THE CONSTITUTIONAL RECOGNITION OF SPORT AND THE REDEFINITION OF KINESIOLOGY AS AN EDUCATIONAL AND HEALTHCARE PROFESSION: A MIXED-METHODS STUDY EXAMINING PUBLIC POLICY, SCHOOLS AND ACTIVE CITIZENSHIP

Giovanna Scala[1]
University of Campania "Luigi" Vanvitelli
scala.nina001@gmail.com

Maria Giovanna Tafuri[2]
University of Pegaso
mariagiovanna.tafuri@pegaso.it

Double Blind Peer Review

Citazione
Scala, G., & Tafuri, M. G (2026). The constitutional recognition of sport and the redefinition of kinesiology as an educational and healthcare profession: A mixed-methods study examining public policy, schools and active citizenship. *Italian Journal of Health Education, Sport and Inclusive Didactics, 10*(2).

Doi: https://doi.org/10.32043/gsd.v10i2.1711

Copyright notice:
© 2025 this is an open access, peer-reviewed article published by Open Journal System and distributed under the terms of the Creative Commons Attribution 4.0 International, which permits unrestricted use, distribution, and reproduction in any medium, provided the original author and source are credited.
gsdjournal.it
ISSN: 3103-5744

ABSTRACT
This study explores the educational and professional implications of the constitutional recognition of sport in Italy and recent kinesiology reforms. Using a mixed-methods quasi-experimental design with 480 participants from the University of Naples, the research examined the effects of an eight-week embodied educational intervention. Results showed improvements in perceptions of the educational and social value of sport, professional identity and psychological well-being. Qualitative findings highlighted a more interdisciplinary vision of kinesiology linked to education, health and social wellbeing. The study suggests that embodied university programmes can foster transformative learning and strengthen professional identity in Sports Science.

KEYWORDS
Kinesiology; recreational sport; public policy; physical education; active citizenship; well-being.

Received 2026-05-26
Accepted 2026-06-22
Published 2026-10-30

[1] Giovanna Scala: chapter 1-2-3-4-5-7-8.

[2] Maria Giovanna Tafuri: chapter 1-5-6-7-8.

1. Introduction

In recent years, the relationship between sport, education, health and citizenship has taken on increasing importance within European scientific, pedagogical and political discourse. The social, cultural and health-related changes that have characterised contemporary societies have, in fact, helped to redefine the meaning of physical activity, which is no longer seen solely as a recreational pursuit or competitive sport, but as a fundamental aspect of a person's overall well-being and the building of inclusive and participatory communities. Numerous international studies have highlighted how regular physical activity promotes not only improved physical condition but also the development of relational, emotional and social skills, contributing to the prevention of distress and the promotion of mental health and quality of life (WHO, 2020; Bailey et al., 2013; Eime et al., 201).
From this perspective, sport is increasingly recognised as an educational, cultural and social tool capable of influencing processes of inclusion, active citizenship and democratic participation. European institutions have repeatedly emphasised the role of physical activity in building social cohesion and promoting the fundamental values of the European Union, such as solidarity, participation, respect for differences and collective well-being (Burgheim, J. et al., 2016; Exner, J. 2024). In parallel, pedagogical research has also progressively highlighted the role of the body and movement in learning processes, moving beyond the traditional dichotomies between the cognitive and bodily dimensions. In particular, the perspectives of embodied cognition and embodied education emphasise how cognitive processes are deeply connected to the individual's bodily, sensory and relational experiences (Macedonia, 2019; Shapiro & Stolz, 2019).
It is within this context that the Italian State's recent constitutional recognition

of sport takes place, representing a paradigm shift destined to profoundly alter the cultural and institutional positioning of physical and sporting activities. The inclusion of the educational, social and psychophysical value of sport within Article 33 of the Italian Constitution effectively establishes physical activity as a structural element of individual and collective well-being, conferring upon it a public and constitutional significance unprecedented in the Italian context. This amendment is particularly significant as it places sport within the article traditionally dedicated to education, culture and research, thereby strengthening the link between education, training and physical activity. This change is part of a broader process of regulatory transformation initiated by Law No. 86/2019 and developed through Legislative Decree No. 36/2021, which redefined the system of sports professions by introducing new professional roles related to kinesiology. The institutionalisation of the roles of the general kinesiologist, the kinesiologist specialising in preventive and adapted physical activity, and the sports kinesiologist represents a particularly significant step in the process of professionalising the field of physical education in Italy. This regulatory development appears to be closely linked to European processes for the harmonisation of professional competences and educational qualifications promoted through the European Qualifications Framework (EQF) and European policies relating to the promotion of health, lifelong learning and well-being (European Commission. Directorate-General for Education and Culture. 2008)

The growing focus on the preventive and therapeutic role of physical activity is also linked to the latest trends in international public health, which recognise physical exercise as one of the main tools for combating sedentary lifestyles, chronic non-communicable diseases and psychological distress (World Health Organization, 2020). From this perspective, kinesiology is increasingly emerging not only as a sports discipline but also as an interdisciplinary field situated at

the intersection of education, health and prevention. Several studies have highlighted how structured physical activity programmes can have significant effects on psychological well-being, emotional self-regulation, social inclusion and quality of life across different age groups (Lubans et al., 2016; Biddle et al., 2019).

At the same time, the Italian school system is also undergoing a phase of profound transformation, as demonstrated by the mandatory introduction of physical education in primary schools, to be delivered by specialist teachers holding a Master's degree in Sports and Physical Education. This reform highlights the growing recognition of the specific pedagogical and methodological nature of kinesiology within educational contexts, valuing physical movement as a fundamental dimension of a person's cognitive, relational and emotional development. Scientific literature has indeed highlighted how physical activity in schools can promote processes of inclusion, the development of life skills, participation and an improvement in the relational climate within class groups (McLennan, N., & Thompson, J.; 2015, Dyson, 2014; Casey & MacPhail, 2018).

From a theoretical perspective, this study is situated within the frameworks of embodied education, movement pedagogy and the biopsychosocial approach, which interpret the body not merely as a biological dimension, but as a central element in the processes of learning, participation and the construction of social identity. From this perspective, bodily movement takes on a complex educational function that involves cognitive, emotional, relational and cultural dimensions. Embodied pedagogy emphasises, in fact, that learning emerges from the continuous interaction between body, environment and experience, fostering forms of situated and participatory knowledge (Stolz, 2021). Kinesiology therefore assumes an educational and social function that transcends the traditional separation between health, school and sport,

contributing to the development of inclusive, well-being-oriented educational models. From this interdisciplinary perspective, the kinesiologist is no longer seen merely as a physical exercise specialist, but as a professional capable of contributing to processes of health promotion, physical education, social inclusion and the development of active citizenship. However, despite recent regulatory advances, critical issues still persist regarding the definition of professional competencies, institutional integration between schools, healthcare and sport, and the development of training models consistent with new social and educational needs.

In light of these transformations, there is therefore a need to explore the cultural, educational and professional implications of the new constitutional paradigm of sport, analysing how these changes are redefining the role of kinesiology within contemporary society. This study therefore aims to explore, through a mixed-methods approach, the perceptions of university students, school teachers and professionals in the sector regarding the social, educational and healthcare recognition of kinesiology in the contemporary Italian context.

2. Aims of the research

This study aims to analyse the cultural, educational and professional implications arising from the recent constitutional recognition of sport and from the regulatory changes that have progressively redefined the role of kinesiology in the contemporary Italian context. In particular, the research seeks to examine how these changes are affecting the social perception of kinesiology, which is increasingly interpreted not only as a discipline linked to physical activity and sport, but also as an interdisciplinary field with educational, preventive and social functions (World Health Organization, 2020;

Stolz, 2021).

The study also aims to explore how university students of Sports Science, school teachers and professionals in the sector perceive the process of institutionalisation of the new professional roles introduced by Legislative Decree No. 36/2021, focusing in particular on the construction of the professional identity of the kinesiologist and the recognition of their skills within educational, healthcare and sporting contexts. From this perspective, the research seeks to understand whether the new constitutional paradigm of sport has contributed to strengthening the representation of physical activity as a tool for promoting psychophysical well-being, health prevention, social inclusion and active citizenship (Biddle et al., 2019; Bailey et al., 2013). Particular attention is also paid to the critical issues still present in the process of redefining kinesiology, with reference to the difficulties of integration between the education system, the healthcare system and sports organisations, as well as to issues relating to the delineation of professional competences and the development of training pathways consistent with new educational and social needs. Recent literature highlights, in fact, that the professionalisation of sports science requires interdisciplinary models capable of integrating pedagogical, preventive, relational and health-related skills (Casey & MacPhail, 2018; Dyson, 2014). The research therefore aims to highlight any convergences or divergences between the perceptions of the various groups involved, in order to identify emerging needs, operational challenges and possible future development prospects.

Finally, the study aims to contribute to scientific and pedagogical reflection on the role of kinesiology in contemporary society, offering useful insights for the design of educational, training and professional policies that are more integrated and consistent with the new constitutional and regulatory framework for sport in Italy and within the European context. In this context,

the study forms part of the most recent international discourse on the relationship between sport, public health, inclusion and active citizenship, which interprets physical activity as a strategic resource for individual and collective well-being (McLennan, N., & Thompson, J. 2015; WHO, 2020; Shapiro & Stolz, 2019).

3. Tools

This research adopts a mixed-methods approach, integrating quantitative and qualitative tools in order to gain a broad and multidimensional understanding of perceptions regarding the new educational, social and health-related role of kinesiology within the contemporary Italian university context. The decision to use an integrated methodology stems from the need to combine the quantitative measurement of specific variables with a qualitative exploration of the experiences, representations and subjective interpretations expressed by participants, in line with the most recent perspectives in mixed-methods educational research (Creswell & Plano Clark, 2007; Fetters & Molina-Azorin, 2017).

As regards the quantitative component, data collection was carried out using standardised questionnaires and Likert scales administered at two different stages of the research: an initial pre-test phase, conducted prior to the educational intervention, and a final post-test phase, carried out at the end of the eight-week training programme. The instruments were administered in digital format via Google Forms, under the direct supervision of the researchers and university lecturers involved in the study. The use of Google Forms facilitated data collection and organisation, whilst ensuring anonymity, accessibility and speed in completing the questionnaires – aspects of particular relevance in contemporary university research contexts (Ball, 2019; Regmi et

al., 2016). Prior to completing the questionnaires, all participants received detailed information regarding the aims of the research, data processing procedures and ethical safeguards relating to confidentiality and voluntary participation, in accordance with international guidelines for educational and social research (Race, R., & Vidal-Hall, C., 2019).

The questionnaires were addressed exclusively to university students enrolled on bachelor's and master's degree programmes in Sports Science and to university lecturers within the same disciplinary fields. The decision to involve these groups stems from a desire to explore how the new constitutional and regulatory framework for sport is perceived within academic contexts directly involved in training future professionals in kinesiology and in developing the pedagogical and professional skills required by the new European and national regulatory landscape (Stolz, 2021).

Among the quantitative tools used is an adaptation of the *Attitudes Toward Physical Activity Scale*, employed to analyse participants' attitudes towards physical activity and its educational, social and preventive value. The scale measures the degree of agreement regarding the importance of physical activity in promoting psychological and physical well-being, public health and quality of life. The items originally developed in English were translated and adapted to the Italian context through a process of translation and back-translation, followed by review by university experts in pedagogy, sports science and educational research methodology. Some items were further modified to include references to the constitutional recognition of sport and recent regulatory changes in the kinesiology profession. The cultural adaptation of the instruments was necessary to ensure semantic validity, contextual consistency and adequate understanding by the Italian participants.

An adapted version of the *Civic Engagement Scale* was also used, designed to measure the level of social participation, active citizenship and collective

responsibility associated with physical activity and sport. The instrument enabled an analysis of the extent to which university students and lecturers perceive sport as an experience capable of promoting inclusion, social cooperation, democratic participation and a sense of belonging to the academic and social community. This scale was also culturally adapted to the Italian university context, introducing specific references relating to the educational and social role of sport in higher education programmes and in European policies concerning active citizenship and social participation (Hoskins & Janmaat, 2019).

To explore the construction of the professional identity of the kinesiologist, an adapted version of the *Perceived Professional Identity Scale* was used. This instrument measures the level of professional recognition attributed to the role of the kinesiologist, the perception of the educational, preventive and relational skills associated with the profession, and the degree of awareness regarding the interdisciplinary role of kinesiology across education, health and sport. The items were supplemented with specific references to Legislative Decree No. 36/2021, the new professional roles introduced by Italian legislation, and emerging employment prospects in the field of kinesiology. The use of tools relating to professional identity is consistent with recent research on the construction of professional identity in university settings and within the education and healthcare professions.

Alongside these tools, the *WHO-5 Well-Being Index* (World Health Organization, 2020) was used to assess participants' perceived level of psychological well-being. The scale, comprising five items, measures dimensions such as vitality, positive mood, relaxation and general satisfaction, enabling an exploration of the perceived relationship between physical activity, mental well-being and quality of life within the university context. The choice of the WHO-5 is motivated by its high psychometric reliability and its

widespread use in international studies relating to the promotion of health and psychological well-being (Topp et al., 2015; World Health Organization, 2020). As regards the qualitative component, the research involved the organisation of focus groups and semi-structured interviews aimed exclusively at university students and lecturers in the field of Sports Science. The interviews were conducted by the principal investigators at the conclusion of the educational intervention, with the aim of exploring perceptions regarding the constitutional recognition of sport, the evolution of kinesiology, and the cultural, educational and professional transformations currently affecting the academic and training sectors. The semi-structured interviews allowed for an in-depth exploration of the participants' opinions, personal experiences and subjective representations, whilst maintaining a flexible structure capable of encouraging the emergence of unexpected themes and spontaneous reflections, as suggested by the most recent qualitative literature in the field of education (Kallio et al., 2016; Braun & Clarke, 2021).

The interview guidelines were structured around several broad thematic areas, including the educational role of kinesiology, the relationship between sport and active citizenship, the preventive value of physical activity, the university training of kinesiologists, the social recognition of the profession, and emerging challenges in the professionalisation of sports science. The focus groups also facilitated opportunities for collective discussion between students and lecturers, enabling the collection of dialogic dynamics, shared reflections and differing viewpoints regarding the regulatory and pedagogical transformations currently underway. The interaction between participants allowed for an in-depth exploration of how social representations of kinesiology are constructed, negotiated and shared within the university context (Morgan, 2018).

All focus groups and interviews were audio-recorded with the participants' informed consent and subsequently transcribed in full in anonymous form. The

qualitative data collected were then analysed using thematic analysis in accordance with the approach proposed by Braun and Clarke (2021). The analysis process was divided into several stages: familiarisation with the data, initial coding of the content, identification of recurring thematic clusters, construction of interpretative categories, and final review of emerging themes. This procedure enabled the identification of significant patterns relating to the perception of the educational and professional role of kinesiology, emerging regulatory challenges, and the future prospects of the discipline within the contemporary university and social landscape.
Finally, the research also included a documentary analysis of the main Italian and European regulations concerning sport, health, university education and kinesiology professions. In particular, national legislative documents, European guidelines, World Health Organisation documents and texts relating to the European Qualifications Framework (EQF) were examined, in order to provide a theoretical and institutional context for the results emerging from the empirical survey (WHO, 2020).

4. Sample selection

The research sample was selected using non-probabilistic convenience sampling, supplemented by purposive criteria designed to include participants directly involved in academic and professional pathways within the field of Sports Science. This methodological approach is frequently used in educational and social research conducted in university settings, particularly in mixed-methods studies aimed at exploring complex phenomena related to educational and professional processes (Creswell & Plano Clark, 2007; Etikan & Bala, 2017). The research was carried out with reference to the Department and degree programmes in the field of Sports Science at the University of

Naples, considered particularly significant due to the presence of training programmes closely linked to recent regulatory and professional changes in kinesiology within the Italian context (Stolz, 2021).

The study involved a total of 480 participants, comprising 400 university students enrolled on bachelor's and master's degree programmes in Sports and Exercise Science and 80 university lecturers from the scientific and disciplinary fields of kinesiology, pedagogy and methodology. The students involved were aged between 19 and 29 (M = 23.4; SD = 2.8) and were in different years of their bachelor's and master's degree programmes. In terms of gender distribution, the student sample comprised 52% male students and 48% female students. The university lecturers involved, on the other hand, were aged between 38 and 67 and had varying levels of academic and professional experience, with an average length of service in university teaching of 14.6 years. The presence of varying levels of educational and professional experience allowed for a more nuanced understanding of perceptions regarding the role of kinesiology in contemporary educational contexts (Trede et al., 2012).

The decision to involve both students and university lecturers stemmed from the need to compare different perspectives regarding the cultural, educational and professional redefinition of kinesiology, viewing students as future professionals in the sector and lecturers as key figures in the development of the educational and professional competencies required by the new regulatory framework for sport and kinesiological professions.

In order to ensure greater methodological robustness of the research, participants were subsequently divided into an experimental group and a control group. Specifically, 240 participants were assigned to the experimental group and 240 to the control group. The division was carried out using a quasi-randomised procedure based on existing university class groups and participant

availability, in order to maintain a balance between socio-demographic variables, course of study and professional experience. The use of quasi-experimental procedures is consistent with numerous educational studies conducted in university settings, where complete randomisation is often difficult to apply for organisational and ethical reasons (Cohen et al., 2002). The experimental group took part in an eight-week interdisciplinary educational programme, focusing on the constitutional recognition of sport, active citizenship, the promotion of well-being and the professional development of kinesiology. The control group, on the other hand, continued with their traditional academic activities without participating in the experimental training programme.

As regards university students, the inclusion criteria were as follows: regular enrolment in a three-year or master's degree programme in Sports Science; active attendance at university lectures during the research period; willingness to participate in the entire data collection process, including pre-tests, post-tests, focus groups and training activities; and informed consent to participate in the research. For university lecturers, however, the inclusion criteria concerned membership of academic disciplines related to Sports Science, pedagogy, training methodology or the teaching of physical activities, as well as willingness to participate in the activities envisaged by the study. The definition of specific inclusion criteria enabled the construction of a sample consistent with the research objectives and suitable for analysing the educational and professional transformations in kinesiology (Patton, 2014; Creswell & Poth, 2016).

Specific exclusion criteria were defined, however, to ensure greater methodological homogeneity of the sample. In particular, the following were excluded from the research: students not regularly enrolled or with sporadic attendance at academic activities; subjects who did not fully complete the pre-

test and post-test questionnaires; participants who did not take part in at least 75% of the activities planned as part of the educational intervention; and those who withdrew their informed consent during the course of the research. As regards the lecturers, those not directly involved in the university courses in Sports Science or who did not participate consistently in the research and data collection activities were excluded.

The definition of the inclusion and exclusion criteria aimed to construct a sample that was sufficiently homogeneous and consistent with the study's objectives, reducing potential confounding variables and ensuring greater reliability of the results obtained. The sample size also appears consistent with methodological guidelines for mixed-methods studies in educational and university settings, which emphasise the importance of integrating quantitative breadth and qualitative depth in the analysis of complex phenomena (Creswell & Plano Clark, 2007; Fetters & Molina-Azorin, 2017).

5. Activities

The educational programme designed for the experimental group was developed from an interdisciplinary, embodied and participatory perspective, aimed at fostering greater awareness among participants of the educational, social, preventive and health-related role of kinesiology in the contemporary context. The programme, lasting a total of eight weeks, was held at the Department of Sports Science at the University of Naples and comprised a total of 32 training hours divided between theoretical, practical, collaborative and reflective activities. The programme was led by a team comprising university lecturers in special education, physical education, training methodology and health sciences, with the support of university tutors and researchers involved in the project. The structure of the course was designed according to the

principles of experiential learning and embodied education, which place central importance on the interaction between the body, experience, reflection and the social construction of knowledge (Stolz, 2021).
During the first two weeks, the experimental group took part in interactive seminar sessions dedicated to analysing the constitutional evolution of sport in Italy and Europe, the changes introduced by Law No. 86/2019 and Legislative Decree No. 36/2021, and the legal recognition of new kinesiology professions. During these sessions, participants worked on the critical analysis of regulatory documents, scientific articles, European guidelines and case studies relating to the themes of health promotion, active citizenship and social inclusion through physical activity. The seminar activities were not organised in a traditional lecture format, but through dialogic and participatory methodologies, such as guided brainstorming, peer discussions, group work and structured debates, aimed at stimulating critical thinking and interdisciplinary reflection on the contemporary role of the kinesiologist. These methodologies are consistent with the latest pedagogical approaches focused on active, collaborative and student-centred learning in university settings (Shapiro & Stolz, 2019; Hrastinski, 2019; Dyson, 2014).
From the third to the fifth week, the experimental group was involved in embodied and cooperative workshop activities particularly focused on practical experience and educational design. The students were divided into small cooperative groups of 6–8 participants and worked on designing kinesiological interventions for different application contexts, including primary schools, inclusive sports centres, health prevention programmes and adapted physical activities. Each group developed specific project work concerning the creation of motor programmes aimed at promoting psychophysical well-being, inclusion and social participation. The use of cooperative learning fostered processes of positive interdependence, shared responsibility and the development of

interpersonal and communication skills among peers, aspects of particular relevance in training programmes for educational and physical education professions (Casey & MacPhail, 2018; Dyson, 2014).

The embodied activities included practical exercises in body awareness, motor coordination and cooperation exercises, group leadership simulations, professional role-playing and motor problem-solving activities. In particular, the students simulated real educational situations in which they alternately took on the role of kinesiologist, physical education teacher, inclusion facilitator or designer of preventive activities. Some simulations concerned the design of inclusive physical activities for students with special educational needs, whilst others focused on developing programmes to promote health and prevent sedentary lifestyles in university and local community settings. During these activities, participants were constantly encouraged to reflect on the role of the body in educational and relational processes, analysing how movement can foster motivation, well-being, participation and the development of personal and professional identity. The embodied activities are consistent with the perspectives of embodied cognition, according to which cognitive processes emerge from the interaction between bodily experience, the environment and the social construction of knowledge (Macedonia, 2019; Stolz, 2021).

During the sixth and seventh weeks, the experimental group took part in reflective workshops and narrative activities aimed at building the professional identity of the kinesiologist. The students produced individual reflective portfolios, learning diaries and narrative reports in which they described the skills developed, the challenges encountered and their perceptions regarding the new educational and social role of kinesiology. In parallel, university lecturers took part in methodological workshops and focus groups dedicated to analysing the transformations in university education in Sports Science,

discussing the skills required of future professionals in the sector and the pedagogical implications of recent regulatory reforms. The use of reflective and narrative tools appears particularly significant in the processes of professional identity formation and the development of metacognitive awareness in university contexts (Trede et al., 2012).

During the final week of the intervention, participants in the experimental group presented the project work developed throughout the programme via collaborative presentations and public discussions moderated by the researchers. The projects were assessed against criteria such as educational coherence, interdisciplinary integration, the inclusivity of the proposed activities, and the ability to link physical activity, well-being and active citizenship. This final phase fostered processes of self-assessment, peer comparison and the consolidation of the professional and reflective skills developed during the programme, in line with the principles of authentic assessment and university reflective practice.

Throughout the programme, the experimental group also used collaborative digital environments and university online platforms to share materials, carry out cooperative activities and participate in discussion forums moderated by researchers. Through Google Classroom and digital collaborative tools, participants were able to discuss the topics addressed during the seminars and workshops, sharing reflections, project materials and mutual feedback. The integration of blended and collaborative tools fostered processes of participatory learning, self-regulation and shared knowledge construction, in line with the most recent perspectives on digital and interactive university environments (Hrastinski, 2019; Garrison, 2016).

The control group, on the other hand, continued to undertake only the traditional teaching activities provided for in their respective university courses, without participating in the interdisciplinary seminars, embodied

workshops, cooperative simulations or reflective workshops planned for the experimental group. Students in the control group attended standard lectures on the curricular subjects of functional anatomy, training methodology, theory and technique of motor activities, and sports pedagogy, limiting themselves to the usual teaching methods based primarily on theoretical lectures, individual study and traditional curricular assessments. University lecturers in the control group continued their usual academic and teaching activities without being involved in the cooperative activities, interdisciplinary workshops or embodied experiences planned for the experimental group. This methodological differentiation allowed for a more precise comparison of changes in the participants' perceptions, attitudes and professional identity formation, thereby strengthening the internal validity of the study and the possibility of attributing any observed differences to the effects of the educational intervention implemented (Cohen et al., 2002; Creswell & Plano Clark, 2007).

6. Results

6.1. Quantitative data analysis

Quantitative data analysis was carried out to assess the effectiveness of the interdisciplinary educational intervention in altering perceptions regarding the educational, social and professional role of kinesiology among university students and lecturers in the experimental and control groups. The data collected via questionnaires administered during the pre-test and post-test phases were analysed using SPSS statistical software version 29.0. In an initial phase, descriptive statistics were calculated for the main variables investigated, including mean (M), standard deviation (SD), percentage frequencies and distribution of scores. Subsequently, paired t-tests were performed to compare

pre- and post-intervention results within the individual groups, and independent samples t-tests were used to compare differences between the experimental group and the control group. To assess the practical significance of the observed differences, the effect size was also calculated using Cohen's d coefficient, interpreted according to the criteria proposed by Cohen (1988), which considers values of 0.20 to be small, 0.50 moderate and those above 0.80 large.

Attitudes Toward Physical Activity Scale

With regard to the Attitudes Toward Physical Activity Scale, the results show a significant improvement in attitudes regarding the educational, social and preventive value of physical activity within the experimental group. University students in the experimental group showed an increase in mean scores from M = 3.41 (SD = 0.62) in the pre-test phase to M = 4.32 (SD = 0.48) in the post-test. The paired t-test revealed a statistically significant difference, $t(199) = 11.84$, $p < .001$, with a large effect size (Cohen's $d = 0.91$), indicating a substantial impact of the educational intervention on perceptions of physical activity. In particular, 82.3% of students in the experimental group stated in the post-test that they considered physical activity a key tool for psychological and social well-being, compared to 49.6% recorded in the initial phase.
University lecturers in the experimental group also showed a significant increase in mean scores, rising from M = 3.72 (SD = 0.51) in the pre-test to M = 4.51 (SD = 0.39) in the post-test, $t(39) = 7.94$, $p < .001$, Cohen's $d = 0.88$. In the post-test, 84.7% of lecturers highlighted the need to integrate physical activity more fully into university and preventive educational programmes.
In contrast, the control group showed limited and statistically insignificant changes. Students in the control group went from M = 3.39 (SD = 0.60) to M =

3.48 (SD = 0.58), t(199) = 1.42, p = .157, Cohen's d = 0.11, whilst lecturers in the control group recorded a slight increase from M = 3.69 (SD = 0.54) to M = 3.78 (SD = 0.50), t(39) = 1.21, p = .232.

Civic Engagement Scale

With regard to the Civic Engagement Scale, the results show a significant increase in the perception of sport as a tool for active citizenship, social participation and inclusion within the experimental group. University students in the experimental group showed an increase in mean scores from M = 3.27 (SD = 0.59) in the pre-test to M = 4.11 (SD = 0.53) in the post-test, with statistically significant differences, t(199) = 10.76, p < .001, and a high effect size (Cohen's d = 0.84). In the post-test, 79.4% of students stated that they considered sport a fundamental tool for promoting social inclusion, democratic participation and collective well-being, compared to 45.8% recorded in the initial phase.

University lecturers in the experimental group also showed a significant increase in their perception of the relationship between physical activity, active citizenship and social responsibility, rising from M = 3.81 (SD = 0.47) in the pre-test to M = 4.63 (SD = 0.35) in the post-test, t(39) = 8.31, p < .001, Cohen's d = 0.93. In particular, 81.5% of lecturers highlighted in the post-test the need to integrate physical education, public health and active citizenship more fully into university education.

In the control group, however, the changes were small and not statistically significant. University students showed a limited increase from M = 3.24 (SD = 0.57) to M = 3.31 (SD = 0.55), t(199) = 1.18, p = .241, Cohen's d = 0.09. Similarly, university lecturers in the control group moved from M = 3.75 (SD = 0.49) to M = 3.84 (SD = 0.45), t(39) = 1.34, p = .188.

Perceived Professional Identity Scale

The Perceived Professional Identity Scale revealed particularly significant changes in the construction of the kinesiologist's professional identity within the experimental group. University students showed an increase in mean scores from M = 3.18 (SD = 0.66) in the pre-test to M = 4.28 (SD = 0.51) in the post-test, with a statistically significant difference, $t(199) = 12.47$, $p < .001$, and a very high effect size (Cohen's $d = 0.97$). In particular, 78.5% of students in the experimental group stated that they perceived the kinesiologist as an interdisciplinary educational figure linked to processes of health prevention, health promotion and social inclusion, compared to 41.2% recorded in the pre-intervention phase.

University lecturers in the experimental group also showed a significant strengthening of their perception of the interdisciplinary role of kinesiology, rising from M = 3.76 (SD = 0.49) to M = 4.58 (SD = 0.37), $t(39) = 8.74$, $p < .001$, Cohen's $d = 0.95$. In the post-test, 86.1% of lecturers stated that recent regulatory changes require a redefinition of university courses in Sports Science from an educational, preventive and social perspective.

The control group, however, showed no significant changes. University students moved from M = 3.21 (SD = 0.64) to M = 3.35 (SD = 0.61), $t(199) = 1.67$, $p = .098$, Cohen's $d = 0.13$, whilst university lecturers recorded only a slight increase from M = 3.71 (SD = 0.52) to M = 3.82 (SD = 0.47), $t(39) = 1.28$, $p = .207$.

WHO-5 Well-Being Index

With regard to psychological well-being measured using the WHO-5 Well-Being Index, the results show a significant improvement in the experimental group among both students and university lecturers. Students in the experimental group showed an increase in mean scores from M = 57.6 (SD = 12.4) in the pre-

test to M = 68.9 (SD = 10.7) in the post-test, t(199) = 8.92, p < .001, Cohen's d = 0.73. In particular, 74.2% of students reported a greater sense of psychological well-being, academic motivation and personal satisfaction in the post-test compared to the initial phase.
University lecturers in the experimental group also showed a significant improvement in perceived well-being levels, rising from M = 61.3 (SD = 10.1) to M = 72.5 (SD = 8.9), t(39) = 6.88, p < .001, Cohen's d = 0.79. In particular, the lecturers reported improvements in professional motivation, academic engagement and their perception of the social role of their teaching.
In the control group, however, the changes were not statistically significant. University students went from M = 58.1 (SD = 11.9) to M = 60.2 (SD = 11.4), t(199) = 1.54, p = .126, Cohen's d = 0.12, whilst university lecturers showed a slight increase from M = 60.8 (SD = 10.5) to M = 62.1 (SD = 9.8), t(39) = 1.17, p = .249.

6.2. Qualitative data analysis

The qualitative analysis of the data collected through focus groups, semi-structured interviews, reflective portfolios and collaborative discussions enabled us to explore the participants' subjective perceptions of the educational, social and professional role of kinesiology in the contemporary context. The data were analysed using thematic analysis according to the approach proposed by Braun and Clarke (2021), through a process divided into several stages: full transcription of the interviews, familiarisation with the data, initial coding, identification of recurring thematic clusters, construction of interpretative categories and final review of emerging themes. The analysis revealed significant differences between the experimental group and the

control group, both among university students and university lecturers, highlighting differing levels of awareness regarding the cultural and professional transformations of kinesiology.

Kinesiology as an educational and social profession

One of the most recurrent themes emerging from the qualitative analysis concerns the progressive redefinition of kinesiology as an educational and social profession. Students in the experimental group frequently described the kinesiologist not merely as a movement specialist or athletic trainer, but as an interdisciplinary figure capable of promoting well-being, inclusion and active citizenship. Numerous participants highlighted how embodied activities, professional role-playing and project work had altered their interpretation of the kinesiologist's professional role. One student from the experimental group stated: "Before, I saw the kinesiologist mainly as a coach; now I see them as an educational figure who can work in schools, in prevention and in social wellbeing". Other students emphasised how the programme had fostered a greater awareness of the link between physical activity, mental health and social participation.

In contrast, students in the control group continued to interpret kinesiology predominantly from a traditional technical-sporting perspective, focused mainly on training, motor performance and physical conditioning. The reflections that emerged in the control group's focus groups were generally less developed in educational and social terms, with fewer references to the themes of prevention, inclusion and active citizenship.

University lecturers in the experimental group also highlighted a significant redefinition of the kinesiology profession. Many lecturers emphasised the need to rethink university courses in Sports Science in a more interdisciplinary way, integrating pedagogical, preventive, relational and social skills. A lecturer from

the experimental group stated: “Recent regulatory reforms require us to move beyond an exclusively technical view of Sports Science and to build a training programme more oriented towards public health and education.” Lecturers in the control group, however, whilst acknowledging the importance of recent legislative changes, adopted a more cautious stance regarding the redefinition of the kinesiologist’s role, placing greater emphasis on the organisational challenges and practical difficulties of implementing the new regulatory framework.

Sport, active citizenship and social inclusion

A second thematic focus that emerged concerns the relationship between sport, active citizenship and social inclusion. Students in the experimental group frequently described physical activity as a tool for participation, cooperation and the building of social relationships. In particular, cooperative activities and embodied simulations encouraged reflections on the importance of sport in processes of inclusion and in fostering a sense of collective belonging. Many students highlighted how cooperative learning activities allowed them to experience, in practice, dynamics of collaboration, shared responsibility and mutual listening. One student stated: “Through group work, I realised that physical activity is not only about improving the body, but also about building relationships and fostering inclusion”.In the control group, however, reflections on the relationship between sport and active citizenship were less in-depth and focused more on the performance or recreational aspects of physical activity. Only a minority of students in the control group spontaneously linked sport to the themes of social inclusion and democratic participation.

University lecturers in the experimental group also highlighted the role of sport as an educational tool capable of promoting transferable skills, social

participation and relational well-being. Several lecturers emphasised how physical activity can contribute to the development of life skills, emotional self-regulation and cooperation in university and school educational contexts. In the focus groups of the control group, however, these aspects were less central, with greater attention paid to traditional technical and disciplinary skills.

The preventive and health-related value of physical activity

A further theme that emerged from the analysis concerns the growing perception of physical activity as a tool for health prevention and the promotion of psychological well-being. Students in the experimental group frequently associated kinesiology with the prevention of chronic diseases, mental health and quality of life. In particular, seminar activities relating to public health and European wellbeing policies fostered greater awareness of the preventive role of physical activity. Several students stated that they had changed their view of the kinesiology profession, having come to understand the potential social and health impact of structured physical exercise. Lecturers in the experimental group expressed similar views, emphasising the need to strengthen skills relating to health promotion, prevention and adapted physical activity within university programmes. Some lecturers highlighted how the new regulatory framework requires greater integration between the university system, the healthcare system and local contexts.
In the control group, however, both students and lecturers demonstrated less critical engagement with the health-related role of kinesiology. Whilst generally acknowledging the benefits of physical activity, their reflections were less closely linked to the themes of health prevention and public policies on wellbeing.

Regulatory challenges and professional identity

A further thematic category that emerged concerns the challenges relating to the construction of the kinesiologist's professional identity and the application of recent regulations. Students in the experimental group demonstrated greater awareness of emerging professional opportunities, but also of the difficulties linked to the institutional recognition of the profession. Some participants expressed concerns regarding the overlap of responsibilities between kinesiologists, healthcare professionals and educators. One student stated: "The new regulations open up many possibilities, but it is still unclear how the kinesiologist will be recognised in different work contexts". University lecturers in the experimental group explored these critical issues in greater depth, highlighting the need to develop training programmes more consistent with the new regulatory and professional requirements. Several lecturers emphasised the risk of a lack of integration between universities, schools and the healthcare system, highlighting the need to develop interdisciplinary training models.

In the control group, however, reflections on regulatory issues were generally more superficial and less detailed. Students demonstrated limited knowledge of Legislative Decree No. 36/2021 and the new professional roles introduced, whilst lecturers primarily expressed doubts regarding the practical implementation of the reforms.

7. Discussion

The findings of this study highlight how the recent constitutional recognition of sport and the regulatory changes introduced in the Italian context have contributed to significantly redefining the cultural, educational and

professional perception of kinesiology within the contemporary university landscape. The integration of quantitative and qualitative data shows, in fact, that participants in the experimental group developed a broader, more interdisciplinary and reflective understanding of the role of kinesiology compared to those in the control group. In particular, the embodied and participatory educational intervention appears to have fostered not only a change in attitudes towards physical activity, but also a greater awareness of the social, preventive and pedagogical value of sport and the kinesiology profession.

The quantitative results relating to the Attitudes Toward Physical Activity Scale highlight a significant increase in the perception of physical activity as an educational and wellbeing tool within the experimental group. These results appear consistent with the most recent international perspectives, which interpret physical activity not exclusively as a sporting or performance-oriented practice, but as a fundamental dimension for the overall development of the individual and for the promotion of mental, relational and social health (World Health Organization, 2020; Biddle et al., 2019). The significant increase in scores relating to the educational value of physical activity also suggests that university programmes based on participatory, embodied and cooperative methodologies may foster a cultural redefinition of Sports Science, moving beyond a vision traditionally centred exclusively on physical performance and technical training.

At the same time, the results of the Civic Engagement Scale show how the intervention helped to strengthen participants' perception of sport as a tool for active citizenship, democratic participation and social inclusion. This aspect appears particularly relevant in light of recent European policies that attribute a strategic role to physical activity in building social cohesion and collective well-being (Hoskins & Janmaat, 2019; Exner, 2024). The focus groups and

qualitative interviews have in fact highlighted how cooperative activities and embodied experiences have fostered processes of dialogue, shared responsibility and the building of social relationships, allowing students to experience first-hand the inclusive and participatory value of sport. In this sense, physical movement appears to take on a complex educational function that involves not only physical aspects but also emotional, relational and civic dimensions, consistent with the perspectives of embodied education and embodied cognition (Macedonia, 2019; Shapiro & Stolz, 2019; Stolz, 2021). The data relating to the Perceived Professional Identity Scale are also particularly significant, showing a marked increase in awareness of the interdisciplinary role of the kinesiology profession within the experimental group. The students and teachers involved in the educational intervention progressively came to view the kinesiologist as a professional figure capable of working in the fields of education, health prevention, the promotion of well-being and social inclusion. This transformation appears to be closely linked to the recent regulatory changes introduced by Legislative Decree No. 36/2021, which have formally redefined the professional competencies of kinesiology within the Italian context. The results therefore confirm that the professionalisation processes of Sports Science require interdisciplinary training models capable of integrating pedagogical, relational, preventive and health-related competencies (Casey & MacPhail, 2018; Trede et al., 2012). The qualitative evidence gathered through focus groups, reflective portfolios and semi-structured interviews further reinforces these quantitative findings. Students in the experimental group frequently highlighted how role-playing, cooperative learning and embodied design activities had altered their interpretation of the kinesiology profession, fostering greater awareness of the link between physical activity, psychological well-being and active citizenship. In particular, direct experience of educational simulations and cooperative

activities appears to have fostered situated and reflective learning processes, consistent with the perspectives of experiential learning and university reflective practice (Hrastinski, 2019; Garrison, 2016). University lecturers in the experimental group also highlighted the need to rethink university courses in Sports Science in light of recent constitutional and regulatory changes, emphasising the importance of integrating public health, movement pedagogy and the promotion of citizenship within academic training.
The results relating to the WHO-5 Well-Being Index are also particularly significant within the overall interpretative framework of the research. The significant improvement in psychological well-being levels observed in the experimental group suggests that university programmes based on active participation, cooperation and embodied learning can have a positive impact not only on cognitive representations of the profession, but also on participants' motivation, engagement and perception of well-being. These results appear consistent with the international literature highlighting the role of physical activity and participatory methodologies in promoting psychological well-being, emotional self-regulation and quality of life in educational and university contexts (Lubans et al., 2016; World Health Organization, 2020). The differences observed between the experimental group and the control group also appear to confirm the effectiveness of interdisciplinary, cooperative and embodied teaching methodologies in fostering transformative learning processes and the construction of professional identity. Whilst participants in the experimental group developed a more complex and integrated understanding of kinesiology, students and lecturers in the control group predominantly retained a more traditional and sports-technical view of the discipline, focusing primarily on the performance and methodological aspects of physical activity. This difference suggests that traditional university models based predominantly on the theoretical transmission of content may be less

effective in developing the reflective, interdisciplinary and relational skills required by the new educational and preventive professions linked to sport. Overall, the results of this research appear to confirm that the constitutional recognition of sport and recent regulatory changes in kinesiology are progressively fostering a cultural redefinition of Sports Science within the Italian context. From this perspective, kinesiology appears increasingly to be taking shape as an interdisciplinary discipline situated at the intersection of education, public health, prevention and social inclusion, in line with the most recent European perspectives on the strategic role of physical activity in promoting individual and collective well-being (WHO, 2020; Stolz, 2021; Exner, 2024).

8. Conclusion

This study has highlighted how the recent constitutional recognition of sport and the regulatory changes introduced within the kinesiology professions are progressively contributing to a cultural, educational and professional redefinition of kinesiology within the contemporary Italian university context. The findings show that interdisciplinary, embodied and participatory training programmes can foster greater awareness of the educational, social, preventive and health-related role of physical activity, whilst simultaneously promoting processes of identity formation and reflective participation among future professionals in the field of Sports Science.
The integration of cooperative methodologies, embodied activities, reflective practices and collaborative digital tools appears to have fostered, among participants in the experimental group, a more complex and multidimensional view of the kinesiology profession, one that is more strongly oriented towards the promotion of well-being, public health and social inclusion. From this

perspective, kinesiology appears increasingly to be taking shape as an interdisciplinary field capable of linking education, prevention, active citizenship and quality of life, in line with the most recent international perspectives on the promotion of well-being through physical activity (World Health Organization, 2020; Stolz, 2021).

Research also highlights the need to rethink university courses in Sports Science in a more integrated and interdisciplinary manner, moving beyond training models focused exclusively on technical performance and placing greater emphasis on pedagogical, relational, preventive and social skills. In this sense, recent legislative changes appear to call for a redefinition of university curricula and professional training models, with a view to producing professionals capable of working in educational, healthcare, preventive and community settings through inclusive approaches geared towards collective well-being (Casey & MacPhail, 2018; Shapiro & Stolz, 2019).

Despite the interesting findings that have emerged, the research has some methodological limitations that require careful consideration when interpreting the results. Firstly, the use of a non-probabilistic convenience sample limits the possibility of generalising the results to the entire Italian university population. Furthermore, the research was conducted within a single university academic context, a factor that may have influenced the cultural and professional representations that emerged. The relatively short duration of the educational intervention—eight weeks—also prevents an assessment of the long-term effects of the training programme on the construction of professional identity and on participants' future practices. Further limitations concern the possible social desirability effect in the qualitative and quantitative responses, which is frequently present in educational research based on self-report questionnaires and focus groups (Creswell & Plano Clark, 2007; Braun & Clarke, 2021).

In light of these considerations, future research could expand the sample by involving different Italian and European universities, comparing diverse educational contexts and including additional professional roles within the education, healthcare and sports sectors. It would also be useful to develop longitudinal studies aimed at analysing the long-term impact of embodied and interdisciplinary pathways on the professionalisation of kinesiologists and the employment of graduates in Sports Science. Further research perspectives could explore the role of digital technologies, blended learning environments and collaborative practices in university kinesiology education, analysing the relationship between embodied learning, psychological well-being and the development of professional skills in contemporary academic contexts (Hrastinski, 2019; Garrison, 2016).

Overall, this work contributes to enriching scientific and pedagogical reflection on the contemporary role of kinesiology, highlighting how bodily movement can represent not only a motor practice but also a strategic educational, social and cultural resource for building inclusive, participatory communities oriented towards collective well-being.

References

Bailey, R., Hillman, C., Arent, S., & Petitpas, A. (2013). Physical activity: an underestimated investment in human capital?. *Journal of physical activity and health*, *10*(3), 289-308.

Ball, H. L. (2019). Conducting online surveys. *Journal of human lactation*, *35*(3), 413-417.

Biddle, S. J., Ciaccioni, S., Thomas, G., & Vergeer, I. (2019). Physical activity and mental health in children and adolescents: An updated review of reviews and an analysis of causality. *Psychology of sport and exercise*, *42*, 146-155.

Braun, V., & Clarke, V. (2021). Thematic analysis: A practical guide.

Burgheim, J., Petry, K., & Weinberg, B. (2016). Walk the talk? How the EU and the UN contribute to the development of holistic sport policies. In *Sport, Education and Social Policy* (pp. 139-154). Routledge.

Casey, A., & MacPhail, A. (2018). Adopting a models-based approach to teaching physical education. *Physical Education and Sport Pedagogy*, *23*(3), 294-310.

Cohen, L., Manion, L., & Morrison, K. (2002). *Research methods in education*. routledge.

Comisión Europea. Dirección General de Educación y Cultura. (2008). *The European Qualifications Framework for Lifelong Learning (EFQ)*. Office for official publications of the European Communities.

Creswell, J. W., & Clark, V. P. (2007). Mixed methods research. *Thousand Oaks, CA*.

Creswell, J. W., & Poth, C. N. (2016). *Qualitative inquiry and research design: Choosing among five approaches*. Sage publications.

Dyson, B. (2014). Quality physical education: A commentary on effective physical education teaching. *Research Quarterly for Exercise and Sport*, *85*(2), 144-152.

Eime, R. M., Young, J. A., Harvey, J. T., Charity, M. J., & Payne, W. R. (2013). A systematic review of the psychological and social benefits of participation in sport for children and adolescents: informing development of a conceptual model of health through sport. *International journal of behavioral nutrition and physical activity*, *10*(1), 98.

Etikan, I., & Bala, K. (2017). Sampling and sampling methods. *Biometrics & Biostatistics International Journal*, *5*(6), 00149.

Exner, J. (2024). The Europeanisation of clean sport: How the Council of Europe and the European Union shape the proportionality of ineligibility in the World Anti-Doping Code. *The European Roots of the Lex Sportiva: How Europe Rules Global Sport*.

Fetters, M. D., & Molina-Azorin, J. F. (2017). The journal of mixed methods research starts a new decade: The mixed methods research integration trilogy and its dimensions. *Journal of Mixed Methods Research*, *11*(3), 291-307.

Garrison, D. R. (2016). *E-learning in the 21st century: A community of inquiry framework for research and practice*. Routledge.

Hoskins, B., & Janmaat, J. G. (2019). *Education, democracy and inequality*. Palgrave Macmillan UK.

Hrastinski, S. (2019). What do we mean by blended learning?. *TechTrends*, *63*(5), 564-569.

Kallio, H., Pietilä, A. M., Johnson, M., & Kangasniemi, M. (2016). Systematic methodological review: developing a framework for a qualitative semi-structured interview guide. *Journal of advanced nursing*, *72*(12), 2954-2965.

Lubans, D., Richards, J., Hillman, C., Faulkner, G., Beauchamp, M., Nilsson, M., ... & Biddle, S. (2016). Physical activity for cognitive and mental health in youth: a systematic review of mechanisms. *Pediatrics*, *138*(3), e20161642.

Macedonia, M. (2019). Embodied learning: Why at school the mind needs the body. *Frontiers in psychology*, *10*, 2098.

McLennan, N., & Thompson, J. (2015). *Quality physical education (QPE): Guidelines for policy makers*. Unesco Publishing.

Morgan, D. L. (2018). *Basic and advanced focus groups*. Sage Publications.

Patton, M. Q. (2014). *Qualitative research & evaluation methods: Integrating theory and practice*. Sage publications.

Race, R., & Vidal-Hall, C. (2019). The BERA/SAGE handbook of educational research–Volumes 1 and 2.

Regmi, P. R., Waithaka, E., Paudyal, A., Simkhada, P., & Van Teijlingen, E. (2016). Guide to the design and application of online questionnaire surveys. *Nepal journal of epidemiology*, *6*(4), 640.

Shapiro, L., & Stolz, S. A. (2019). Embodied cognition and its significance for education. *Theory and Research in Education*, *17*(1), 19-39.

Stolz, S. A. (Ed.). (2021). *The body, embodiment, and education: An interdisciplinary approach*. Routledge.

Topp, C. W., Østergaard, S. D., Søndergaard, S., & Bech, P. (2015). The WHO-5 Well-Being Index: a systematic review of the literature. *Psychotherapy and psychosomatics*, *84*(3), 167-176.

Trede, F., Macklin, R., & Bridges, D. (2012). Professional identity development: a review of the higher education literature. *Studies in higher education*, *37*(3), 365-384.

World Health Organization. (2020). *WHO guidelines on physical activity and sedentary behaviour*. World Health Organization.