injuries, and were not taking any medications that could affect balance. Static balance was assessed by the ellipse area and statokinesigram parameters (Romberg test), dynamic balance was evaluated by the star excursion balance test, and flexibility was assessed by the sit and reach test.

Results: After the intervention, VR and TR groups showed a significant improvement in static and dynamic balance and flexibility (all $p < 0.001$) compared to the CG. Also, there was a significant difference for flexibility in favour of the VR group ($\Delta_{pre-post} = -3.33 \pm 0.67$ cm; $p < 0.001$; ES = 0.95) compared to the TR group ($\Delta_{pre-post} = -2.10 \pm 0.63$ cm; $p < 0.001$; ES = 0.60).

Conclusions: Findings suggest that a 5-week VR protocol may significantly improve static and dynamic balance and flexibility in adult healthy women. However, the VR protocol appears more effective just for increasing flexibility than TR, whereas static and dynamic balance variables may take longer. Further longer-term research is needed.

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Developing and enhancing body literacy to mitigate the negative effects of social media and promote a positive body image: a research intervention study with 9–10-year-olds children

Purpose: Social media use is widespread among adolescents and preadolescents despite the age limits imposed by law. Social media platforms often portray stereotypical beauty ideals that are far from reality; users are continuously exposed to unrealistic body models, with which they are constantly confronted. Failing to meet these idealised standards can lead to feelings of body dissatisfaction. This study represents the theoretical framework of a qualitative research-intervention project aimed at investigating the impact of an educational intervention on the development of children's body image. To develop a positive body image, it is necessary to work on the early reinforcement and enhancement, since childhood, of a personal dimension that can be defined as body literacy. Body literacy encompasses a multifaceted construct comprising several dimensions, including self-awareness, positive body development, gender differences, emotional literacy, Body Dysmorphic Disorder, and body acceptance.

Methods: The intervention consists of three phases: focus group discussions, educational intervention implementation, and post-intervention assessment. The analysis of the qualitative data will be carried out through a management, organization and analysis tool of the qualitative data named NVivo. The intervention aims to promote body awareness, body interoception, body perception, and body comprehension through age-appropriate educational activities and interactive sessions in a sample of 50 children aged 9–10 years.

Results: The focus group aims to investigate the habits of social media use and the mental representation of one's body in the reference sample. The intervention consists of a total of seven sessions each of which involves a combination of educational presentations, interactive exercises, group discussions, and hands-on activities designed to engage the children and enhance their understanding of body image-related concepts. The post-intervention assessment aims to verify the effectiveness of the interventions.

Conclusions: This intervention protocol will be implemented and aims to develop and maintain a positive body image in children; moreover, it aims to mitigate the potential negative impacts individuals may encounter as they navigate the digital world. Therefore, it is proper to work on the development of body literacy from the first years of life, going to enhance all the constituent factors of this complex and multifaceted construct.

Exploring the relationships between emotional intelligence and social media use in pre-teens. A longitudinal study

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Purpose: Adolescence is a period marked by significant physical, cognitive, social, and emotional changes. During this phase, emotional intelligence may play a crucial role in shaping social-emotional development. While emotional intelligence has both biological and psychological foundations, it is also subject to the influence of various sociocultural factors. However, with the widespread use of social media among pre-teens, concerns have arisen regarding its impact on emotional intelligence development and overall well-being. This study examines the relationship between emotional intelligence, social media activity, and the tendency towards social media addiction during adolescence. By investigating these factors, we aim to gain a better understanding of how social media engagement may influence emotional intelligence and potentially impact adolescents' psychological well-being.

Methods: A longitudinal study was conducted with a sample of 538 students ranging in age from 11 to 14 years. The data collection took place during school hours, and participants completed anonymous, self-administered questionnaires. The questionnaires used in this study included the Instagram Image Activity Scale (IIAS), which measured the frequency of image-related activities on social networks, the Trait Emotional Intelligence Questionnaire, and the Bergen Social Media Addiction Scale.

Results: A total of 537 preadolescents (49% girls, 49% boys, 2% non-binary; mean age: 12.12; SD: 0.89) were included. The most used platforms include WhatsApp (95%), YouTube (86%), TikTok (74%) and Instagram (68%). The participants carried out more activities on social media based on images of celebrities, followed by images of peers and, finally, by self-images. Correlational analysis shows a negative association between emotional intelligence and risk of problematic social media use (-0.263, $p < 0.01$), while a positive association emerged between the Bergen scale and the IIAS (0.556, $p < 0.01$).

Conclusions: This study highlights the extensive use of social media and suggests that excessive or problematic engagement in social media activities may negatively influence the development of emotional intelligence, as pre-teens may spend less time and energy understanding, expressing, and experiencing their emotion. Furthermore, it could be hypothesised that pre-teens with lower emotional intelligence may show greater susceptibility to becoming over-involved or addicted to social media. These findings underscore the need for further research and interventions to promote healthy social media use and support the development of emotional intelligence among preadolescents.

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Social media and body image in preteens: investigating the role of online platforms in shaping body perception. A longitudinal study

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Purpose: In recent years, the use of social networks has increased, exposing users to content based on beauty standards and thinness. Social networks have changed the way young people perceive themselves, often leading to distorted notions of beauty. The building of preteens' body image starts from this stage of life and the comparison with the beauty ideals proposed by social media might have an impact on their body satisfaction. Despite the age restrictions settled by many platforms, preteens can easily access and subscribe to social networks. In this perspective, the critical stage of identity formation, their vulnerability to societal pressures and the influence of online platforms cannot be underestimated. The present study shows the results of a survey aimed at investigating the association between the use of social networks and body image in preteens.

Methods: A longitudinal study involved 538 preteens aged 10–14 years through an anonymous and self- administered questionnaire aimed at investigating: the main activities conducted on social networks, the average daily time spent on social media, the addiction to social networks risk and the body satisfaction. Participants indicated the amount of time spent on each social network per day (15 min to + 4 h). The risk of addiction to social networks was calculated with the Bergen Social Media Addiction Scale (BSMAS). The study used the Instagram Image Activity Scale (IIAS) to investigate the main activities carried out on social networks by preteens. Finally, body satisfaction was assessed with the Sociocultural Attitudes Towards Appearance Questionnaire-4-Revised (SATAQ-4R).

Results: Of the total sample analysed, 85, 5% declared using social media and 98, 3% messaging apps. The average number of social networks used is 5, 52 (SD 2.9). Preteens tend to spend more than one hour per day using social media (78%). Correlational analysis showed a positive correlation between time spent on social media, body dissatisfaction ($r = 0, 417$) and addiction to social networks risk ($r = 0, 517$). The study found a positive association between the type of social media engagement and body satisfaction ($r = 0, 512$).

Conclusions: The current study has revealed that the types of activities and time spent online is related to body dissatisfaction and risk of social networks addiction. It is necessary to develop intervention strategies based on a positive development of body image and on media literacy programs. Therefore, an integrated and targeted approach between schools and families might be the ideal solution to counter the negative effects deriving from the use of social media.

Toward the era of digital physical literacy education. A literature review

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Purpose: To review the literature regarding the development of the digitalization of education in the post-humanism era.

Methods: a literature review was conducted on Google Scholar, Web Of Science and Pubmed databases using the keywords *digital literacy, education, posthumanism.*

Results: Digital literacy (DL) encompasses the competencies and skills required for navigating a fragmented and complex information ecosystem. DL development led to the era of the posthumanism, the movement in which humans are not intended anymore as an individual, but as as entity connected to the society and the environment. From a phenomenological perspective, the body has been identified as a point of contact between individuals and the society, representing a unicuum embedding many characteristic traits, reflecting its interactions with the society, personal experiences, etc. Nevertheless, a reflection should be made concerning how the use of the body has changed in the posthumanism. For instance, in the immersive virtual reality the virtual body can be different from the real body, affecting their perception, attitudes, and behavior. With this experience of embodiment, an individual might live the world from a different point of view characterized by interactivity, virtuality, information processability, presence and body ownership. In this perspective physical education (PE) teachers should identify the emerging needs of new generations and readapt their educational approaches toward a new culture of the physical literacy (PL). PL is widely described as *'the motivation, confidence, physical competence, knowledge and understanding to value and take responsibility for engagement in physical activities for life'.*

Conclusions: Digital technologies are continuously developing and evolving leading to the advent of new real and virtual worlds increasingly interconnected. Therefore, PE teachers should understand how these new realities are influencing the growing processes of new generations and how to adopt those new technologies for developing new strategies to live within the body and the society. It is maybe time to thinking about a digital physical literacy?

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