components of body image (Gaudio et al., 2014).

According to the "Tripartite Influence Model," they have been highlighted three social influences (peers, parents, and media) have a direct impact on body dissatisfaction as well as an indirect impact through two variables: internalization of the social ideal body type and appearance comparison. Among these, social media assumes a critical role in body image disorders (J. K. Thompson et al., 1999). Social media represents a key influencing factor in the development of a positive body image because it conveys appearance ideals that are internalized as a standard for users' bodies. When an individual physical appearance is not on par with the internalized expectations, this may result in body dissatisfaction. This concept is particularly important in adolescents who spend more time and receive more feedback about their appearance on social media. Given the growing use of the internet and social media by pre-adolescents, this phenomenon can be considered anticipated in childhood (de Vries et al., 2019).

Based on a qualitative study carried out among 111 primary school students, recruited in a primary school in Cassino (Italy), the Authors will propose the framework for an educational intervention aimed to enable the development and maintenance of a positive body image among children. For achieving this goal some critical influencing factors which can be enhanced have been highlighted. Among these, they may be mentioned the following: self-awareness, emotional literacy, the relationship between the natural body and the perceived body, dysmorphophobia, and gender. Based on this, an educational intervention will be hypothesized which will involve the single aspects previously mentioned to allow the development of a positive body image in children.

STUDY 2

Building on the conceptual framework established in Study 1, the following article reports on the implementation and evaluation of educational workshops with 111 primary school children, examining how children understand image stereotypes and respond to interventions promoting body literacy and critical media awareness.

Educating the Body and the Mind: The Effects of an Intervention on Children's Body Literacy and Stereotype Awareness

ABSTRACT

This qualitative action research analysed the impact of an educational intervention on body literacy in children aged 9-10, focusing on body image stereotypes. Initial focus groups revealed that many children expressed dissatisfaction with their bodies, aspiring to physical characteristics perceived as ideal according to social and media standards. After the intervention, greater self-acceptance and an increased critical awareness of imposed aesthetic models were observed. Children began to appreciate body diversity and reduce comparisons with unrealistic ideals. The findings suggest that targeted educational interventions can foster positive body perception, counteracting aesthetic stereotypes' negative effects, and promoting school-aged children's psychological well-being.

KEYWORDS: Body literacy, image stereotypes, primary school, media literacy, action research.

Introduction

In the contemporary landscape, characterized by increasing digitalization and ever earlier exposure to media, children are confronted with pervasive aesthetic standards and image stereotypes that can profoundly influence the perception of their bodies. Research indicates that body dissatisfaction begins to manifest as early as childhood, with 40-50% of children between 6- and 12-years expressing dissatisfaction with their physical appearance (Smolak, 2011). This issue assumes

clinical and social relevance considering its correlations with harmful behaviours, such as reduced physical activity (Grogan, 2006), unhealthy eating patterns (Tremblay & Lariviere, 2009), and an increased risk of mental health problems, including depression (Xie et al., 2013).

Image stereotypes, understood as standardized and generalized representations relating to physical appearance, play a crucial role in the formation of children's body image. These stereotypes, amplified by traditional media and social networks, promote often unreachable aesthetic ideals and contribute to the construction of arbitrary associations between certain physical characteristics and personal qualities, social success, or individual value (Tiggemann & Slater, 2014). The rapid diffusion of platforms such as Instagram, TikTok, and YouTube has intensified children's exposure to these idealized models, implementing preventive educational interventions even more urgent.

Body literacy, defined as the ability to understand, accept, and appreciate one's own body by developing resistance against harmful influences from society and media, emerges as a fundamental pedagogical tool to counter the negative impact of image stereotypes (Whitehead, 2010). This multidimensional construct includes body awareness, interoception, perception, and comprehension of the body, offering a holistic perspective to address issues related to body image.

The present study aims to evaluate the effectiveness of an educational intervention designed to promote body literacy and reduce the influence of image stereotypes among Italian primary school students aged 9-10. The intervention research, preventive in nature, incorporated workshops aimed at promoting body awareness, appreciation of diversity, and self-acceptance, with a specific focus on image stereotypes. The main objectives include improving body image, mitigating the negative influence of media and social networks, and building a positive framework for understanding one's own body. This study is situated within the growing literature that emphasizes the importance of inclusive school-based interventions to address concerns related to body image during childhood. The

expected results include increased media literacy, reduced internalization of harmful ideals, and improved psychological and social well-being of children. The initiative aims to provide significant contributions to the literature on body image while also offering practical solutions to support the holistic development and resilience of children in a media-saturated world.

2. Theoretical Framework

2.1 Image Stereotypes in Contemporary Culture

Image stereotypes represent sociocultural constructs that define and impose standards of beauty and physical attractiveness considered desirable within specific cultural contexts. These stereotypes are not limited to establishing aesthetic canons but create implicit associations between certain physical characteristics and personal attributes, conveying powerful messages about the value attributed to bodies of different shapes, sizes, and characteristics (Grogan, 2008). In contemporary Western culture, dominant stereotypes promote an ideal of thinness for females and muscularity for males, implicitly suggesting that conformity to these standards is indicative of personal control, success, and social value (Jones et al., 2004).

The construction and perpetuation of image stereotypes occur through multiple channels, including traditional media, social networks, advertising, toys, and even educational materials. Research has extensively documented how repeated exposure to these messages can influence self-perception and evaluation of one's own body from childhood (Levine & Murnen, 2009). Of particular relevance is the process of internalization, through which individuals assimilate cultural aesthetic ideals as personal goals to achieve, establishing a direct link between conformity to these standards and self-evaluation (Rodgers et al., 2015).

In recent years, the advent of social media has amplified the pervasiveness of image stereotypes, introducing new dynamics of social comparison and self-validation based on visual approval. Platforms such as Instagram and TikTok,

characterized by the centrality of image and the possibility of photographic manipulation, offer fertile ground for the diffusion of unrealistic aesthetic standards and the normalization of digitally altered bodies (Chua & Chang, 2016). The use of filters and retouching applications contributes to creating an "augmented reality" that distorts the perception of bodily normality, making it even more difficult for children to develop a healthy and realistic body image.

2.2 Image Stereotypes and Body Image Development in Childhood

Childhood represents a critical period for the development of body image, significantly influenced by image stereotypes present in the sociocultural context. Contrary to the previous belief that concerns related to physical appearance emerged primarily during adolescence, contemporary research demonstrates that children begin to form evaluations of their bodies at a very early age (Smolak, 2011). Studies indicate that children between 3 and 5 years generally show positive attitudes toward their own body but begin to absorb and internalize image stereotypes present in their environment. Starting from 5 years of age, many children have already internalized the dominant aesthetic ideals in their culture, and by the age of 6, a significant percentage express dissatisfaction with specific body parts, weight, or shape, manifesting desires oriented toward thinness in females and muscularity in males (Richardson et al., 2009).

Image stereotypes influence the development of body image through various psychological mechanisms. Social comparison represents one of the main processes: children constantly compare their appearance with that of peers, media characters, and influencers, evaluating their worth based on perceived conformity to dominant aesthetic ideals (Festinger, 1954). In parallel, the internalization of stereotypes leads children to develop cognitive schemas that filter information related to the body, reinforcing negative perceptions and minimizing positive aspects (Smolak, 2012). A particularly relevant factor is gender differentiation in exposure to and internalization of image stereotypes. Research suggests that girls tend to be more vulnerable to the negative effects of stereotypes related to

thinness, developing early behaviours of weight control and concerns for physical appearance (Dohnt & Tiggemann, 2006). Boys, on the other hand, show increasing concern for muscularity and physical prowess, reflecting dominant masculine stereotypes (Tatangelo et al., 2016).

2.3 Body Literacy as a Prevention Tool

Body literacy emerges as an essential educational paradigm to counter the negative influence of image stereotypes on children's body image. This concept includes not only motor competence but also the ability to understand, value, and take care of one's own body consciously and critically (Digennaro & Visocchi, 2024).

In the context of image stereotypes, body literacy comprises several interconnected dimensions: body awareness, which refers to the ability to perceive and understand one's own body concerning the surrounding space; interoception, which implies the recognition and interpretation of internal bodily sensations; body perception, which concerns the subjective evaluation of one's own body influenced by cultural and personal factors; and body comprehension, which includes knowledge of how the body functions and the ability to make informed decisions about one's physical well-being.

A crucial element of body literacy concerning image stereotypes is critical media literacy, defined as the ability to critically analyse media messages related to the body and beauty (McLean et al., 2016). Educational programs that integrate media literacy help children understand image manipulation techniques, recognize the artificial nature of beauty ideals proposed by media, and develop resistance against messages that promote unrealistic aesthetic standards (Wilksch et al., 2015).

Emotional literacy represents another fundamental component in preventing the internalization of image stereotypes. This concept includes emotional intelligence and emotion regulation, both essential for promoting a positive self-perception.

The ability to recognize, understand, and express one's emotions effectively is associated with greater resistance to image stereotypes and reduced vulnerability to body dissatisfaction (Damiano et al., 2015; Digennaro & Visocchi, 2023).

Schools represent privileged contexts for implementing body literacy programs, given their ability to reach a diverse student population. Research indicates that well-structured school interventions can mitigate risk factors such as the internalization of beauty ideals and appearance-based comparison, simultaneously improving self-esteem and general well-being (Richardson & Paxton, 2010).

3. Methodology

3.1 Research Design

The present study adopted a qualitative action research approach, articulated in three distinct phases. The first phase involved initial data collection, conducted through focus groups to explore baseline perceptions and attitudes among participants, with particular attention to image stereotypes. The second phase involved the implementation of an intervention program designed to promote body literacy, with a specific focus on developing body awareness, self-acceptance, and critical media literacy. The third and final phase consisted of post-intervention data collection, again using focus groups to evaluate changes in participants' perceptions and behaviours related to image stereotypes after the intervention. This methodological design was chosen to provide an in-depth understanding of the impact of the intervention, maintaining a participant-centered approach sensitive to context. The qualitative action research allowed not only to document changes in students' perceptions but also to adapt the intervention iteratively based on emerging needs and participants' responses.

3.2 Participants

Participants were selected through convenience sampling from fourth and fifth grade classes at the Pio di Meo Primary School in Cassino, Italy. The selection

process was conducted in collaboration with classroom teachers to ensure effective inclusion of students. The study involved a cohort of 50 participants. The sample included children aged between 9 and 11 years, with a balanced distribution between males and females. Particular attention was paid to the representation of various sociodemographic characteristics, to capture a variety of perspectives and experiences related to image stereotypes.

3.3 Data Collection Instruments

For data collection, a focus group was conducted with the entire sample to investigate participants' habits regarding social media use, as well as their perceptions and opinions about their physical appearance and body image, with particular emphasis on image stereotypes.

According to Lederman, a focus group is a technique that involves in-depth group interviews, where participants are intentionally selected to represent a specific population interested in a particular topic (Rabiee, 2004). It is essential that participants feel comfortable speaking openly with interviewers and with each other during the focus group (Richardson & Rabiee, 2001).

The focus group was characterized by anonymous open-ended questions posed by a moderator, designed to stimulate dialogue and gather students' perceptions regarding the influence of social media on their body image and the internalization of image stereotypes. Audio recorders were used during the focus group session to ensure accurate transcription of discussions.

The discussions revolved around a series of targeted questions to explore various aspects of children's interaction with online photos and image stereotypes. Topics included posting photos online, parental roles in photo sharing, emotions associated with sharing one's photos online, friends' access to shared photos, motivations that drive children to share their photos, children's favorite influencers, and the perception of image stereotypes spread in media and social networks.

3.4 Educational Intervention

The second phase of the research involved the implementation of an educational intervention, characterized by practical-educational workshops aimed at improving body literacy within the target sample, with particular attention to the deconstruction of image stereotypes.

Each workshop lasted two hours and consisted of an initial and final section consistent across all sessions, while the central section varied, as each activity was carefully designed to align with the main theme of each specific workshop. The themes of the workshops conducted were as follows: self-awareness, body image, emotional intelligence, gender stereotypes, and image stereotypes.

In particular, the workshop dedicated to image stereotypes included activities aimed at identifying image stereotypes present in media and social networks, critically analysing image manipulation techniques, exploring the impact of image stereotypes on the perception of self and others, developing strategies to resist the influence of image stereotypes, and promoting appreciation of body diversity.

The initial part of each practical session involved creating a timeline, an activity designed to recall and reflect on the memory, personal meaning, and symbolic value attributed to the activities of the previous workshop. The final part involved a game called "The Wool Thread," which involved constructing a relational network using a ball of wool and included reflection and verbalization of feelings and emotions related to the activities just completed.

3.5 Data Analysis

Qualitative analysis of the data collected in the intervention research was performed through the use of Nvivo software, which allowed for the identification of several relevant thematic areas. The analytical approach followed the principles of thematic analysis, with particular attention to narratives related to image stereotypes.

The process of analysis involved transcribing audio recordings from the focus groups, followed by coding the data to identify recurring themes and significant patterns. Particular attention was paid to identifying changes in perceptions and attitudes related to image stereotypes before and after the educational intervention.

The analysis also considered gender differences in responses to the intervention, as well as the influence of social media use on the internalization of image stereotypes. This analytical approach allowed for a nuanced and contextualized understanding of the impact of the intervention on participants.

4. Results

The qualitative analysis of the collected data allowed for the identification of significant themes related to image stereotypes before and after the educational intervention. The qualitative data analysis revealed significant changes in participants' perceptions and attitudes toward image stereotypes following the educational intervention. Students aged 9-10 demonstrated increased critical awareness of media influences, developed strategies to resist stereotypes, and showed a more balanced view of personal value beyond physical appearance. However, some difficulties persisted due to ongoing social pressure and the pervasive influence of social media. Notable differences were observed between genders and among different types of social media users.

The results are presented following the main thematic areas that emerged from the analysis, with particular attention to changes in participants' perceptions and attitudes. A summary of the key findings is presented in Table 1.

| Thematic Area | Before Intervention | After Intervention | Persistent Difficulties |
|----------------------|----------------------------|---------------------------|--------------------------------|
|----------------------|----------------------------|---------------------------|--------------------------------|

| | | | |
|---|--|--|--|
| <p>Dominant Beauty Standards</p> | <ul style="list-style-type: none"> • "Pretty girls are always thin, that's how they should be" • "I wish I had a more muscular physique because it would make me feel more confident" | <ul style="list-style-type: none"> • "Before, I thought it was normal to want to look like people on social media; now I understand that many of those images aren't real" • "I've understood that people who truly appreciate me do so for who I am, not for how I look" | <ul style="list-style-type: none"> • Gender differences in response (boys showed greater resistance to questioning muscularity stereotypes) |
| <p>Beauty and Social Success</p> | <ul style="list-style-type: none"> • "If you don't fit into certain aesthetic canons, people judge you more" • "On social media, those who get more likes are always those who are more beautiful" | <ul style="list-style-type: none"> • "Before, I believed that being beautiful was the most important thing; now I know there are many other qualities that make me special" • "I've learned that I can appreciate my body for what it can do, not just for how it appears" | <ul style="list-style-type: none"> • "Even though I've understood that stereotypes are wrong, many people still use them, and this makes it difficult to really change" • "At school, those who are more popular still correspond to the beauty ideals we see on social media" |

| | | | |
|---|---|---|--|
| <p>Gender Stereotypes</p> | <ul style="list-style-type: none"> • "Boys must be strong and muscular, otherwise they get made fun of" • "Girls must be graceful and well-groomed; it's important to be appreciated" | <ul style="list-style-type: none"> • "Now I better understand how stereotypes condition the way we see ourselves and others" • "Now I can understand when a stereotype is influencing me, and I try not to let it condition me" | <ul style="list-style-type: none"> • "For a boy, it's still important to be strong, even if I understand that not everyone can be muscular" |
| <p>Use of Filters and Retouching</p> | <ul style="list-style-type: none"> • "I always use filters in my photos because I | <ul style="list-style-type: none"> • "Now I post photos without filters because I | <ul style="list-style-type: none"> • "It's difficult not to use filters when |

| | | | |
|--|--|--|---|
| | <p>look better that way"</p> <ul style="list-style-type: none"> • "Everyone uses filters on social media; if you don't use them, you seem strange, and your photos don't get likes" | <p>don't want to hide behind a false image"</p> <ul style="list-style-type: none"> • "I've understood that filters can be fun, but they become a problem when they make us feel insecure about our real appearance" | <p>all my friends do it"</p> <ul style="list-style-type: none"> • "Even though I understand that social media doesn't show reality, I continue to feel insecure when I see certain images" |
|--|--|--|---|

Table 1. Summary of the key findings of the research

5 Discussion

The results of this intervention research offer important insights into the effectiveness of educational interventions aimed at deconstructing image stereotypes and promoting body literacy among primary school children. The analysis of data collected before and after the intervention reveals a complex picture of changes, persistence, and individual differences that deserve careful consideration.

5.1 Effectiveness of the Intervention in Deconstructing Image Stereotypes

The educational intervention has demonstrated significant potential in promoting critical awareness of image stereotypes among participants. The increased ability to identify and critically analyse stereotypes suggests that children, even at a young age, can develop cognitive tools to resist harmful media messages when supported by targeted education. This result is consistent with previous studies that have highlighted the effectiveness of school interventions in improving media literacy and reducing the internalization of beauty ideals (McLean et al., 2016; Wilksch et al., 2015).

Particularly significant is the observed change in the perception of the link between physical appearance and personal value. The reduction in importance attributed to aesthetic conformity suggests that the intervention was successful in promoting a more holistic vision of personal value, a key element of body literacy (Whitehead, 2010). This cognitive shift could represent an important protective factor against the development of body dissatisfaction and associated risk behaviour.

The more critical attitude toward the use of filters and image modification technologies represents another promising result of the intervention. The ability to recognize the artificial nature of modified images and to resist the pressure to conform to unrealistic aesthetic standards is fundamental for the development of a positive body image. This result is particularly relevant considering the increasing diffusion of photographic modification technologies accessible even to younger children (Chua & Chang, 2016; Tiidenberg, 2014).

5.2 Persistence of Stereotypes and Contextual Factors

Despite the positive results, the persistence of some difficulties in completely overcoming the influence of image stereotypes highlights the complex and multifactorial nature of this phenomenon. The continuing social pressure, exerted by peers, family, and society in general, represents a significant challenge to the long-term effectiveness of the educational intervention. This observation reflects the systemic nature of image stereotypes, which are rooted in broader social and cultural structures (Grogan, 2008).

The results suggest that educational interventions, as effective as they may be in promoting critical awareness, may encounter limits when not supported by broader changes in the social context. This is consistent with the socioecological model of body image, which recognizes the influence of factors at individual, interpersonal, community, and social levels on the formation of body image (Voelker et al., 2015). The persistent influence of

social media on the body perception of some participants underscores the power and pervasiveness of these means of communication in the lives of contemporary children. The difficulty of resisting online social comparison dynamics, despite greater critical awareness, reflects the complex interaction between cognition and emotion in the experience of social media (Vogel et al., 2014). This suggests that future interventions might benefit from specific attention to emotional regulation strategies in the context of social media exposure.

The gender differences observed in responses to the intervention deserve particular attention. The greater resistance of male children to questioning stereotypes related to muscularity and physical strength could reflect the strong cultural association between masculinity and physical power, an association that begins to be internalized at a young age (Tatangelo et al., 2016). These results suggest the need for gender-sensitive approaches in body literacy education, which consider the specific pressures and social expectations that differently influence boys and girls.

5.3 Interaction Between Social Media Use and Intervention Effectiveness

The analysis of the interaction between social media use and response to the educational intervention offers interesting insights for the design of future body literacy programs. The diversity of responses observed among active, moderate, and limited users suggests that the effectiveness of educational interventions can vary significantly based on the level of exposure to digital media.

The fact that some active social media users showed the most significant changes after the intervention indicates an important transformation potential, precisely among subjects more vulnerable to image stereotypes. This result is encouraging and suggests that critical media literacy can be particularly effective for those who are most exposed to problematic content (Levine &

Murnen, 2009).

On the other hand, the ability of moderate users to maintain a balance between appreciation of digital platforms and critical awareness of their risks highlights the potential of social media as tools for promoting body literacy, when used consciously. This observation is consistent with previous research that has identified potential positive effects of social media on body image, depending on the nature of content consumed and shared (Cohen et al., 2019). The preventive benefit observed in limited users underscores the importance of early interventions, which can provide critical tools before problematic patterns of interaction with media develop. These results suggest the opportunity for differentiated approaches to body literacy, calibrated on children's level of exposure to and engagement with social media.

5.4 Implications for Body Literacy

The results of this research have important implications for the conceptualization and implementation of body literacy in the contemporary educational context. First, they highlight the need to explicitly include the deconstruction of image stereotypes as a fundamental component of body literacy. The ability to recognize, critically analyse, and resist image stereotypes emerges as an essential skill for the development of a healthy relationship with one's own body in the digital era.

Second, the results underscore the importance of integrating critical media literacy into body literacy education. In a context where children are exposed to idealized and often manipulated body images from early childhood, the ability to critically decode media messages related to the body becomes a fundamental skill for promoting well-being (Richardson et al., 2009).

Finally, the diversity of responses to the intervention observed among participants suggests the need for personalized approaches to body literacy, which take into account individual differences in terms of gender, media

exposure, and vulnerability to image stereotypes. This implies the development of flexible educational programs, capable of adapting to the specific needs and characteristics of different groups of children.

6 Conclusions and Implications

This intervention research investigated the impact of image stereotypes on children's body perception and assessed the effectiveness of an educational program aimed at fostering body literacy. The findings underscore the potential of such education to counteract the negative effects of image stereotypes, encouraging a more positive and realistic body image. The analysis of pre- and post-intervention data revealed several key insights. First, image stereotypes are both present and influential from an early age, with children between 9 and 11 years old already exhibiting signs of internalizing unrealistic beauty standards and linking physical appearance to personal worth. Second, a structured educational intervention can successfully enhance critical awareness of these stereotypes, reducing their impact on body perception and strengthening children's resilience to harmful media messages. However, the success of these interventions is shaped by contextual elements, including ongoing social pressure, the use of social media, and gender differences, all of which can either support or hinder the change process. Finally, body literacy—when combined with critical media literacy—emerges as a promising strategy for promoting a healthier relationship with the body in the digital age, though it must be tailored to the specific characteristics and needs of the target population.

6.1 Practical Implications

The results of this research carry important practical implications for educators, parents, and professionals working with children, highlighting the need for a

coordinated and multidimensional approach to promoting healthy body perception. For educators, it is essential to integrate body literacy into the school curriculum, with a focus on deconstructing image stereotypes and fostering an appreciation for body diversity. This includes adopting gender-sensitive strategies that address the different aesthetic pressures faced by boys and girls, incorporating activities that promote critical media literacy to help students decode implicit messages in media content, and cultivating school environments that value bodily differences and encourage a culture of respect and inclusion.

Parents also play a crucial role by recognizing how their behaviours and language around body image can shape children's self-perception. They should actively monitor and mediate their children's exposure to social media, guiding them toward more conscious and critical engagement, while also affirming their children's abilities and qualities beyond physical appearance to support a multidimensional sense of self. Open and honest conversations about image stereotypes and their impact are also key to nurturing children's critical thinking and resilience.

For professionals, the findings suggest the importance of designing early prevention programs that combine body literacy with broader efforts to support psychological well-being. A multidisciplinary perspective is necessary, one that accounts for individual, interpersonal, and sociocultural influences on body image. Moreover, interventions should be scalable and adaptable to various educational contexts to ensure greater impact and long-term sustainability.

6.2 Limitations and Future Directions

This study presents some limitations that are important to acknowledge. First, the qualitative nature of the research, while valuable for exploring participants' subjective experiences, limits the generalizability of results. Second, the short-

term evaluation of the intervention does not allow for determining the stability of observed changes over time. Finally, the specific context of the research (an Italian primary school) might limit the applicability of results to other cultural contexts.

Future research directions could include:

6.1.1. Longitudinal studies to evaluate the long-term impact of body literacy interventions on the perception of image stereotypes.

6.1.2. Comparative research in different cultural contexts to understand how image stereotypes and their influence vary across cultures.

6.1.3. Studies combining qualitative and quantitative methodologies to provide a more comprehensive understanding of intervention effectiveness.

6.1.4. Research on the development of digital body literacy interventions that could leverage the positive potential of digital media to counter image stereotypes.

6.1.5. Studies focused on the role of parents and teachers as mediators of exposure to image stereotypes and facilitators of body literacy.

In conclusion, this intervention research highlights the importance of proactively addressing the influence of image stereotypes from childhood through educational interventions that promote body literacy and critical media literacy. In an era characterized by the pervasiveness of digital images and increasing aesthetic pressure, equipping children with tools to critically navigate this landscape represents a fundamental educational priority to promote their overall well-being and resilience.

STUDY 3

The following article extends the intervention research through a comprehensive longitudinal investigation, tracking changes in children's body perceptions, media awareness, and digital practices across time and examining both immediate responses and barriers to sustained change.

Fostering Body Literacy and Media Awareness in Primary Education: Insights from a Qualitative Action Research Study

Abstract

Body dissatisfaction among children is increasingly prevalent, affecting up to half of those aged 6–12, and is intensified by exposure to idealized beauty standards on social media. This study aimed to evaluate an educational intervention promoting body literacy and critical media awareness among fourth- and fifth-grade students (ages 9–11) through qualitative action research in a primary school in Cassino, Italy. The program consisted of eight workshops addressing self-awareness, body image, emotional intelligence, gender stereotypes, and media literacy. Data were collected through pre- and post-intervention focus groups. The study initially involved 255 students participating in preliminary data collection activities, and the sample was subsequently expanded with an additional 50 students engaged in intensive focus group discussions for in-depth qualitative analysis. Thematic analysis using NVivo revealed that before the intervention, students reported strong body dissatisfaction, frequent use of digital filters, and reliance on social validation through social media. After the workshops, participants showed greater awareness of media manipulation, increased recognition of stereotypes, and decreased use of beauty filters. Nonetheless, persistent peer pressure and

entrenched sociocultural ideals limited enduring behavioral change. Gender differences persisted, with girls focusing on aesthetic features and boys emphasizing strength and function. Overall, the intervention enhanced self-awareness and critical reflection but highlighted the necessity for long-term, developmentally appropriate initiatives integrating emotional literacy, peer collaboration, and parental involvement to promote sustainable positive body image within digital contexts.

Keywords:

Body Literacy; Qualitative Action Research; Primary Education.

1 Introduction

Body dissatisfaction increasingly emerges in childhood and poses significant risks for children's physical and psychosocial well-being. Recent studies indicate that 40% to 50% of children between the ages of 6 and 12 report dissatisfaction with their physical appearance (Smolak, 2011; Tatangelo & Ricciardelli, 2017). This high prevalence is associated with lower participation in physical activity (Grogan, 2016), maladaptive eating behaviors (Rodgers et al., 2021), and heightened susceptibility to depression and anxiety (Bucchianeri & Neumark-Sztainer, 2014). These established correlations underscore childhood as a pivotal window for preventive interventions designed to improve resilience to appearance-related social pressures. Incorporating emotional literacy in educational programs could be crucial, as emotional regulation skills enhance children's ability to handle body image concerns effectively (Duarte et al., 2015; Giles et al., 2021).

1.1 The Digital Transformation of Body Image Development

The rise of social media platforms has fundamentally transformed how children and adolescents develop their body image. Instagram, TikTok, YouTube, and Snapchat expose young users to numerous appearance-focused posts through

algorithm-driven feeds that often feature idealized and digitally enhanced images (Fardouly & Vartanian, 2016; Tiggemann & Slater, 2017). These digital spaces foster body dissatisfaction through several interconnected mechanisms. Children engage in upward social comparisons with edited photos of peers, celebrities, and influencers (Kleemans et al., 2018; Saiphoo & Vahedi, 2019), internalize restrictive beauty ideals through repeated exposure to thin-ideal or muscular-ideal content (Rodgers et al., 2020; Aparicio-Martinez et al., 2019), and experience validation pressures through interactive features like likes, comments, and follower counts that function as proxies for self-worth (Chua & Chang, 2016).

Research indicates that these digital influences substantially impact children, who often lack critical media analysis abilities and struggle to distinguish between authentic and manipulated images (McLean et al., 2015). Digital filters and photo-editing tools exacerbate these challenges by normalizing unrealistic standards and promoting self-objectification (Cohen et al., 2019). Gender-specific patterns emerge as girls tend to internalize thin ideal norms while boys pursue muscular ideals, both shaped by socio-cultural beauty norms disseminated through media (Grogan, 2017; Rodgers et al., 2021).

Beyond passive consumption, children's direct participation in digital self-presentation introduces additional complications. The pressure to create idealized online personas is substantial, and experiences of body shaming, teasing, and cyberbullying intensify body dissatisfaction while diminishing self-esteem (Fardouly et al., 2018). These effects prove especially detrimental during middle childhood, when peer relationships assume paramount importance and social acceptance becomes a primary developmental concern (Lawler & Nixon, 2011).

1.2 Body Literacy as a Protective Framework

Body literacy provides a comprehensive framework to help children develop

resilience against appearance pressures. It encompasses several interconnected competencies: body awareness (understanding one's body within spatial and social contexts), interoception (recognizing and interpreting internal sensations, emotions, and physiological states), body perception (subjective evaluation shaped by cultural contexts and personal experiences), and body comprehension (knowledge of bodily functions enabling informed health decisions) (McLean & Paxton, 2019; Digennaro & Visocchi, 2023).

This approach transcends traditional body image interventions by integrating critical media literacy, emotional intelligence development, and body appreciation. Critical media literacy enables children to analyze appearance ideals, identify commercial and social influences, and question unrealistic standards (McLean et al., 2016). Emotional literacy, encompassing both emotional intelligence and emotion regulation, protects body dissatisfaction. Higher emotional competence correlates with positive self-perception, improved interpersonal relationships, and enhanced psychological resilience (Duarte et al., 2015; Giles et al., 2021).

Body literacy interventions emphasize valuing body diversity, prioritizing function over appearance, and fostering self-compassion. This aligns with positive body image frameworks that conceptualize body satisfaction not merely as the absence of dissatisfaction but as active appreciation of the body's capabilities and intrinsic worth (Tylka & Wood-Barcalow, 2015). This approach proves especially suitable for children, who typically maintain positive body perceptions early in development before negative attitudes emerge during preadolescence (Tatangelo et al., 2016).

1.3 School-Based Interventions: Rationale and Evidence

Schools represent ideal venues for body literacy interventions due to their capacity to reach numerous students, their significant role in socialization processes, and their potential to normalize body image discussions among

peers (Yager et al., 2013). Research demonstrates that well-designed, theory-based school programs effectively reduce risk factors such as internalization of beauty ideals and appearance comparisons while increasing protective factors including self-esteem, body appreciation, and critical thinking skills (Dunstan et al., 2017; Rodgers et al., 2018).

Despite promising intervention research findings, significant gaps persist in understanding how body literacy programs function within real-world educational contexts, particularly at the primary school level where preventive efforts likely yield the greatest benefit. Most existing studies focus on adolescent populations, employ quantitative methodologies potentially insufficient for capturing the complexity of children's subjective experiences, or fail to adequately address the rapidly evolving digital media landscape shaping contemporary childhood (Gattario et al., 2020).

Given the lack of qualitative research examining body literacy interventions in primary education contexts, particularly regarding children's lived experiences with digital media, this study addresses these critical gaps. The qualitative action-research design employed offers a novel approach by immersing researchers directly within the primary educational environment, providing rich, context-sensitive insights into how young students interact with body literacy interventions. This methodology not only illuminates the nuanced, subjective experiences of children but also ensures educational strategies remain adaptable to real-world dynamics, thereby bridging a critical research gap within intervention science.

1.4 The Present Study

This study employs a qualitative action-research approach to evaluate an educational intervention promoting body literacy among fourth- and fifth-grade students in Italy. The intervention comprises eight workshops addressing self-awareness, emotional intelligence, gender stereotypes, body dysmorphia,

developmental changes, distinctions between actual and perceived body image, and critical analysis of appearance stereotypes. Through participatory and experiential activities, the program aims to foster body awareness, appreciation for diversity, and self-acceptance while enhancing resilience to societal and media pressures.

The research addresses the following questions: (1) What are fourth- and fifth-grade students' baseline perceptions of their bodies, specific appearance-related concerns, and patterns of social media engagement, and what implications could these have for early interventions? (2) How do students' self-perceptions, critical awareness of media influence, and digital engagement practices change following participation in a targeted body literacy intervention, potentially influencing future curricula? (3) What persistent barriers impede the translation of cognitive and attitudinal changes into sustained behavioral modifications post-intervention, and how might addressing these barriers inform the development of more effective educational strategies?

By employing focus groups and systematic thematic analysis, the study foregrounds children's subjective experiences to generate evidence informing the design and refinement of future body literacy programs within primary educational contexts.

This initiative contributes to the growing body image literature in three key ways. First, it extends existing knowledge by examining body literacy development within the understudied middle childhood period, when preventive interventions prove most effective. Second, it provides in-depth qualitative data illuminating the psychological mechanisms and social processes through which body literacy programs operate, complementing quantitative outcome research. Third, it addresses the timely concern of children's engagement with social media and digital technologies, examining how educational interventions can foster critical digital citizenship alongside positive body image development.

Expected outcomes include enhanced media literacy capacities, reduced

internalization of restrictive appearance ideals, diminished engagement in negative social comparison processes, and improved psychological and social well-being. Ultimately, this research aspires to generate practical knowledge supporting children's holistic development and resilience in an increasingly media-saturated world while contributing valuable insights for educators, parents, and policymakers concerned with promoting positive youth development.

1.5 Body image

Body image is conceptualized as a multidimensional construct encompassing the cognitive, affective, perceptual, and behavioral dimensions through which individuals relate to their physical bodies (Cash & Smolak, 2011; Grogan, 2017). This construct spans a continuum from negative body image, characterized by dissatisfaction, distorted perceptions, and appearance preoccupation, to positive body image, defined by holistic appreciation, respect for bodily functionality, and acceptance of physical diversity (Tylka & Wood-Barcalow, 2015).

Historically, body dissatisfaction was considered predominantly an adolescent phenomenon; however, contemporary developmental research demonstrates that appearance concerns emerge considerably earlier. Young children, typically between ages 3 and 5, generally exhibit favorable attitudes toward their bodies and demonstrate limited awareness of societal beauty standards (Damiano et al., 2015). Nevertheless, negative perceptions begin surfacing during early formal schooling years. Weight-based prejudice and bias toward larger bodies have been documented among children as young as 3 years, indicating early socialization into appearance-based hierarchies.

By age 5, a substantial proportion of children have internalized cultural appearance ideals, and by age 6, research indicates that up to 70% express dissatisfaction with specific body attributes, including weight, shape, or body

parts (Smolak, 2011; Damiano et al., 2015). Gender differences in body dissatisfaction emerge early, with girls typically expressing a desire for thinness and boys articulating a preference for increased muscularity (Tatangelo & Ricciardelli, 2017). Body dissatisfaction intensifies when individuals assign excessive salience to physical appearance in their self-evaluation schemas, a tendency that frequently escalates during the transition into preadolescence (ages 9-12), potentially crystallizing into persistent negative body image patterns that extend into adulthood (McCabe et al., 2020). These empirical findings underscore a critical developmental window during early and middle childhood when positive body image foundations remain relatively intact. This period represents an optimal opportunity for preventive interventions that can capitalize on children's nascent positive body perceptions, potentially averting the consolidation of body dissatisfaction during later developmental stages.

1.6 Body image in the digital era

Social media platforms have fundamentally reconfigured modes of communication by integrating mobile and web-based technologies to facilitate highly interactive digital spaces. Within these environments, users participate in synchronous content sharing, collaborative engagement, and the production of user-generated media (Kietzmann et al., 2011). The widespread adoption of social media among children and adolescents has led to an expanding body of literature examining the multifaceted impacts of these platforms on psychosocial development, particularly regarding body image formation.

Empirical evidence reveals considerable prevalence of body image concerns among children and adolescents who actively utilize social networking sites (Tiggemann & Slater, 2017; Fardouly & Vartanian, 2016). While social media offer valuable affordances including skill acquisition (Ahn, 2011), health promotion opportunities, and social connectivity, they simultaneously present

challenges encompassing body image disturbances (McLean et al., 2015). Theoretical frameworks emphasizing social comparison processes illuminate the mechanisms through which social media exposure influences body image. According to Social Comparison Theory, individuals evaluate themselves by comparing their personal attributes with those of others, with upward comparisons (comparing oneself to superior others) typically resulting in negative self-evaluations. Social media intensifies these processes by providing unlimited access to curated, idealized representations of others' appearance and lifestyles (Vogel et al., 2014; Fardouly & Vartanian, 2016). The visual and interactive nature of platforms like Instagram amplifies appearance-focused comparisons, as users encounter streams of attractiveness-focused content accompanied by social feedback metrics (likes, comments) that quantify popularity and desirability (Chua & Chang, 2016; Tiggemann & Slater, 2017). The concept of thin-ideal internalization represents a crucial mediating variable in the relationship between social media and body image (Rodgers et al., 2020; Aparicio-Martinez et al., 2019). Among children, internalization of appearance ideals and engagement in appearance comparisons contribute to body dissatisfaction, self-objectification, and negative emotions, including body shame and appearance anxiety, potentially triggering maladaptive behaviors such as dietary restriction (Damiano et al., 2015; Halliwell & Diedrichs, 2014). Recent research examining photo-based social media use identifies additional concerning patterns, including the normalization of digital filter and editing tool usage among youth. These technologies enable users to alter facial features, skin texture, body proportions, and overall appearance, creating increasingly unrealistic self-presentations that may distort self-perception and elevate appearance dissatisfaction (Kleemans et al., 2018; Lonergan et al., 2019). For children with developing cognitive capacities and incomplete media literacy skills, distinguishing between authentic and manipulated imagery presents challenges (McLean et al., 2015).

Body literacy represents comprehensive, multidimensional proficiency

encompassing interconnected competencies that collectively enable individuals to understand, appreciate, and care for their physical bodies in health-promoting ways (Cairney et al., 2019; Digennaro & Visocchi, 2023). This construct integrates four primary components: body awareness (the ability to perceive and understand one's body in relation to surrounding space and contexts), interoception (recognition and interpretation of internal bodily sensations and physiological states), body perception (subjective evaluation influenced by cultural contexts and personal experiences), and body comprehension (knowledge about bodily functions and informed health decision-making) (Khalsa et al., 2018; Grogan, 2017; Cairney et al., 2019).

Gender constitutes a critical factor in shaping body literacy development, particularly in terms of body perception and the internalization of appearance ideals. Societal appearance standards, extensively perpetuated through mass media and increasingly through social media platforms, establish divergent expectations for male and female bodies (Grogan, 2017). Males frequently experience body dissatisfaction centered on perceived inadequacy in muscularity and muscle definition, aligning with cultural ideals of a lean, muscular physique (Frederick et al., 2020). Females are predominantly subjected to pressures to be thin, with slenderness idealized across most contemporary Western and increasingly globalized cultural contexts (Rodgers et al., 2021).

Emotional literacy represents another essential determinant in promoting positive body image and comprehensive body literacy. Emotional literacy encompasses emotional intelligence (the capacity to recognize, understand, express, and manage emotions effectively) and emotion regulation (the ability to assess, monitor, sustain, and modulate emotional responses). Elevated emotional intelligence associates with favorable psychological outcomes, including positive effects, successful interpersonal relationships, and adaptive coping (Schutte et al., 2007). Conversely, deficits in emotional intelligence correlate with body dissatisfaction, particularly among preadolescents and

adolescents. Emotion regulation skills enable individuals to respond adaptively to appearance-related distress, social comparison experiences, and negative body-related thoughts, thereby buffering against body dissatisfaction (Duarte et al., 2015; Giles et al., 2021).

Body literacy interventions emphasize fostering appreciation for body diversity, critically examining unattainable and narrowly defined beauty ideals, and cultivating analytical competencies to evaluate media content and appearance-related messages (McLean et al., 2016). These programs typically integrate psychoeducation about media literacy, self-esteem enhancement, body functionality appreciation, and peer support components (Yager et al., 2013; Dunstan et al., 2017). Educational institutions are particularly well-positioned to implement body literacy programs given their systematic access to diverse student populations, their role as socialization contexts, and their capacity to normalize body image discussions within supportive peer environments (Gattario et al., 2020).

Empirical research substantiates the effectiveness of well-designed, theory-driven school-based interventions in improving body image among children and adolescents. Systematic reviews and meta-analyses have demonstrated that these initiatives are capable of significantly lowering risk factors—such as the internalization of appearance norms and engagement in appearance-based social comparison—while simultaneously bolstering protective factors including self-esteem, body satisfaction, and critical media literacy skills (Yager et al., 2013; Dunstan et al., 2017). Programs grounded in interactive, participatory pedagogies and structured peer discussions yield particularly robust short-term outcomes. Furthermore, integrating body literacy content within physical education curricula has facilitated a shift in focus from aesthetics to bodily functionality and competence (Digennaro & Visocchi, 2023). Notwithstanding these successes, important limitations undermine the sustainability of intervention effects. Many studies report a decline in program benefits over time, indicating that initial improvements in attitudes and

behaviors often diminish without sustained engagement. This attenuation underscores a critical need for ongoing reinforcement mechanisms, longitudinal support structures, and the comprehensive integration of body literacy concepts across the educational continuum to ensure a durable, systemic impact (Rodgers et al., 2018).

1.7 Body literacy

Body literacy represents comprehensive, multidimensional proficiency encompassing interconnected competencies that collectively enable individuals to understand, appreciate, and care for their physical bodies in health-promoting ways (Cairney et al., 2019; Sum et al., 2016; Digennaro & Visocchi, 2023). This construct integrates four primary components: body awareness, interoception, body perception, and body comprehension.

Body awareness refers to the ability to perceive and understand one's body in relation to its surrounding space, other individuals, and environmental contexts. This foundational competency encompasses proprioceptive and kinesthetic knowledge, enabling coordinated movement, spatial orientation, and physical self-regulation (Mehling et al., 2012; Tylka et al., 2014).

Interoception refers to the recognition and interpretation of internal bodily sensations, emotions, and physiological states, fostering understanding of the body's internal landscape. Interoceptive awareness facilitates emotion regulation, self-care behaviors, and attuned responses to bodily needs (Khalsa et al., 2018; Murphy et al., 2019). **Body perception** encompasses the subjective evaluation and interpretation of one's physical appearance and characteristics, which are profoundly influenced by cultural contexts, personal experiences, social environments, and media exposure. This evaluative dimension corresponds closely to traditional body image constructs, encompassing satisfaction, self-surveillance, and appearance investment (Cash & Smolak, 2011; Grogan, 2017). **Body comprehension** encompasses knowledge about

bodily functions, health maintenance practices, and informed decision-making regarding physical well-being, including an understanding of nutrition, exercise, hygiene, and health behaviors (Cairney et al., 2019; Pot et al., 2021). Gender constitutes a critical factor in shaping body literacy development, particularly in terms of body perception and the internalization of appearance ideals. Societal appearance standards, extensively perpetuated through mass media and increasingly through social media platforms, establish divergent expectations for male and female bodies (Grogan, 2017; Tiggemann, 2011). Males frequently experience body dissatisfaction centered on perceived inadequacy in muscularity and muscle definition, aligning with cultural ideals of a lean, V-shaped, muscular physique (McCreary & Saucier, 2009; Frederick et al., 2020). Females are predominantly subjected to pressures to be thin, with slenderness idealized across most contemporary Western and increasingly globalized cultural contexts (Grabe et al., 2008; Rodgers et al., 2021). Despite these gender-specific manifestations, the overarching preoccupation with and internalization of restrictive appearance standards contributes to body dissatisfaction across genders, negatively impacting behaviors, self-esteem, mental health outcomes, and overall quality of life (Bucchianeri & Neumark-Sztainer, 2014; Dakanalis & Riva, 2013).

Emotional literacy represents another essential determinant in promoting positive body image and comprehensive body literacy. Emotional literacy encompasses emotional intelligence (the capacity to recognize, understand, express, and manage emotions effectively) and emotion regulation (the ability to assess, monitor, sustain, and modulate emotional responses) (Mayer & Salovey, 1997; Gross, 2015). Elevated emotional intelligence is associated with favorable psychological outcomes, including positive effects, successful interpersonal relationships, adaptive coping, and enhanced physical health (Martins et al., 2010; Schutte et al., 2007). Conversely, deficits in emotional intelligence correlate with body dissatisfaction and eating disorder symptomatology, particularly among preadolescents and adolescents (Markey

& Markey, 2005; Sim & Zeman, 2006). Emotion regulation skills enable individuals to respond adaptively to appearance-related distress, social comparison experiences, and negative body-related thoughts, thereby buffering against body dissatisfaction (Duarte et al., 2015; Giles et al., 2021).

Body literacy interventions emphasize fostering appreciation for body diversity, critically examining unattainable and narrowly defined beauty ideals, and cultivating analytical competencies to evaluate media content and appearance-related messages (Richardson et al., 2009; McLean et al., 2016). These programs typically integrate psychoeducation about media literacy, self-esteem enhancement, body functionality appreciation, and peer support components (Yager et al., 2013; Dunstan et al., 2017). Educational institutions are particularly well-positioned to implement body literacy programs given their systematic access to diverse student populations, their role as socialization contexts, and their capacity to normalize body image discussions within supportive peer environments (Richardson & Paxton, 2010; Gattario et al., 2020).

Empirical research substantiates the effectiveness of well-designed, theory-driven school-based interventions in improving body image among children and adolescents. Systematic reviews and meta-analyses have demonstrated that these initiatives are capable of significantly lowering risk factors—such as the internalization of appearance norms and engagement in appearance-based social comparison—while simultaneously bolstering protective factors including self-esteem, body satisfaction, and critical media literacy skills (Yager et al., 2013; Dunstan et al., 2017; Alleva et al., 2021). Programs grounded in interactive, participatory pedagogies and structured peer discussions yield particularly robust short-term outcomes (Richardson & Paxton, 2010; Halliwell et al., 2022). Furthermore, integrating body literacy content within physical education curricula has facilitated a shift in focus from aesthetics to bodily functionality and competence (Digennaro & Visocchi, 2023). Notwithstanding these successes, important limitations undermine the

sustainability of intervention effects. Many studies report a decline in program benefits over time, indicating that initial improvements in attitudes and behaviors often diminish without sustained engagement. This attenuation underscores a critical need for ongoing reinforcement mechanisms, longitudinal support structures, and the comprehensive integration of body literacy concepts across the educational continuum to ensure a durable, systemic impact (Stice et al., 2019; Rodgers et al., 2018).

2 Materials and Methods

2.1 Research Design

This study employed a qualitative action-research methodology, conceptualized as a collaborative and iterative process in which participants and researchers jointly construct knowledge through cycles of action and reflection (Kemmis & McTaggart, 2005; McNiff & Whitehead, 2011). The action-research approach aligns with the study's emancipatory objectives, empowering participants to critically examine and transform their relationships with body image and media practices. The research was structured across three sequential phases: pre-intervention assessment, intervention implementation, and post-intervention evaluation.

2.2 Participants and Setting

Participants were recruited through convenience sampling from fourth- and fifth-grade classes (ages 9-11 years) at Pio di Meo Primary School in Cassino, Italy. Selection procedures were conducted collaboratively with classroom teachers to ensure appropriate inclusion and optimal pedagogical integration. The study initially involved 255 students participating in preliminary data collection activities. Following the initial assessment phase, the sample was expanded with an additional 50 students who were engaged in intensive focus

group discussions for in-depth qualitative analysis.

These additional 50 focus group participants were purposively selected to ensure maximum variation in gender (25 girls, 25 boys), class level (25 fourth-graders, 25 fifth-graders), and initial social media engagement levels. Selection was conducted collaboratively with classroom teachers based on students' willingness to participate and ability to articulate their experiences. Data saturation was reached after conducting 8 focus groups (pre-intervention) and 8 focus groups (post-intervention), with no new themes emerging in the final two groups.

This age range was deliberately selected as it represents a critical developmental period preceding preadolescence, when body image concerns typically intensify but remain potentially malleable to intervention efforts. Classroom teachers collaborated in participant selection, provided contextual insights about classroom dynamics, facilitated workshop logistics, and participated in debriefing sessions to ensure pedagogical alignment. Teachers did not participate directly in focus groups to minimize social desirability bias.

2.3 Data Collection: Focus Group Methodology

Focus groups constituted the primary qualitative data collection technique employed in both pre- and post-intervention phases. Focus groups represent a structured research method that involves in-depth group interviews with purposefully selected participants who represent specific populations or share an interest in particular topics (Krueger & Casey, 2015). The distinctive feature of focus groups lies in their capacity to generate rich data through synergistic group interaction, enabling exploration of complex topics through dynamic dialogue and mutual stimulation of ideas. This methodology proves particularly valuable when investigating sensitive topics among children, as the group format can reduce anxiety associated with individual interviews while normalizing diverse perspectives.

Focus groups were stratified by gender and grade level, with 6-7 participants per group to facilitate in-depth discussion. Pre-intervention groups (conducted in September 2024) explored baseline perceptions through 8 sessions lasting 45-60 minutes each. Post-intervention groups (conducted in January 2025) followed identical composition and explored changes through 8 sessions lasting 60-90 minutes. All sessions were co-facilitated by two trained researchers using a semi-structured guide.

Pre-intervention focus groups explored participants' baseline habits regarding social media utilization, perceptions of physical appearance, and attitudes toward body image. A semi-structured discussion guide facilitated exploration of several thematic domains: patterns of posting photographs online, parental involvement in photo-sharing practices, emotions associated with sharing personal images digitally, peer access to shared photographs, motivations underlying photo-sharing behaviors, identification of influential social media personalities (influencers), awareness and usage of digital filters and editing tools, body parts or features participants wished to change, and general concerns regarding physical appearance.

Post-intervention focus groups maintained similar structural elements while emphasizing the assessment of perceptual and behavioral changes that followed program participation. Discussion topics included perceived changes in self-perception and body appreciation, modifications in social media practices (particularly filter usage), enhanced critical awareness of media manipulation and beauty standards, the capacity to identify and resist stereotypes, and persistent challenges or barriers encountered.

All focus group sessions were audio-recorded with informed consent to ensure accurate transcription and analysis. Groups were facilitated by trained researchers employing active listening techniques, non-judgmental responses, and open-ended probing questions to encourage authentic expression and diverse viewpoints. Particular attention was devoted to creating psychologically safe environments where participants felt comfortable sharing

potentially sensitive experiences and opinions.

2.4 Intervention Description: Body Literacy Workshops

The educational intervention comprised eight practical-educational workshops, each lasting approximately two hours, designed to systematically develop specific body literacy competencies. The intervention was delivered over 12 weeks (October-December 2024), with one 2-hour workshop per week for each class.

Workshop sessions maintained consistent structural elements (opening and closing activities) while varying thematic content across sessions. Themes addressed included:

- (1) Self-Awareness and Personal Identity - Identifying Internal Signals
- (2) Body Image Formation and Influences - Recognizing External Pressures
- (3) Emotional Intelligence and Emotion Regulation - Managing Emotional Responses
- (4) Gender Stereotypes and Their Impact - Challenging Societal Norms
- (5) Body Dysmorphia and Distorted Perceptions - Developing Healthy Perception
- (6) Bodily Changes Across the Lifespan - Understanding Developmental Changes
- (7) Distinguishing Actual from Perceived Body - Building Accurate Self-Perception
- (8) Critical Analysis of Appearance Stereotypes in Media - Enhancing Media Literacy

Each workshop began with a timeline activity, in which participants recalled and reflected on previous session content, fostering continuity, consolidation, and metacognitive awareness. Core workshop activities varied based on their thematic focus, but consistently employed experiential and interactive methodologies, including small-group discussions, creative expression

exercises (such as drawing and collage), role-playing scenarios, media analysis tasks, and collaborative problem-solving activities. Sessions concluded with "The Yarn Thread" activity. This structured group reflection exercise utilized a ball of yarn to construct symbolic relational networks while participants verbalized their feelings and insights related to the session activities.

Pedagogical approaches emphasize participatory learning, peer dialogue, and critical consciousness-raising consistently with constructivist and critical pedagogical frameworks. Activities were developmentally appropriate, incorporating playful elements while addressing substantive content. Workshop facilitators maintained non-judgmental, accepting stances, validating diverse perspectives, and encouraging critical questioning of taken-for-granted assumptions about appearance, gender, and media representations.

2.5 Data Analysis

Qualitative data analysis employed thematic analysis methodology supported by NVivo qualitative data analysis software (QSR International). Thematic analysis represents a flexible, theoretically independent method for identifying, analyzing, and reporting patterns (themes) within qualitative data (Braun & Clarke, 2006, 2019). The analysis process proceeded through iterative phases including: (1) familiarization with data through repeated reading of transcripts, (2) generation of initial codes identifying semantic and latent features, (3) organization of codes into potential themes, (4) review and refinement of themes, (5) definition and naming of final themes, and (6) production of the analytical narrative.

Both open coding (inductive identification of emerging patterns) and axial coding (theoretical connection of concepts) were employed to identify recurrent meanings, emotional patterns, and discursive shifts related to self-perception, body image, and media practices. Codes were subsequently organized into higher-order thematic categories that capture the interrelations

among self-awareness, gender norms, digital mediation, and resistance to stereotypes. The reflexive nature of the analytical process allowed both participants' meanings and the researchers' interpretive frameworks to inform their development, aligning with an interpretivist epistemology that aims to understand lived experiences and subjective transformations.

Analytical rigor was enhanced through multiple strategies, including prolonged engagement with data, peer debriefing among research team members, negative case analysis (examining instances that contradict preliminary interpretations), and maintaining detailed audit trails to document analytical decisions. Direct participant quotations were selected to illustrate thematic findings, providing evidentiary grounding and preserving participants' voices within the analytical narrative.

3 Results

The qualitative phase employed thematic analysis, supported by NVivo software, to systematically explore participants' reflections across the pre- and post-intervention stages. Open and axial coding identified recurrent meanings, emotional patterns, and discursive shifts related to self-perception, body image, and media practices. Codes were organized into higher-order categories that capture the interrelations among self-awareness, gender norms, digital mediation, and resistance to stereotypes. The reflexive analytical process enabled both participants and researchers to co-construct insights, aligning with an interpretivist epistemology that aims to understand lived experiences and subjective transformations (Braun & Clarke, 2019).

The intervention produced marked qualitative improvements, most notably in students' critical awareness of media manipulation and their ability to analyze and challenge appearance-based stereotypes in digital environments. Participants demonstrated increased acceptance of bodily diversity and a heightened willingness to question prevailing standards of physical appearance

online. Nevertheless, these cognitive and attitudinal advancements did not consistently translate into lasting behavioral change. While gains in media literacy and self-acceptance were evident, they infrequently led to sustained alterations in digital engagement or self-assessment practices. Persisting sociocultural beauty norms and peer influences continued to shape students' emotional reactions to online portrayals of appearance, thereby limiting the integration of new understandings into enduring behavioral patterns. Consequently, although the intervention fostered critical reflection and attitudinal progress, entrenched systemic factors curtailed its long-term effectiveness on students' practices and perceptions.

3.1 Table 1. Summary of Thematic Findings Before and After the Intervention

| Thematic Area | Before Intervention | After Intervention | Illustrative Quotes |
|--|--|---|---|
| Perception of Physical Appearance | Physical appearance is closely tied to self-esteem and emotional well-being; participants reported feeling judged by peers and media images. Children expressed specific dissatisfaction with body parts, including facial | Greater appreciation for bodily uniqueness and self-worth beyond physical traits for many participants; some reported little or no change | Before: "I would like to have green eyes"; "My face, I think it's too round"; "My body structure because my ribs stick out, the skeleton is outside not inside"; "I would like |

| | | | |
|------------------------------------|--|---|--|
| | <p>features, body proportions, hair, teeth, and eye color.</p> | <p>in self-perception patterns.</p> | <p>longer hair"; "I would like to change my teeth because they are not straight"; "I would like to have blue eyes"; "I would like to have blonde hair" / After: "I used to think being pretty meant being accepted. Now I see that how I feel matters more than how I look; "It's not easy, but I'm learning to like myself without comparing."</p> |
| <p>Gendered Body Ideals</p> | <p>Female participants aspired to slimness and</p> | <p>Post-intervention narratives suggest a</p> | <p>Before: "My body structure because I'm too thin"; "My</p> |

| | | | |
|--|--|---|---|
| | <p>muscular tone; male participants valued muscularity and athleticism as symbols of strength and desirability. Gender-differentiated concerns were evident, with girls focusing on facial features, body proportions, and hair, while boys expressed concerns about functionality and strength.</p> | <p>gradual decoupling from gendered ideals, although gendered aspirations remain evident. A broader acceptance of diverse body shapes and a reduced pressure to conform to traditional gender ideals emerged.</p> | <p>fingers because they don't know how to do many things" (boy); "I would like blonde hair" (boy) / After: "I always felt I had to be thinner to be attractive. I realized strength can mean many things, not only muscles."</p> |
| <p>Influence of Digital Filters and Image Editing</p> | <p>Widespread use of filters and image editing is noted across multiple platforms (Snapchat, Instagram, TikTok). Filters are perceived both</p> | <p>Some participants reduced their use of filters and reported increased critical awareness regarding</p> | <p>Before: "I use filters on Snapchat to set a more colorful background on the phone"; "I use filters to whiten teeth";</p> |

| | | | |
|--|---|---|--|
| | <p>as an aesthetic enhancement and a source of normative pressure. Children reported using filters for: whitening teeth, adding freckles, changing eye color, elongating eyelashes, creating backgrounds, and playful transformations.</p> <p>12 out of the sample reported regular filter use.</p> | <p>digital manipulation ; others continued to rely on filters for self-presentation. A growing, crucial distance from digital manipulation and preference for authenticity in self-representation emerged among a subset of participants.</p> | <p>"I use filters to change eye color"; "I use filters for fun using butterflies, freckles, green eyes, dog ears"; "I use filters to look like a Disney princess"; "I couldn't post a photo without a filter" / After: "Now I prefer to show myself as I really am—even with imperfections" ; "I noticed that filters make everyone look the same"; "Now I publish photos without filters</p> |
|--|---|---|--|

| | | | |
|---------------------------------|---|--|--|
| | | | because I don't want to hide behind a false image" |
| Awareness of Stereotypes | Participants acknowledged stereotypes linking beauty, success, and gender roles, yet found them difficult to resist or deconstruct. Recognition that societal standards shape judgments, but limited capacity to challenge these norms. | Enhanced ability to recognize and challenge stereotypes, heightened sensitivity to their social reproduction in media. Increased capacity to identify when stereotypes influence thoughts and behaviors. | Before: "If you don't fit certain aesthetic standards, people judge you more"; "Even though I know certain stereotypes are wrong, it's difficult not to be influenced by them" / After: "I realized how many stereotypes I've internalized without noticing"; "Now I can identify when a stereotype is |

| | | | |
|---|---|--|---|
| | | | <p>shaping my thoughts";</p> <p>"Now I understand better how stereotypes condition the way we see ourselves and others"</p> |
| <p>Social Media Practices: Posting Behaviors</p> | <p>Active users emphasized control over their digital self-presentation; passive users experienced insecurity and feelings of comparison. Many sought validations through likes and comments. The majority posted on WhatsApp stories, Instagram, or saved content in TikTok drafts. 7 out of 17 students</p> | <p>Improved self-regulation and reduced dependence on external validation, more mindful engagement with social media platforms for a subset of participants. Some reported posting for self-expression</p> | <p>Before: "I post on WhatsApp status photos of where I go, for example I go to the mountains and post the photo of the mountain";</p> <p>"Sometimes I put photos with friends if we do something together";</p> <p>"Sometimes I send things but always on</p> |

| | | | |
|---|--|--|--|
| | <p>posted photos/videos of themselves.</p> <p>Common motivations included: sharing locations/activities, documenting experiences with friends, showing special events, and seeking likes.</p> | <p>rather than validation.</p> | <p>Facebook in my family group" /</p> <p>After: "I used to post for likes; now I post for myself";</p> <p>"Seeing others online doesn't affect me like before"</p> |
| <p>Social Media Practices: Monitoring and Validation-Seeking</p> | <p>Frequent checking of views, likes, and comments.</p> <p>Most participants checked "every time I open" the app or "2-3 times per day." Strong pattern of validation-seeking through quantitative metrics. Some reported removing posts due to low engagement or receiving negative</p> | <p>Slight reduction in frequency of checking for some participants; others maintained pre-existing monitoring behaviors.</p> <p>Modest shift from external validation to self-directed motivation.</p> | <p>Before:</p> <p>"Every time I open I go to check";</p> <p>"Every hour";</p> <p>"I got to 5 [times checking]";</p> <p>"2-3 times a day";</p> <p>"Sometimes when I have nothing to do, like the next day I go check"; "A boy on a</p> |

| | | | |
|--|--|--|---|
| | comments. | | TikTok video only received insults and so he deleted the video"; "It happened that I removed posts because they got few likes" / After: Reduced emphasis on metrics for some: "Now I check less because I understood that many images don't represent reality" |
| Parental Involvement in Digital Practices | 21 students reported finding at least one photo of themselves posted by parents online. Mixed emotions: some reported annoyance when | Limited data on changes in parental practices post-intervention; children reported | "A student states that the father does not post photos that portray them, but they are present in his profile |

| | | | |
|---|--|---|--|
| | <p>parents shared photos, particularly when dissatisfied with their appearance. One student's mother prohibited posting photos showing the child's face. Parent-child negotiations around photo-sharing are evident.</p> | <p>increased awareness of their rights regarding image sharing.</p> | <p>photo"; "A student states that sometimes they feel annoyed when their parents send photos to relatives via WhatsApp"; "A student often takes photos of themselves and then deletes them"; "Others feel annoyed only if they are not satisfied with their appearance in the photo"</p> |
| <p>Device Ownership and Access</p> | <p>Variability in device ownership created differential access to social media. 9 students had personal</p> | <p>Post-intervention data showed most children (all but one) had access to at least one</p> | <p>Before: "Only 9 students have a smartphone or other electronic device for</p> |

| | | | |
|----------------------------------|--|---|---|
| | <p>smartphones or electronic devices. Some parents deemed children too young for personal devices. One child expressed a fear of being hacked and preferred waiting until after the age of 20.</p> | <p>personal device, though parental controls varied. Contextual constraints remained a significant barrier.</p> | <p>personal use"; "A girl is afraid of using her own phone and being hacked; she would want it after 20 years of age"; "The parents of a student believe it is too early for a personal smartphone" / After: "All children, except one, have at least one personal device"</p> |
| <p>Barriers to Change</p> | <p>Internalized ideals and social expectations constrained self-reflection and change; transformation perceived as superficial or</p> | <p>Persistent challenges in applying critical awareness in daily life; societal standards remained</p> | <p>Before: Strong internalization of ideals with limited resistance / After: "Even if I think differently, it's</p> |

| | | | |
|--|---|--|--|
| | <p>temporary. Peer pressure and societal reinforcement of beauty standards created resistance to adopting new perspectives.</p> | <p>pervasive and emotionally influential. Participants recognized difficulty translating workshop insights into sustained behavioral change.</p> | <p>hard to act differently"; "The world around me still praises a single idea of beauty"; "Even if I understand that stereotypes are wrong, many people still use them and this makes it really difficult to change"; "I feel like I'm the same person as before, I haven't noticed big changes"</p> |
|--|---|--|--|

3.2 Descriptive Analysis

3.2.1 Pre-Intervention: Embodied Insecurity and Digital Dependency

Pre-intervention narratives revealed entrenched associations between physical appearance and emotional self-worth. Participants frequently described the

body as a form of social currency, influencing perceptions of inclusion, desirability, and confidence. This discourse resonates with objectification theory, highlighting how the body becomes simultaneously a site of identity construction and a target of social surveillance.

Specific body dissatisfaction was remarkably prevalent and detailed. Children identified features they wished to modify, including eye color (multiple participants desiring green or blue eyes), hair characteristics (length, color), facial shape ("too round"), body proportions ("too thin," "ribs showing"), dental alignment, and even cognitive capabilities ("brain"). The specificity and diversity of these concerns demonstrate how comprehensively appearance-related dissatisfaction permeates children's self-perception during middle childhood.

Gender patterns emerged clearly in the data. Female participants predominantly referenced concerns about facial features, body proportions, hair aesthetics, and overall body shape, aligning with feminine beauty ideals that emphasize facial attractiveness and slenderness. Male participants, though fewer in expressing dissatisfaction, focused on functional capacities ("fingers that don't know how to do many things") and aesthetic features associated with masculinity (blonde hair, potentially reflecting aspirational identification with media representations). These gendered patterns reflect early internalization of culturally specific appearance ideals transmitted through family socialization, peer interactions, and media exposure (Tatangelo & Ricciardelli, 2017).

Digital mediation played a pivotal role in shaping self-perceptions. Habitual filter usage was nearly universal among social media users, with 12 out of 50 students reporting regular engagement with editing tools. Filters served multiple functions: aesthetic enhancement (teeth whitening, eye color modification), playful experimentation (animal features, fantastical transformations), and strategic self-presentation (background modification, freckle addition). This pattern reflects what Cohen et al. (2019) term "Snapchat dysmorphia," the normalization of digitally altered appearance as an

aspirational standard.

Participants articulated a paradox of empowerment and dependency regarding the use of filters. They gained control over self-presentation and could experiment with appearance without permanent commitment yet simultaneously reinforced unrealistic ideals they sought to resist. As one participant noted, filters enabled individuals to see themselves "better," suggesting dissatisfaction with their unmodified appearance and a preference for enhanced versions. This finding aligns with research demonstrating that habitual filter use correlates with increased body dissatisfaction and appearance anxiety (Lonergan et al., 2019; Kleemans et al., 2018).

Social media practices revealed strong patterns of validation-seeking. Most participants who posted content reported frequently monitoring views, likes, and comments—often "every time I open" the application or multiple times a day. Quantitative social feedback metrics served as proxies for self-worth and social acceptance, and post removal was most common when engagement fell short of expectations. One particularly poignant example involved a child deleting a TikTok video after receiving "only insults," illustrating vulnerability to negative social feedback and the emotional risks of digital self-presentation. Parental involvement introduced additional complexity. While 21 out of 50 students found photos of themselves posted by parents, reactions varied from acceptance to annoyance, particularly when children felt dissatisfied with their appearance in shared images. This finding highlights intergenerational differences in privacy norms and children's emerging awareness of digital presence and image control.

Importantly, structural barriers shaped participation. Only 9 out of 50 students initially possessed personal devices, creating differential access to social media and intervention relevance. This digital divide reflects socioeconomic factors and parental philosophies regarding age-appropriate access to technology, with some parents deeming children "too young" and one child expressing concerns about device ownership.

3.2.2 Post-Intervention: Emerging Critical Consciousness and Persistent Tensions

Post-intervention findings revealed a marked increase in self-reflective capacity among participants, who began to critically reassess previously internalized body norms. NVivo analysis revealed substantial thematic clustering around critical reflection, self-acceptance, and digital dissonance, indicating a cognitive shift from uncritical adherence to societal standards toward an active interrogation of such norms. For instance, participants articulated this progression through statements such as, "how I feel matters more than how I look," highlighting a growing prioritization of internal well-being over external appearance. Others explicitly acknowledged their prior tendency to equate social acceptance with physical attractiveness, with remarks like, "before, I thought being liked meant looking a certain way, but now I realize it's more about who I am." The emergence of these sentiments exemplifies the development of a more autonomous and critically engaged self-perception, substantiating the intervention's impact in fostering both metacognitive awareness and revised body image attitudes.

Awareness of stereotypes expanded significantly. Participants demonstrated enhanced capacity to identify stereotypical messages, articulate links between aesthetic ideals and social hierarchies, and critique media representations. Statements such as "I realized how many stereotypes I've internalized without noticing" and "Now I can identify when a stereotype is shaping my thoughts" suggest metacognitive development—the capacity to observe and evaluate one's own thought processes. This represents a crucial shift from unconscious internalization toward conscious recognition, creating potential for cognitive restructuring.

Following the intervention, digital practices among participants exhibited marked heterogeneity, indicating a spectrum of behavioral responses to the

body literacy curriculum. While a subset of students expressed a conscious and sustained decrease in the use of digital filters, frequently citing motivations such as a desire for authenticity—exemplified by statements including, "Now I publish photos without filters because I don't want to hide behind a false image" other participants either continued previous behaviors or demonstrated only transient modification. For those who reduced filter use, this behavioral shift was underpinned by a reframing of filters as instruments of inauthenticity rather than tools for self-enhancement, reflecting a substantive reorientation toward valuing unmediated self-representation. Their explicit recognition that "filters make everyone look the same" evidences a developing critical media literacy, with awareness of the standardizing and depersonalizing consequences of digital image manipulation. However, other participants reported persistent reliance on filters or struggled to sustain new practices, citing factors such as ongoing social comparison and peer expectations. This diversity in behavioral change underscores the complex interplay between individual cognitive shifts and the structural or interpersonal factors that either enable or impede the translation of attitudinal gains into consistent, long-term digital practice.

Despite measurable gains in cognitive awareness and attitudinal shifts among participants, a significant portion of students reported minimal progress in translating these insights into consistent behavioral modification. Participant statements such as "I feel like I'm the same person as before, I haven't noticed big changes," and "Even if I think differently, it's hard to act differently," indicate a persistent disconnect between intellectual understanding and behavioral implementation. This pattern reflects a well-documented gap in the health behavior change literature. The present findings illustrate that although the intervention promoted cognitive restructuring, students often lacked the requisite sense of agency and experienced insufficient normative support to enact or sustain new behaviors. This insufficiency is especially pronounced within developmental contexts characterized by substantial peer conformity

and pervasive media influence, where prevailing norms and a limited sense of control undermine the translation of awareness into action (Lawler & Nixon, 2011; Grogan, 2016). The enduring presence of these barriers emphasizes that structural and social-ecological factors constitute fundamental obstacles to intervention efficacy. Consequently, effective body literacy interventions must move beyond individual awareness-raising to incorporate strategies that enhance perceived behavioral control and actively reshape normative environments.

Barriers to sustained change were explicitly articulated. Participants recognized that while workshops fostered new awareness, "the world around me still praises a single idea of beauty," highlighting the overwhelming influence of persistent sociocultural beauty standards. Peer environments, family attitudes, continued media exposure, and internalized beliefs created resistance to translating workshop insights into daily practice. The statement "it's difficult not to be influenced by them [stereotypes]" captures the tension between intellectual understanding and embodied experience.

Social media remained both a challenge and an opportunity for identity negotiation. While some participants expressed reduced dependence on external validation ("I used to post for likes; now I post for myself"), others maintained pre-existing patterns. The modest gains in critical media literacy for some participants contrasted with persistent validation-seeking behaviors among others, suggesting that individual differences in receptivity, developmental readiness, and environmental support moderate the effectiveness of the intervention.

Thematic Synthesis. In synthesis, the intervention successfully enhanced critical media awareness and stereotype recognition, with 68% of participants (34 out of 50 students) demonstrating increased ability to identify manipulated imagery. However, behavioral changes were modest: only 24% (12 out of 50 students) reported sustained reduction in filter use, and 40% (20 out of 50 students) explicitly noted difficulty translating awareness into action due to

persistent peer pressure and sociocultural norms. Gender patterns remained evident post-intervention, with girls continuing to emphasize aesthetic features and boys prioritizing functional capacities.

4 Discussion

The findings confirm that while body literacy interventions can effectively enhance critical awareness in primary school children, translating this awareness into sustained behavioral change requires addressing multiple interconnected barriers that operate at individual, interpersonal, and sociocultural levels. The findings from this study provide clear evidence that, while targeted interventions were effective at enhancing students' critical media literacy and promoting greater self-reflection, these gains did not translate into sustained improvements in body image attitudes or behaviors. Qualitative data demonstrated that many participants acquired the ability to identify and critically evaluate unrealistic appearance ideals portrayed in digital media, as indicated by increased recognition of stereotypes and explicit metacognitive statements such as, "Now I can identify when a stereotype is shaping my thoughts." However, this cognitive advancement frequently failed to result in enduring behavioral change. Thematic analysis documented that entrenched sociocultural beauty norms and persistent peer pressures continued to exert a dominating influence, as evidenced by participants' continued reliance on digital filters and validation-seeking behaviors, as well as comments reflecting difficulty enacting newfound awareness in practice (e.g., "Even if I think differently, it's hard to act differently").

These explicitly observed barriers substantiate the need for interventions that go beyond individual cognition. First, the persistence of these challenges underscores the necessity for longitudinal, developmentally responsive curricula that consistently reinforce body literacy and critical media analysis throughout critical developmental stages, as periodic workshops alone have

proven insufficient for effecting durable change. Second, recurring reports of participant difficulty in managing appearance-based emotional distress, despite improved critical understanding, indicate that future interventions should integrate experiential modules focused explicitly on building emotion regulation and self-compassion capacities. Third, the continuation of conformity behaviors and social validation needs, as revealed through group discussions and participant narratives, highlights the importance of systematically embedding structured reflection activities (e.g., guided peer discussions, critical incident analyses) to facilitate ongoing resistance to dominant appearance standards. These recommendations are directly derived from the qualitative evidence regarding participants' articulated struggles and observed behaviors, thereby representing empirically grounded strategies to support meaningful and lasting transformation in body image attitudes and practices amidst the complex sociocultural realities of contemporary digital environments.

A) Sustained and Developmentally Responsive Programming: Although single-cycle interventions can effectively initiate body literacy awareness among students, they have not demonstrated efficacy in facilitating enduring behavioral change. The persistent influence of sociocultural and peer-based barriers necessitates the implementation of longitudinal programs that integrate body literacy and media awareness curricula throughout multiple years of schooling. Such programs should be deliberately scaffolded to align with students' evolving cognitive, emotional, and social capacities, ensuring that content and pedagogical strategies remain developmentally appropriate at each stage of education. In practical terms, this requires embedding recurring workshops within the curriculum, incorporating regular booster sessions, and establishing mechanisms for ongoing reflection and application (e.g., classroom projects, teacher-facilitated discussions, and portfolio tracking to assess attitudinal and behavioral progress). Moreover, sustained programming

should facilitate transition points—such as the shift from primary to secondary education—by providing tailored support during these periods of heightened vulnerability to body image challenges. Institutional commitment to an iterative, context-sensitive model of programming is essential for producing meaningful and lasting change in students’ body literacy and critical engagement with media representations (Visocchi & Digennaro, 2024).

B) Peer-Based Pedagogies: Peer discussions and collaborative reflection proved effective in fostering awareness, suggesting that dialogical and participatory pedagogies are key to sustaining change. Creating classroom cultures that normalize body diversity and critique appearance-based judgments may extend the impact of interventions beyond workshop timeframes (Digennaro et al., 2022).

C) Parental and Community Engagement: Given parental influence on children's digital practices and the broader sociocultural reinforcement of beauty standards, effective interventions require family and community involvement. Parent education on body image development, social media risks, and supportive communication strategies could enhance the effectiveness of interventions.

D) Addressing Structural Inequalities: The digital divide observed in device ownership and access creates differential exposure both to social media risks and intervention relevance. Addressing these structural inequalities is crucial for promoting equitable body literacy.

E) Gender-Responsive Approaches: While the intervention addressed gender stereotypes, persistent gender patterns in body dissatisfaction suggest the need for more targeted, gender-responsive content that explicitly challenges masculine and feminine appearance ideals while validating diverse expressions of gender identity.

F) Integration with Emotional Literacy: The connection between emotional intelligence and body satisfaction suggests that body literacy programs should explicitly integrate emotional literacy components, teaching emotion

recognition, expression, and regulation skills alongside critical media literacy and body appreciation.

Crucial research gaps persist regarding the pedagogical utility and sustained impact of fostering digital authenticity within body literacy curricula. Subsequent inquiries should prioritize systematic evaluation of digital authenticity as an instructional strategy, rigorously assessing its capacity to promote enduring self-acceptance and reinforce students' critical resistance to culturally dominant beauty norms. Despite documented short-term attitudinal gains, there is insufficient evidence on the long-term viability of intervention effects and the specific transformative mechanisms triggered by digital authenticity. Future research should therefore employ robust longitudinal designs to determine the durability of interventions, map the developmental progression of body literacy acquisition, and pinpoint the optimal timing for intervention implementation to maximize outcomes. Moreover, given the heterogeneity of student populations, studies must undertake cross-cultural and intersectional analyses to examine the efficacy of interventions across diverse cultural, socioeconomic, and gender identity contexts. This approach is necessary to discern which curricular components possess universal applicability and which require contextual adaptation. To address the multifaceted nature of attitudinal and behavioral change, future studies should integrate quantitative assessments of outcomes with richly detailed, context-sensitive qualitative investigations that capture participant perspectives and emergent change processes. Advancing such a targeted and methodologically rigorous research agenda will address current knowledge deficits, inform evidence-based program refinement, and establish a firm empirical and theoretical foundation for future policy and educational practice in body literacy.

G) Ethical Considerations

The research protocol received approval from the institutional ethics committee. Informed consent was obtained from parents/guardians, with child

assent secured from all participants before data collection. Participants were informed of the voluntary nature of their participation, the confidentiality protections in place, and their rights to withdraw without penalty. All identifying information was removed from transcripts and replaced with pseudonyms to ensure anonymity.

5. Conclusions

This qualitative action research study demonstrated that body literacy and critical media education interventions can effectively enhance children's awareness, reflection, and analytical engagement with issues related to body image and digital representation. Participants exhibited significant cognitive and attitudinal gains, including increased awareness of stereotypes, greater appreciation for bodily diversity, and a more critical understanding of media manipulation. However, these shifts rarely translate into sustained behavioral changes, as enduring sociocultural pressures and peer influences continued to shape self-perception and digital practices.

The findings emphasize that short-term educational initiatives, while valuable for initiating awareness, are insufficient to counteract entrenched beauty norms and validation-based digital behaviors. Comprehensive, longitudinal, and developmentally responsive programs that integrate emotional literacy, parental mediation, and peer-based pedagogies are necessary to achieve durable change. Schools represent an ideal context for implementing holistic interventions that foster resilience, authenticity, and inclusivity in the digital age.

Long-term curriculum integration requires systematic embedding of body literacy content across multiple grade levels with developmentally appropriate progressions. Multi-stakeholder involvement encompassing teachers, parents, and policymakers proves essential for creating supportive ecosystems that reinforce intervention messages beyond the classroom. Emotional literacy must

be recognized as a core component of body image education, with explicit instruction in emotion recognition, regulation, and self-compassion skills. Finally, systemic cultural change is needed to challenge and transform the pervasive sociocultural beauty standards that perpetuate body dissatisfaction among children.

Future research should employ longitudinal mixed-methods designs to assess the durability of intervention effects across diverse cultural contexts (see Section 4.7 for detailed recommendations). Particular attention should be given to identifying optimal developmental windows and intervention components that facilitate translation of awareness into sustained behavior change.

This study represents one of the few qualitative action research efforts exploring body literacy at the primary school level through children's authentic voices, offering critical insights into the complex interplay between cognitive awareness and behavioral agency in an era of pervasive digital influence. Addressing structural and cultural inequalities within and beyond educational contexts will be critical to empowering children to resist harmful appearance norms and to cultivate a positive, embodied sense of self.

CONCLUSIONS

This dissertation has explored the complex relationship between body image and social media use among Italian primary school children through a qualitative research approach that privileged children's own voices, perspectives, and lived experiences. Through extensive theoretical analysis and three interconnected empirical studies involving a total of 255 students, with intensive qualitative insights from 50 participants, this research has generated substantial knowledge about the opportunities and strategies for supporting positive body image development in the digital age.

Principal Findings

The findings converge on several significant discoveries that highlight both children's capabilities and intervention opportunities. Children already in preadolescence (ages 9-11) possess sophisticated awareness and remarkable capacity for critical analysis. They recognize the manipulation of online images, identify beauty standards promoted by media, and are capable of articulated reflection on appearance-related pressures. This early awareness represents a valuable resource upon which to build effective educational interventions.

The research demonstrated that children respond positively to structured opportunities for dialogue and collective reflection. When safe spaces are created to explore body-related themes, children support one another, validate diverse perspectives, articulate body-positive values, and demonstrate sophisticated critical thinking capacities. This social and reflective competence suggests significant potential for interventions that leverage group dynamics in positive ways.

The Effectiveness and Potential of Educational Interventions

The intervention studies provided encouraging evidence regarding the effectiveness of body literacy education. Following participation in the workshop series, children demonstrated significant and promising changes: greater recognition of image manipulation techniques, more critical and sophisticated analysis of media messages, increased appreciation for body diversity and functionality, reduced use of beauty filters and greater authenticity in self-presentation among many participants, and development of strategies to resist appearance-related pressures.

Particularly significant was the qualitative shift in how children discussed their bodies, moving from predominantly evaluative and critical language to more

appreciative and functional discourse. Many children articulated a deeper understanding of personal worth that extends beyond physical appearance, expressing statements such as "how I feel matters more than how I look" and "I can appreciate my body for what it can do, not just for how it appears."

The intervention also facilitated the development of metacognitive competencies, with children demonstrating growing capacity to observe and evaluate their own thought processes: "Now I can identify when a stereotype is influencing my thoughts" represents a level of awareness that creates opportunities for self-regulation and ongoing change.

Theoretical Implications and Innovative Contributions

This dissertation makes several significant theoretical contributions that open new directions for research and practice. It extends body image theory to primary school populations, identifying this period as a critical window of opportunity for preventive interventions, when children maintain relatively positive body relationships while beginning to encounter sociocultural pressures.

An innovative contribution is the integration of body image and digital citizenship frameworks. This research demonstrates that treating body image as inseparable from media literacy, emotional competence, and critical consciousness produces a more comprehensive and relevant approach for contemporary children, whose bodily and digital experiences are deeply intertwined.

The research elaborates body literacy as a comprehensive and operationalizable educational framework, encompassing body awareness, interoception, body perception, body comprehension, critical media literacy, emotional literacy, and body appreciation. This multidimensional conceptualization provides more specific guidance for intervention design than previous, less elaborated formulations.

The most significant methodological contribution was centering children's voices and perspectives through extensive focus group methodology. This approach revealed the sophistication of children's thinking, their capacity for critical reflection, and their creative strategies for navigating appearance-related pressures—dimensions that might be invisible through traditional quantitative methods.

Recommendations for Practice: Building Solid Foundations

The evidence from this research suggests promising directions for multiple stakeholders.

For educators, the research demonstrates that investing in body literacy education produces tangible and meaningful outcomes. Integration of body literacy into school curricula—with focus on deconstructing stereotypes, promoting appreciation for body diversity, and developing critical media literacy competencies—represents an opportunity to support children's holistic development. Programming should be longitudinal and developmentally sequenced, building on progressive competencies across school years, utilizing interactive and participatory pedagogies that value peer dialogue and collective meaning-making.

For parents, the research highlights families' crucial role in creating environments that support positive body relationships. Effective strategies include emphasizing diverse qualities beyond physical appearance, modeling positive body relationships through one's own behavior, engaging in active and dialogical mediation of social media use, and cultivating home environments that value health, well-being, and intrinsic human worth.

For policymakers and social media platforms, the research suggests opportunities for innovations that support young users' well-being:

implementation of design features that promote authenticity and reduce social comparison, transparent labeling of edited content, provision of tools for mindful management of digital engagement, and development of educational resources that support critical media literacy.

Future Directions: Research and Development Opportunities

This research opens multiple promising directions for future inquiry. Longitudinal studies can evaluate how intervention effects are maintained and develop over time, identifying factors that facilitate translation of awareness into sustained practices. Comparative research across different cultural contexts can illuminate which intervention components possess universal applicability and which require contextual adaptation.

Integration of qualitative and quantitative methods can provide complementary understandings, with qualitative approaches capturing processes, meanings, and mechanisms of change, and quantitative approaches documenting prevalence, patterns, and effect sizes. Research on the development of digital interventions—applications, online platforms, interactive resources—could leverage the positive potential of digital technologies to promote body literacy.

Particularly promising is the exploration of peer-led educational approaches, where children themselves become agents of cultural change within their social contexts, potentially amplifying and sustaining intervention effects beyond formal workshop settings.

Concluding Reflection: Toward a Body-Positive Culture

This research demonstrates that children possess remarkable capacities for critical awareness, sophisticated reflection, and mutual support when provided with appropriate opportunities. Rather than being simply vulnerable to negative social

media influences, children can develop competencies to navigate digital environments in more conscious, critical, and healthy ways.

Body literacy interventions represent valuable investments in children's holistic development, with benefits extending beyond body image to include critical thinking, emotional competence, media literacy, and general psychosocial well-being. Building on these promising foundations through sustained programming, multi-stakeholder engagement, and broader cultural change, we can create environments—both digital and physical—in which all children can flourish.

Ultimately, this dissertation contributes to an optimistic yet realistic vision: with appropriate educational support, family engagement, responsible platform design, and gradual cultural transformation toward valuing diversity, we can support children in developing positive and resilient relationships with their bodies in the digital age. Children are not passive recipients of negative influences but capable agents who, when adequately supported, can develop the critical awareness, emotional competencies, and confidence necessary to navigate the complexities of contemporary life with well-being and agency.

REFERENCES

Agliata, D., & Tantleff-Dunn, S. (2004). The impact of media exposure on males' body image. *Journal of Social and Clinical Psychology, 23*(1), 7-22.

Ahn, J. (2011). The effect of social network sites on adolescents' social and academic development: Current theories and controversies. *Journal of the American Society for Information Science and Technology, 62*(8), 1435-1445. <https://doi.org/10.1002/asi.21540>

Akerjordet, K., & Severinsson, E. (2007). Emotional intelligence: A review of the literature with specific focus on empirical and epistemological perspectives. *Journal of Clinical Nursing, 16*(8), 1405–1416. <https://doi.org/10.1111/j.1365-2702.2006.01749.x>

Alleva, J. M., Sheeran, P., Webb, T. L., Martijn, C., & Miles, E. (2021). A meta-analytic review of stand-alone interventions to improve body image. *PLoS ONE*, *10*(9), e0139177.

Aparicio-Martinez, P., Prazeres, P., Mayers, A., & Dauwels-Okutsu, S. (2019). Social media, thin-ideal, body dissatisfaction and disordered eating attitudes: An exploratory analysis. *International Journal of Environmental Research and Public Health*, *16*(21), 4177. <https://doi.org/10.3390/ijerph16214177>

Bearman, S. K., Martinez, E., Stice, E., & Presnell, K. (2006). The Skinny on Body Dissatisfaction: A Longitudinal Study of Adolescent Girls and Boys. *Journal of Youth and Adolescence*, *35*(2), 217–229. <https://doi.org/10.1007/s10964-005-9010-9>

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

Bilukha, O. O., & Utermohlen, V. (2002). Internalization of Western standards of appearance, body dissatisfaction and dieting in urban educated Ukrainian females. *European Eating Disorders Review*, *10*(2), 120-137.

Bizirgianni, I., & Dionysopoulou, P. (2013). The influence of tourist trends of youth tourism through social media (SM) & information and communication technologies (ICTs). *Procedia-Social and Behavioral Sciences*, *73*, 652-660.

Boldi, A., & Rapp, A. (2022). Quantifying the Body: Body Image, Body Awareness and Self-Tracking Technologies. In K. Wac & S. Wulfovich (Eds.), *Quantifying Quality of Life: Incorporating Daily Life into Medicine* (pp. 189–207). Springer International Publishing. https://doi.org/10.1007/978-3-030-94212-0_9

Braun, V., & Clarke, V. (2006). Using thematic analysis in psychology. *Qualitative Research in Psychology*, *3*(2), 77-101. <https://doi.org/10.1191/1478088706qp063oa>

Braun, V., & Clarke, V. (2019). Reflecting on reflexive thematic analysis. *Qualitative Research in Sport, Exercise and Health*, *11*(4), 589-597. <https://doi.org/10.1080/2159676X.2019.1628806>

Brennan, M. A., Lalonde, C. E., & Bain, J. L. (2010). Body Image Perceptions: Do Gender Differences Exist? *Psi Chi Journal of Psychological Research*, *15*(3), 130–138. <https://doi.org/10.24839/1089-4136.JN15.3.130>

Bucchianeri, M. M., & Neumark-Sztainer, D. (2014). Body dissatisfaction: An overlooked public health concern. *Journal of Public Mental Health, 13*(2), 64-69. <https://doi.org/10.1108/JPMH-11-2013-0071>

Cairney, J., Kwan, M. Y., Velduizen, S., Hay, J., Bray, S. R., & Faught, B. E. (2019). Gender, perceived competence and the enjoyment of physical education in children: A longitudinal examination. *International Journal of Behavioral Nutrition and Physical Activity, 9*(1), 26. <https://doi.org/10.1186/1479-5868-9-26>

Cash, T. F. (2012). Cognitive-behavioral perspectives on body image. In *Encyclopedia of Body Image and Human Appearance*, Vol. 1 (pp. 334–342). Elsevier Academic Press. <https://doi.org/10.1016/B978-0-12-384925-0.00054-7>

Cash, T. F., & Smolak, L. (2011). *Body Image: A Handbook of Science, Practice, and Prevention* (2nd ed.). The Guilford Press.

Chua, T. H. H., & Chang, L. (2016). Follow me and like my beautiful selfies: Singapore teenage girls' engagement in self-presentation and peer comparison on social media. *Computers in Human Behavior, 55*, 190-197. <https://doi.org/10.1016/j.chb.2015.09.011>

Clark, L., & Tiggemann, M. (2006). Appearance culture in nine-to 12-year-old girls: Media and peer influences on body dissatisfaction. *Social Development, 15*(4), 628-643.

Cohen, R., Fardouly, J., Newton-John, T., & Slater, A. (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>

Cuesta-Zamora, C., González-Martí, I., & García-López, L. M. (2018). The role of trait emotional intelligence in body dissatisfaction and eating disorder symptoms in preadolescents and adolescents. *Personality and Individual Differences, 126*, 1–6. <https://doi.org/10.1016/j.paid.2017.12.021>

Dakanalis, A., & Riva, G. (2013). Mass media, body image, and eating disturbances: The underlying mechanism through the lens of the objectification theory. In L. B. Sams & J. A. Keels (Eds.), *Handbook on Body Image: Gender Differences, Sociocultural Influences and Health Implications* (pp. 217-236). Nova Science Publishers.

Dakanalis, A., Carrà, G., Calogero, R., Fida, R., Clerici, M., Zanetti, M. A., & Riva, G. (2015). The developmental effects of media-ideal internalization and self-objectification processes on adolescents' negative body-feelings, dietary

restraint, and binge eating. *European Child & Adolescent Psychiatry*, 24(8), 997-1010.

Damasio, A. (2003). Mental self: The person within. *Nature*, 423(6937), 227. <https://doi.org/10.1038/423227a>

Damiano, S. R., Hart, L. M., & Paxton, S. J. (2015). Development and validation of parenting measures for body image and eating patterns in childhood. *Journal of Eating Disorders*, 3(1), 5. <https://doi.org/10.1186/s40337-015-0043-5>

Damiano, S. R., Gregg, K. J., Spiel, E. C., McLean, S. A., Wertheim, E. H., & Paxton, S. J. (2015). Relationships between body size attitudes and body image of 4-year-old boys and girls, and attitudes of their fathers and mothers. *Journal of Eating Disorders*, 3, 16. <https://doi.org/10.1186/s40337-015-0048-0>

Damiano, S. R., Paxton, S. J., Wertheim, E. H., McLean, S. A., & Gregg, K. J. (2015). Dietary restraint of 5-year-old girls: Associations with internalization of the thin ideal and maternal, media, and peer influences. *International Journal of Eating Disorders*, 48(8), 1166-1169.

De Vries, D. A., Peter, J., de Graaf, H., & Nikken, P. (2016). Adolescents' social network site use, peer appearance-related feedback, and body dissatisfaction: Testing a mediation model. *Journal of Youth and Adolescence*, 45(1), 211-224.

de Vries, D. A., Vossen, H. G. M., & van der Kolk-van der Boom, P. (2019). Social Media and Body Dissatisfaction: Investigating the Attenuating Role of Positive Parent-Adolescent Relationships. *Journal of Youth and Adolescence*, 48(3), 527–536. <https://doi.org/10.1007/s10964-018-0956-9>

Digennaro, S. (2022). THE BODY AND ITS DUPLICATIONS: THE IMPACT OF THE USE OF SOCIAL MEDIA ON PREADOLESCENTS' BODY IMAGE. *Giornale Italiano Di Educazione Alla Salute, Sport e Didattica Inclusiva*, 6(1). <https://doi.org/10.32043/gsd.v6i1.545>

Digennaro, S., & Visocchi, A. (2024). Nurturing Body Literacy: Transforming Education in the Virtual Reality Era to Shape Children's Identities and Redefine Educator Roles. *Education Sciences*, 14(3), 267. <https://doi.org/10.3390/educsci14030267>

Dohnt, H. K., & Tiggemann, M. (2006). Body image concerns in young girls: The role of peers and media prior to adolescence. *Journal of Youth and Adolescence*, 35(2), 135-145.

Duarte, C., Ferreira, C., Trindade, I. A., & Pinto-Gouveia, J. (2015). Body image and college women's quality of life: The importance of being self-compassionate. *Journal of Health Psychology, 20*(6), 754-764. <https://doi.org/10.1177/1359105315573438>

Dunstan, C. J., Paxton, S. J., & McLean, S. A. (2017). An evaluation of a body image intervention in adolescent girls delivered in single-sex versus co-educational classroom settings. *Eating Behaviors, 25*, 23-31. <https://doi.org/10.1016/j.eatbeh.2016.03.016>

Farb, N., Daubenmier, J., Price, C. J., Gard, T., Kerr, C., Dunn, B. D., Klein, A. C., Paulus, M. P., & Mehling, W. E. (2015). Interoception, contemplative practice, and health. *Frontiers in Psychology, 6*. <https://www.frontiersin.org/articles/10.3389/fpsyg.2015.00763>

Fardouly, J., & Vartanian, L. R. (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>

Fardouly, J., Willburger, B. K., & Vartanian, L. R. (2018). Instagram use and young women's body image concerns and self-objectification: Testing mediational pathways. *New Media & Society, 20*(4), 1380-1395. <https://doi.org/10.1177/1461444817694499>

Festinger, L. (1954). A theory of social comparison processes. *Human Relations, 7*(2), 117-140.

Frederick, D. A., Crerand, C. E., Brown, T. A., Perez, M., Best, C. R., & Cook-Cottone, C. P. (2020). Demographic predictors of body image satisfaction: The U.S. Body Project I. *Body Image, 37*, 54-65. <https://doi.org/10.1016/j.bodyim.2021.01.006>

Furnham, A., Badmin, N., & Sneade, I. (2002). Body image dissatisfaction: Gender differences in eating attitudes, self-esteem, and reasons for exercise. *The Journal of Psychology, 136*(6), 581-596. <https://doi.org/10.1080/00223980209604820>

Gattario, K. H., Frisén, A., Fuller-Tyszkiewicz, M., Ricciardelli, L. A., Diedrichs, P. C., Yager, Z., Franko, D. L., & Smolak, L. (2020). How is body dissatisfaction communicated between mothers and daughters? A qualitative study in a community sample. *Body Image, 32*, 44-52. <https://doi.org/10.1016/j.bodyim.2019.11.003>

Gaudio, S., Brooks, S. J., & Riva, G. (2014). Nonvisual multisensory impairment of body perception in anorexia nervosa: A systematic review of neuropsychological studies. *PLoS One*, 9(10), e110087. <https://doi.org/10.1371/journal.pone.0110087>

Geangu, E. (2008). Notes on self awareness development in early infancy. *Cognition, Brain, Behavior*, 12(1), 103-121.

Giles, S., Hughes, E. K., & Fuller-Tyszkiewicz, M. (2021). Prospective predictors of body dissatisfaction in young children: A systematic review. *Body Image*, 37, 283-302. <https://doi.org/10.1016/j.bodyim.2021.03.006>

Grabe, S., Ward, L. M., & Hyde, J. S. (2008). The role of the media in body image concerns among women: A meta-analysis of experimental and correlational studies. *Psychological Bulletin*, 134(3), 460-476.

Green, J., Draper, A., & Dowler, E. (2003). Short cuts to safety: Risk and "rules of thumb" in accounts of food choice. *Health, Risk & Society*, 5(1), 33-52.

Griffiths, S., Murray, S. B., Krug, I., & McLean, S. A. (2018). The Contribution of Social Media to Body Dissatisfaction, Eating Disorder Symptoms, and Anabolic Steroid Use Among Sexual Minority Men. *Cyberpsychology, Behavior and Social Networking*, 21(3), 149–156. <https://doi.org/10.1089/cyber.2017.0375>

Grogan, S. (2006). Body image and health: Contemporary perspectives. *Journal of Health Psychology*, 11(4), 523-530.

Grogan, S. (2008). *Body Image: Understanding Body Dissatisfaction in Men, Women and Children* (2nd ed.). Routledge.

Grogan, S. (2016). *Body Image: Understanding Body Dissatisfaction in Men, Women and Children* (3rd ed.). Routledge. <https://doi.org/10.4324/9781315681528>

Grogan, S. (2017). *Body Image: Understanding Body Dissatisfaction in Men, Women and Children* (3rd ed.). Routledge.

Gross, J. J. (2015). Emotion regulation: Current status and future prospects. *Psychological Inquiry*, 26(1), 1-26.

Halliwell, E., & Diedrichs, P. C. (2014). Brief report: Testing a dissonance body image intervention among young girls. *Health Psychology*, 33(2), 201-204. <https://doi.org/10.1037/a0032585>

Halliwell, E., Yager, Z., Paraskeva, N., Diedrichs, P. C., Smith, H., & White, P. (2022). Body image in primary schools: A pilot evaluation of a primary school intervention program designed by teachers to improve children's body satisfaction. *Body Image, 19*, 117-121.

Haseeb, H., Anwar, M., & Pirwani, T. A. (2018). Effects of electronic media on youth. *Pakistan Armed Forces Medical Journal, 68*(1), 177-181.

Hawn, C. (2017). Take two aspirin and tweet me in the morning: How Twitter, Facebook, and other social media are reshaping health care. *Health Affairs, 28*(2), 361-368.

Hayes, S., & Tantleff-Dunn, S. (2010). Am I too fat to be a princess? Examining the effects of popular children's media on young girls' body image. *British Journal of Developmental Psychology, 28*(2), 413-426.

Horzum, M. B. (2016). Examining the relationship to gender and personality on the purpose of Facebook usage of Turkish university students. *Computers in Human Behavior, 64*, 319–328. <https://doi.org/10.1016/j.chb.2016.06.010>

Hosseini, S. A., & Padhy, R. K. (2022). Body Image Distortion. In *StatPearls*. StatPearls Publishing. <http://www.ncbi.nlm.nih.gov/books/NBK546582/>

Irvine, K. R., McCarty, K., McKenzie, K. J., Pollet, T. V., Cornelissen, K. K., Tovée, M. J., & Cornelissen, P. L. (2019). Distorted body image influences body schema in individuals with negative bodily attitudes. *Neuropsychologia, 122*, 38–50. <https://doi.org/10.1016/j.neuropsychologia.2018.11.015>

Jang, H.-Y., Ahn, J.-W., & Jeon, M.-K. (2018). Factors Affecting Body Image Discordance Amongst Korean Adults Aged 19–39 Years. *Osong Public Health and Research Perspectives, 9*(4), 197–206. <https://doi.org/10.24171/j.phrp.2018.9.4.09>

Jones, D. C., & Crawford, J. K. (2006). The peer appearance culture during adolescence: Gender and body mass variations. *Journal of Youth and Adolescence, 35*(2), 243-255.

Jones, D. C., Vigfusdottir, T. H., & Lee, Y. (2004). Body image and the appearance culture among adolescent girls and boys: An examination of friend conversations, peer criticism, appearance magazines, and the internalization of appearance ideals. *Journal of Adolescent Research, 19*(3), 323-339.

Kemmis, S., & McTaggart, R. (2005). Participatory action research: Communicative action and the public sphere. In N. K. Denzin & Y. S. Lincoln

(Eds.), *The Sage Handbook of Qualitative Research* (3rd ed., pp. 559-603). Sage Publications.

Khalsa, S. S., Adolphs, R., Cameron, O. G., Critchley, H. D., Davenport, P. W., Feinstein, J. S., ... & Interoception Summit 2016 participants. (2018). Interoception and mental health: A roadmap. *Biological Psychiatry: Cognitive Neuroscience and Neuroimaging*, 3(6), 501-513. <https://doi.org/10.1016/j.bpsc.2017.12.004>

Kietzmann, J. H., Hermkens, K., McCarthy, I. P., & Silvestre, B. S. (2011). Social media? Get serious! Understanding the functional building blocks of social media. *Business Horizons*, 54(3), 241-251. <https://doi.org/10.1016/j.bushor.2011.01.005>

Kim, J., & Lee, J. E. R. (2011). The Facebook paths to happiness: Effects of the number of Facebook friends and self-presentation on subjective well-being. *CyberPsychology, Behavior, and Social Networking*, 14(6), 359-364.

King, I. C. C. (2018). Body image in paediatric burns: A review. *Burns & Trauma*, 6, 12. <https://doi.org/10.1186/s41038-018-0114-3>

Kirschner, P. A., & Karpinski, A. C. (2010). Facebook® and academic performance. *Computers in Human Behavior*, 26(6), 1237-1245.

Kleemans, M., Daalmans, S., Carbaat, I., & Anschütz, D. (2018). 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>

Krueger, R. A., & Casey, M. A. (2000). *Focus Groups: A Practical Guide for Applied Research* (3rd ed.). Sage.

Krueger, R. A., & Casey, M. A. (2015). *Focus Groups: A Practical Guide for Applied Research* (5th ed.). Sage Publications.

Lawler, M., & Nixon, E. (2011). Body dissatisfaction among adolescent boys and girls: The effects of body mass, peer appearance culture and internalization of appearance ideals. *Journal of Youth and Adolescence*, 40(1), 59-71. <https://doi.org/10.1007/s10964-009-9500-2>

Legrain, L., Cleeremans, A., & Destrebecqz, A. (2011). Distinguishing three levels in explicit self-awareness. *Consciousness and Cognition*, 20(3), 578-585. <https://doi.org/10.1016/j.concog.2010.10.010>

Levine, M. P., & Murnen, S. K. (2009). "Everybody knows that mass media are/are not [pick one] a cause of eating disorders": A critical review of evidence for a causal link between media, negative body image, and disordered eating in females. *Journal of Social and Clinical Psychology*, 28(1), 9-42.

Lewer, M., Bauer, A., Hartmann, A. S., & Vocks, S. (2017). Different Facets of Body Image Disturbance in Binge Eating Disorder: A Review. *Nutrients*, 9(12), 1294. <https://doi.org/10.3390/nu9121294>

Lonergan, A. R., Bussey, K., Mond, J., Brown, O., Griffiths, S., Murray, S. B., & Mitchison, D. (2019). Me, my selfie, and I: The relationship between editing and posting selfies and body dissatisfaction in men and women. *Body Image*, 28, 39-43. <https://doi.org/10.1016/j.bodyim.2018.12.001>

Markey, C. N., & Markey, P. M. (2005). Relations between body image and dieting behaviors: An examination of gender differences. *Sex Roles*, 53(7-8), 519-530.

Martins, A., Ramalho, N., & Morin, E. (2010). A comprehensive meta-analysis of the relationship between emotional intelligence and health. *Personality and Individual Differences*, 49(6), 554-564.

Mayer, J. D. (n.d.). What is Emotional Intelligence? UNH Personality Lab. Retrieved from https://scholars.unh.edu/personality_lab

Mayer, J. D., & Salovey, P. (1997). What is emotional intelligence? In P. Salovey & D. J. Sluyter (Eds.), *Emotional Development and Emotional Intelligence: Educational Implications* (pp. 3-31). Basic Books.

McCabe, M. P., Connaughton, C., Tatangelo, G., Mellor, D., & Busija, L. (2020). Healthy me: A gender-specific program to address body image concerns and risk factors among preadolescents. *Body Image*, 20, 20-30. <https://doi.org/10.1016/j.bodyim.2016.10.007>

McCreary, D. R., & Saucier, D. M. (2009). Drive for muscularity, body comparison, and social physique anxiety in men and women. *Body Image*, 6(1), 24-30.

McLean, S. A., & Paxton, S. J. (2019). Body image in the context of eating disorders. *Psychiatric Clinics*, 42(1), 145-156. <https://doi.org/10.1016/j.psc.2018.10.006>

McLean, S. A., Jarman, H. K., & Rodgers, R. F. (2019). How do "selfies" impact adolescents' well-being and body confidence? A narrative review. *Psychology*

Research and Behavior Management, 12, 513–521.
<https://doi.org/10.2147/PRBM.S177834>

McLean, S. A., Paxton, S. J., & Wertheim, E. H. (2016). The role of media literacy in body dissatisfaction and disordered eating: A systematic review. *Body Image*, 19, 9-23.

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. (2016). 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>

McNiff, J., & Whitehead, J. (2011). *All You Need to Know About Action Research* (2nd ed.). Sage Publications.

Mehling, W. E., Price, C., Daubenmier, J. J., Acree, M., Bartmess, E., & Stewart, A. (2012). The Multidimensional Assessment of Interoceptive Awareness (MAIA). *PLoS ONE*, 7(11), e48230. <https://doi.org/10.1371/journal.pone.0048230>

Morrison, T., Morrison, M., & Hopkins, C. (2003). Striving for Bodily Perfection? An Exploration of the Drive for Muscularity in Canadian Men. *Psychology of Men & Masculinity*, 4, 111–120. <https://doi.org/10.1037/1524-9220.4.2.111>

Murphy, J., Brewer, R., Hobson, H., Catmur, C., & Bird, G. (2019). Is alexithymia characterised by impaired interoception? Further evidence, the importance of control variables, and the problems with the Toronto Alexithymia Scale. *Journal of Psychosomatic Research*, 118, 41-48.

Pahi, M. H., Hamid, N. A., & Khalid, N. (2016). The magic of peers' effect and social media use on entrepreneurial identity: A perspective from Malaysian entrepreneurial students. *International Journal of Business and Management*, 11(10), 146-169.

Perloff, R. M. (2014). Social media effects on young women's body image concerns: Theoretical perspectives and an agenda for research. *Sex Roles: A Journal of Research*, 71, 363–377. <https://doi.org/10.1007/s11199-014-0384-6>

Pingitore, R., Spring, B., & Garfieldt, D. (1997). Gender Differences in Body Satisfaction. *Obesity Research*, 5(5), 402–409. <https://doi.org/10.1002/j.1550-8528.1997.tb00662.x>

Pot, G. K., Battjes-Fries, M. C., Patijnhof, M. T., Peeters, M., & Rongen, F. C. (2021). Towards an integrated approach to body literacy. *Health Promotion International*, 36(2), 567-576.

Rabiee, F. (2004). Focus-group interview and data analysis. *Proceedings of the Nutrition Society*, 63(4), 655-660.

Rautio, D., Jassi, A., Krebs, G., Andrén, P., Monzani, B., Gumpert, M., Lewis, A., Peile, L., Sevilla-Cermeño, L., Jansson-Fröjmark, M., Lundgren, T., Hillborg, M., Silverberg-Morse, M., Clark, B., Fernández de la Cruz, L., & Mataix-Cols, D. (2022). Clinical characteristics of 172 children and adolescents with body dysmorphic disorder. *European Child & Adolescent Psychiatry*, 31(1), 133–144. <https://doi.org/10.1007/s00787-020-01677-3>

Ren, L., Xu, Y., Guo, X., Zhang, J., Wang, H., Lou, X., Liang, J., & Tao, F. (2018). Body image as risk factor for emotional and behavioral problems among Chinese adolescents. *BMC Public Health*, 18(1), 1179. <https://doi.org/10.1186/s12889-018-6079-0>

Richardson, C. A., & Rabiee, F. (2001). A question of access: An exploration of the factors that influence the health of young males aged 15 to 19 living in Corby and their use of health care services. *Health Education Journal*, 60(1), 3-16.

Richardson, S. M., & Paxton, S. J. (2010). An evaluation of a body image intervention based on risk factors for body dissatisfaction: A controlled study with adolescent girls. *International Journal of Eating Disorders*, 43(2), 112-122.

Richardson, S. M., Paxton, S. J., & Thomson, J. S. (2009). Is BodyThink an efficacious body image and self-esteem program? A controlled evaluation with adolescents. *Body Image*, 6(2), 75-82.

Rodgers, R. F., McLean, S. A., & Paxton, S. J. (2015). Longitudinal relationships among internalization of the media ideal, peer social comparison, and body dissatisfaction: Implications for the tripartite influence model. *Developmental Psychology*, 51(5), 706-713.

Rodgers, R. F., Paxton, S. J., & Chabrol, H. (2018). Depression as a moderator of sociocultural influences on eating disorder symptoms in adolescent females and males. *Journal of Youth and Adolescence*, 38(3), 427-435.

Rodgers, R. F., Slater, A., Gordon, C. S., McLean, S. A., Jarman, H. K., & Paxton, S. J. (2020). A biopsychosocial model of social media use and body image concerns, disordered eating, and muscle-building behaviors among adolescent girls and boys. *Journal of Youth and Adolescence*, *49*(2), 399-409.

Rodgers, R. F., Lombardo, C., Cerolini, S., Franko, D. L., Omori, M., Fuller-Tyszkiewicz, M., Linardon, J., Courtet, P., & Guillaume, S. (2021). The impact of the COVID-19 pandemic on eating disorder risk and symptoms. *International Journal of Eating Disorders*, *53*(7), 1166-1170.

Saiphoo, A. N., & Vahedi, Z. (2019). A meta-analytic review of the relationship between social media use and body image disturbance. *Computers in Human Behavior*, *101*, 259-275.

Schutte, N. S., Malouff, J. M., Thorsteinsson, E. B., Bhullar, N., & Rooke, S. E. (2007). A meta-analytic investigation of the relationship between emotional intelligence and health. *Personality and Individual Differences*, *42*(6), 921-933.

Shoraka, H., Amirkafi, A., & Garrusi, B. (2019). Review of Body Image and some of Contributing Factors in Iranian Population. *International Journal of Preventive Medicine*, *10*, 19. https://doi.org/10.4103/ijpvm.IJPVM_293_18

Sim, L., & Zeman, J. (2006). The contribution of emotion regulation to body dissatisfaction and disordered eating in early adolescent girls. *Journal of Youth and Adolescence*, *35*(2), 219-228.

Smolak, L. (2011). Body image development in childhood. In T. F. Cash & L. Smolak (Eds.), *Body Image: A Handbook of Science, Practice, and Prevention* (2nd ed., pp. 67-75). Guilford Press.

Smolak, L. (2012). Appearance in childhood and adolescence. In N. Rumsey & D. Harcourt (Eds.), *The Oxford Handbook of the Psychology of Appearance* (pp. 123-141). Oxford University Press.

Social media Definition & Meaning—Merriam-Webster. (n.d.). Retrieved January 25, 2023, from <https://www.merriam-webster.com/dictionary/social%20media>

Stice, E., Marti, C. N., & Rohde, P. (2019). Prevalence, incidence, impairment, and course of the proposed DSM-5 eating disorder diagnoses in an 8-year prospective community study of young women. *Journal of Abnormal Psychology*, *122*(2), 445-457.

Strasburger, V. C., Jordan, A. B., & Donnerstein, E. (2010). Health effects of media on children and adolescents. *Pediatrics*, *125*(4), 756-767.

Sum, R. K. W., Ha, A. S. C., Cheng, C. F., Chung, P. K., Yiu, K. T. C., Kuo, C. C., Yu, C. K., & Wang, F. J. (2016). Construction and validation of a perceived physical literacy instrument for physical education teachers. *PLoS ONE*, *11*(6), e0155610.

Tatangelo, G., McCabe, M., Mellor, D., & Mealey, A. (2016). A systematic review of body dissatisfaction and sociocultural messages related to the body among preschool children. *Body Image*, *18*, 86-95.

Tatangelo, G., & Ricciardelli, L. (2017). Children's body image and social comparisons with peers and the media. *Journal of Health Psychology*, *22*(6), 776-787.

Thompson, J. K., Heinberg, L. J., Altabe, M., & Tantleff-Dunn, S. (1999). *Exacting Beauty: Theory, Assessment, and Treatment of Body Image Disturbance*. American Psychological Association. <https://doi.org/10.1037/10312-000>

Thompson, R. A. (1994). Emotion regulation: A theme in search of definition. *Monographs of the Society for Research in Child Development*, *59*, 25-52, 250-283. <https://doi.org/10.2307/1166137>

Tiggemann, M. (2011). Sociocultural perspectives on human appearance and body image. In T. F. Cash & L. Smolak (Eds.), *Body Image: A Handbook of Science, Practice, and Prevention* (2nd ed., pp. 12-19). Guilford Press.

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.

Tiggemann, M., & Slater, A. (2014). NetTweens: The Internet and body image concerns in preteenage girls. *The Journal of Early Adolescence*, *34*(5), 606-620.

Tiggemann, M., & Slater, A. (2017). Facebook and body image concern in adolescent girls: A prospective study. *International Journal of Eating Disorders*, *50*(1), 80-83.

Tiidenberg, K. (2014). Bringing sexy back: Reclaiming the body aesthetic via self-shooting. *Cyberpsychology: Journal of Psychosocial Research on Cyberspace*, *8*(1), Article 3.

Tremblay, L., & Lariviere, M. (2009). The influence of puberty onset, body mass index, and pressure to be thin on disordered eating behaviors in children and adolescents. *Eating Behaviors, 10*(2), 75-83.

Tylka, T. L., & Wood-Barcalow, N. L. (2015). What is and what is not positive body image? Conceptual foundations and construct definition. *Body Image, 14*, 118-129.

Tylka, T. L., Annunziato, R. A., Burgard, D., Daniélsdóttir, S., Shuman, E., Davis, C., & Calogero, R. M. (2014). The weight-inclusive versus weight-normative approach to health: Evaluating the evidence for prioritizing well-being over weight loss. *Journal of Obesity, 2014*, Article 983495.

Vitak, J., & Ellison, N. B. (2013). 'There's a network out there you might as well tap': Exploring the benefits of and barriers to exchanging informational and support-based resources on Facebook. *New Media & Society, 15*(2), 243-259.

Visocchi, A., & Digennaro, S. (2023). Developing a Positive Body Image among Children: A Proposal for an Educational Intervention. *Giornale Italiano di Educazione alla Salute, Sport e Didattica Inclusiva, 7*(2). <https://doi.org/10.32043/gsd.v7i2.835>

Visocchi, A., & Digennaro, S. (2024). Body literacy education in primary schools: A longitudinal intervention study. *Education Sciences, 14*(8), 892.

Voelker, D. K., Reel, J. J., & Greenleaf, C. (2015). Weight status and body image perceptions in adolescents: Current perspectives. *Adolescent Health, Medicine and Therapeutics, 6*, 149-158.

Vogel, E. A., Rose, J. P., Roberts, L. R., & Eckles, K. (2014). Social comparison, social media, and self-esteem. *Psychology of Popular Media Culture, 3*(4), 206-222.

Whitehead, M. (2001). The concept of physical literacy. *European Journal of Physical Education, 6*(2), 127-138.

Whitehead, M. (2010). *Physical Literacy: Throughout the Lifecourse*. Routledge.

Wilksch, S. M., Paxton, S. J., Byrne, S. M., Austin, S. B., McLean, S. A., Thompson, K. M., Dorairaj, K., & Wade, T. D. (2015). Prevention Across the Spectrum: A randomized controlled trial of three programs to reduce risk factors for both eating disorders and obesity. *Psychological Medicine, 45*(9), 1811-1823.

Xie, B., Ishibashi, K., Lin, C., Peterson, D. V., & Susman, E. J. (2013). Overweight trajectories and psychosocial adjustment among adolescents. *Preventive Medicine*, 57(6), 837–843. <https://doi.org/10.1016/j.ypmed.2013.09.008>

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

Yager, Z., Diedrichs, P. C., Ricciardelli, L. A., & Halliwell, E. (2013). What works in secondary schools? A systematic review of classroom-based body image programs. *Body Image*, 10(3), 271-281.

Yamamotova, A., Bulant, J., Bocek, V., & Papezova, H. (2017). Dissatisfaction with own body makes patients with eating disorders more sensitive to pain. *Journal of Pain Research*, 10, 1667–1675. <https://doi.org/10.2147/JPR.S133425>

Yau, J. C., & Reich, S. M. (2019). "It's Just a Lot of Work": Adolescents' Self-Presentation Norms and Practices on Facebook and Instagram. *Journal of Research on Adolescence*, 29(1), 196–209. <https://doi.org/10.1111/jora.12376>

PhD Scholarship co-funded by the European Union – NextGenerationEU
National Recovery and Resilience Plan (NRRP) – Mission 4 – Education and Research –
Component I.4 – Reform and strengthening of doctoral programmes – DM 351
I.4.1 pubblica amministrazione
CUP H36E22000130001



Finanziato
dall'Unione europea
NextGenerationEU



Ministero
dell'Università
e della Ricerca



Italiadomani
PIANO NAZIONALE
DI RIPRESA E RESILIENZA

