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CURRENT ISSUES IN SPORTS PEDAGOGY IN THE CONTEXT OF THE TRAINING OF FUTURE PHYSICAL EDUCATION PROFESSIONALS

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The article provides a theoretical analysis of current issues in sports pedagogy in the context of the professional training of future physical culture specialists. It is substantiated that the transformation of the social functions of physical culture, the digitalisation of the educational process, the expansion of inclusive practices, the personalisation of physical activity, and changing requirements for specialists' professional competence necessitate a reconsideration of the conceptual and technological foundations of sports pedagogical education.

It is emphasised that sports pedagogy constitutes an interdisciplinary field of educational science concerned with the regularities of teaching, education, development, and personality formation in physical culture and sports activities. This perspective is particularly relevant in the context of the transition from a technocratic model focused on the transmission of sports knowledge and motor skills to a learner-centred, reflective, and subject-activity paradigm of education.

Based on an analysis of contemporary scholarly literature, the key problematic areas of sports pedagogy are identified: the contradiction between the traditional sports training model and the competence-based paradigm of professional education; insufficient integration of digital technologies and digital health tools; fragmented preparation for

professional activity in an inclusive educational environment; limited use of reflective and self-regulatory mechanisms for professional development; insufficient individualisation of the educational process; and the gap between the theoretical, methodological, and practical components of professional training.

It is concluded that the modernisation of sports pedagogy should focus on transforming the logic of professional training: from mastering normatively prescribed algorithms to developing future specialists' ability to analyse professional situations, design pedagogical solutions, implement them, and reflectively evaluate the outcomes achieved.

Keywords: *sports pedagogy, physical culture, professional training, future physical culture specialists, professional competence, digital technologies, inclusive education, reflective practice, personalised learning.*

Problem Statement and Its Relationship to Important Scientific and Practical Tasks. The current stage of development of physical education is characterized by a substantial transformation in the content, objectives, and technologies of the professional activity of physical education specialists. Whereas the traditional model of professional preparation primarily emphasized mastery of physical exercise techniques, methods for developing physical qualities, and the organization of sports training processes, contemporary professional practice requires a considerably broader range of competencies. Future specialists are expected to design individualized physical activity programs, work effectively with diverse population groups, apply digital tools for monitoring physical condition, organize inclusive physical activity, engage in pedagogical reflection, and make evidence-informed professional decisions based on data analysis.

Under these conditions, sports pedagogy assumes particular significance as a field of educational science that investigates the principles and patterns of education, instruction, upbringing, and personal development through physical education and sport. Its subject area has gradually expanded beyond the methodology of teaching motor skills and sports training. Contemporary sports pedagogy encompasses issues of professional socialization, the development of value-based attitudes toward health and physical activity, pedagogical interaction, the digitalization of physical education, inclusive practices, self-regulated learning, and reflective professional development.

The relevance of this issue is reinforced by the discrepancy between the rapid transformation of the social and technological context of physical education and the relative inertia of the content of professional preparation for future physical education specialists. Recent studies in the field of digital pedagogy of physical education indicate an increasing integration of electronic and mobile applications,

gamified learning platforms, augmented and virtual reality technologies, and artificial intelligence tools into educational practice. However, the effectiveness of these technologies depends not merely on their implementation but on their pedagogical validity, the professional readiness of instructors, and their ability to integrate digital data into teaching, learning, and evidence-based professional decision-making.

Accordingly, an important scientific task is to identify and systematize the key challenges of sports pedagogy that directly influence the content, methods, and outcomes of the professional preparation of future physical education specialists.

Analysis of the latest research and publications in which the solution to this problem was initiated, and on which the author relies.

The issue of professional preparation of specialists in the field of physical education is represented in contemporary scientific discourse through several interrelated research directions. The modernization of the professional preparation of future physical education specialists has been examined in the context of pedagogical excellence, inclusive education, digitalization, and the expansion of professional roles. Pedagogical excellence as an integrated construct encompassing motivational, cognitive, operational, value-based, and personal components has been investigated by Maksymchuk, Maksymchuk, Fritsiuk, Matviichuk, and Demchenko (Maksymchuk et al., 2018). These scholars emphasize the continuity and sequential nature of the professional and pedagogical development of future specialists. The necessity of integrating regulatory, psychological, pedagogical, corrective, and methodological knowledge into the preparation of specialists for work in inclusive educational environments has been substantiated by Demchenko, Maksymchuk, Bilan, Maksymchuk, and Kalynovska (Demchenko et al., 2021). Professional situation modelling and reflective analysis of pedagogical experience are identified as essential components of such preparation. The digital dimension of professional education has been explored by Semenikhina, Yurchenko, Rybalko, Shukatka, Kozlov, and Drushliak (Semenikhina et al., 2022), who proposed a model for preparing future specialists to apply digital health technologies. The importance of specialized software and digital technologies in the professional activities of athletes, coaches, and specialists in physical education and health promotion has also been highlighted by Lazorenko and Loza (Lazorenko & Loza, 2021). The expansion of the professional functions of physical education specialists has been associated with their readiness to organize recreational, leisure, and diverse forms of physical activity, as demonstrated in the studies of Holenkov (2024) and Naumchuk, Sydoruk, and Makovetska (Naumchuk et al., 2020).

International research has increasingly focused on the digital transformation of physical education. The potential of online and blended learning in physical education teacher education has been examined by Murtagh, Calderón, Scanlon, and MacPhail (Murtagh et al., 2023). At the same time, Gawrisch, Richards, and Killian (Gawrisch et al., 2020) argue that technological competence develops primarily through professional socialization and the pedagogical culture of teacher education programmes rather than solely through the acquisition of individual digital tools. Martín-Rodríguez and Madrigal-Cerezo (Martín-Rodríguez & Madrigal-Cerezo, 2025) systematized the educational applications of wearable technologies, fitness applications, gamification, virtual and augmented reality, and artificial intelligence, linking their pedagogical potential to personalized learning and the development of self-regulated learning competencies. The need to reconsider traditional models of sport instruction has been emphasized by Penney and Swabey (Penney & Swabey, 2012), who argue that the successful implementation of innovative pedagogical models depends largely on the quality of teacher education and the ability to overcome the dominance of reproductive approaches to teaching and learning.

Research Gap. A synthesis of the available research indicates that contemporary scholarship addresses individual dimensions of the professional preparation of future physical education specialists, including the development of pedagogical excellence, digital transformation, inclusive education, professional socialization, leisure and recreation management, and the modernization of sport pedagogy. Nevertheless, the current challenges of sports pedagogy have not yet been sufficiently conceptualized as a coherent system of determinants influencing the modernization of the professional preparation of future physical education specialists.

The aim of the article is to provide a theoretical substantiation and systematization of the current issues in sports pedagogy within the context of modernizing the professional training of future physical education specialists.

Objectives of the study:

- to clarify the contemporary scope of sports pedagogy in the context of the professional training of future physical education specialists;
- to analyze current scientific approaches to the modernization of physical education teacher training;
- to identify the key problematic areas of sports pedagogy that determine the quality of the professional preparation of future physical education specialists.

Presentation of the main material of the study with a full justification of the obtained results. In contemporary educational research, sports pedagogy is regarded as a specialized field of pedagogical knowledge whose subject matter encompasses the principles, patterns, content, methods, and organizational forms of teaching, education, and personal development through physical education and sport. At the same time, the contemporary understanding of sports pedagogy extends beyond the traditional perception of sport as a domain concerned solely with the development of motor skills, physical qualities, and high-performance athletic achievement. Its scope includes pedagogical processes that emerge across diverse contexts of physical and sporting activity, including physical education, youth sport, sports training, recreational physical activity, and the professional practice of coaches and physical education instructors.

A significant contribution to defining the essence of sports pedagogy is provided by Kathleen M. Armour, who conceptualizes sport pedagogy primarily as the study of learning in practice and the educational space in which sport and education intersect. From this perspective, sports pedagogy examines, on the one hand, the processes through which children, adolescents, and adults learn in the course of physical and sporting activities and, on the other hand, the body of pedagogical knowledge and professional competencies required by teachers and coaches to create effective learning environments (Armour, 2011).

Accordingly, the central category of sports pedagogy should be understood not as sport itself as a form of competitive activity, but rather as learning in and through sport. This perspective fundamentally reshapes the understanding of the professional role of physical education specialists. A teacher or coach is viewed not merely as a provider of specialized knowledge related to movement techniques, methods of developing physical capacities, or the organization of training processes, but primarily as an educational professional who designs learning environments, diagnoses learners' educational needs, organizes meaningful physical activity, provides pedagogical support, and engages in reflective analysis to enhance the quality and effectiveness of professional practice.

From a systems perspective, sports pedagogy can be defined as an integrative field of educational science that investigates the pedagogical principles governing personality development within the context of physical education and sport and develops the theoretical and methodological foundations for organizing teaching, education, personal development, and pedagogical support for participants in these activities. Its integrative nature arises from the interaction of educational science with the theory of physical education, sport psychology, the sociology of sport, the physiology of physical activity, the theory of sports training, and professional education.

Within the structure of sports pedagogy, several interrelated areas of inquiry can be distinguished. The first concerns the pedagogy of physical education and focuses on the study of teaching motor skills, developing physical literacy, fostering motivation for physical activity, and cultivating value-based attitudes toward health. The second area comprises the pedagogy of sports training, which examines the pedagogical principles underlying coach–athlete interaction, the organization of training processes, pedagogical guidance in athletic development, and the formation of athletes' agency. The third area relates to the professional pedagogy of preparing specialists in physical education and sport. Its subject matter includes the content, educational technologies, and pedagogical conditions necessary for developing the professional competence of future physical education teachers, university instructors, coaches, and other professionals in the field of sport.

An important theoretical principle of contemporary sports pedagogy is the recognition of the sociocultural nature of movement learning. In their study *Learning Movement Cultures in Physical Education Practice*, Mikael Quennerstedt and Håkan Larsson argue that learning in physical education should be understood within the context of diverse movement cultures, including sport, fitness, dance, and other forms of physical practice. The authors emphasize that movement learning does not occur in a social vacuum but is embedded within specific cultural and pedagogical contexts that shape the content of learning, patterns of interaction, and perceptions of the educational value of movement (Quennerstedt & Larsson, 2015).

This perspective has significant implications for the professional preparation of future physical education specialists. Traditional models of professional education have largely emphasized students' mastery of sports disciplines and the methodologies for teaching them. Within such models, professional competence has often been equated with technical proficiency in physical exercises, knowledge of the rules of sports games, and the ability to organize instructional sessions. Contemporary sports pedagogy, however, requires professionals to address considerably more complex educational tasks. These include understanding the mechanisms of movement learning, accounting for individual differences among learners, designing pedagogically grounded physical education and sport programmes, fostering motivation for lifelong physical activity, creating inclusive learning environments, ensuring ethical pedagogical interaction, and promoting learner autonomy together with reflective practice.

In this context, it is important to distinguish between the concepts of sports pedagogy, physical education pedagogy, and the theory of sports training. Physical education pedagogy primarily examines the educational process within physical education, focusing on the principles of motor learning and the pedagogical

conditions necessary for developing individuals' physical literacy and physical culture. The theory of sports training, in contrast, is concerned with the principles governing athletic preparation, the development of training adaptations, and the management of athletic performance. Sports pedagogy encompasses a broader field of inquiry because its primary focus is pedagogical interaction and learning processes across diverse contexts of physical education and sport.

Particularly illustrative in this regard is the conceptual framework proposed by David Kirk, who critically examines the dominance of the traditional multi-activity sport-based model of physical education. Kirk argues that this model, in which the curriculum is organized around short-term instruction in a sequence of different sports, has remained remarkably resilient despite its pedagogical limitations. Such an approach does not necessarily facilitate deep learning, meaningful engagement with movement experiences, or the development of sustained participation in physical activity throughout life (Kirk, 2010). From the perspective of sports pedagogy, this critique highlights the need to shift from merely teaching sports techniques toward the pedagogically informed design of movement learning processes.

Accordingly, contemporary sports pedagogy is characterized by a shift in research emphasis from the activities of the teacher or coach as a transmitter of knowledge to the learning processes of individuals engaged in physical education and sport. Central research questions include what learners actually acquire through participation in sport, how movement experience is constructed, how pedagogical interaction influences motivation, autonomy, and self-perception, and how educational environments can facilitate the transfer of acquired movement competencies to everyday life.

Based on an analysis of the contemporary scholarly discourse, several interrelated challenges of sports pedagogy can be identified. One of the most fundamental concerns is the persistence of a technocratic model of professional preparation, in which professional competence is defined primarily by athletic expertise, mastery of movement techniques, and the ability to reproduce standardized instructional methods. However, a high level of personal physical proficiency does not automatically translate into the capacity to teach others effectively, diagnose learning difficulties, individualize educational tasks, or evaluate learners' progress. Consequently, there is an increasing need to transition toward a pedagogically oriented model of professional preparation that emphasizes the ability to design, implement, and continuously improve educational processes within physical education and sport.

A persistent systemic challenge is the gap between pedagogical theory and professional practice. Theoretical coursework, sport-specific practical training, and teaching practicum frequently operate as relatively independent components

of professional preparation, creating a discrepancy between knowledge about pedagogy and the ability to respond effectively to complex and non-routine educational situations. Bridging this gap requires the systematic integration of pedagogical case studies, microteaching, video-based analysis, simulation of authentic professional scenarios, and supervised teaching practice, through which pedagogical theory acquires an analytical and instructional design function rather than remaining solely conceptual.

Another significant challenge concerns the insufficient development of professional reflection among future physical education specialists. Formal self-evaluation of instructional outcomes does not, by itself, promote critical examination of the pedagogical rationale underlying professional decisions or an understanding of the causal relationships between teachers' actions and learners' responses. The development of reflective competence should therefore be supported through structured self-analysis, reflective journals, video-assisted reflection, peer observation, pedagogical supervision, and the analysis of critical professional incidents.

A distinct area of concern is the digital transformation of sports pedagogy. Mobile applications, video analysis systems, sensor-based technologies, fitness trackers, and artificial intelligence expand opportunities for monitoring and analyzing movement performance. However, the mere availability of these technologies does not automatically improve educational quality. Their pedagogical effectiveness depends on their meaningful integration into instructional design, formative feedback, assessment, and reflective learning processes. Furthermore, the increasing use of generative artificial intelligence raises additional challenges related to the reliability of information, data privacy, algorithmic bias, academic integrity, and professional accountability. Consequently, the development of digital pedagogical literacy and critical digital competence has become an essential objective of the professional preparation of future physical education specialists.

Another important challenge concerns the inclusiveness of physical education and sport learning environments. The traditional emphasis on standardized motor performance norms and comparative assessment requires reconsideration in light of principles of meaningful participation, learner agency, and individually significant progress. Professional preparation should therefore equip future specialists with the ability to adapt rules, learning spaces, equipment, task complexity, and assessment criteria according to learners' diverse needs while systematically integrating the principles of inclusive education into both sports pedagogy curricula and practical professional training.

Thus, the modernization of sports pedagogy should not be aimed at the mechanical expansion of the range of academic disciplines or the implementation

of additional digital tools. Instead, it should focus on transforming the underlying logic of professional preparation: shifting from the acquisition of normatively prescribed algorithms toward developing future specialists' capacity to analyze professional situations, design pedagogical solutions, implement them effectively, and critically reflect on the outcomes achieved.

Conclusions and Prospects for Further Research.

The theoretical analysis conducted demonstrates that the contemporary challenges of sports pedagogy are determined by transformations in the social, educational, and technological contexts of the professional activity of physical education specialists. The study has established that the principal challenges in contemporary sports pedagogy within the context of professional preparation include the predominance of a sport-oriented normative model of education, the fragmented nature of digitalization, insufficient preparedness for inclusive educational practice, the limited integration of professional reflection, inadequate personalization of the educational process, and the persistent gap between the theoretical and practical components of professional training.

Prospects for further research are associated with the development of a comprehensive framework for modernizing the sports-pedagogical preparation of future physical education specialists; the identification and substantiation of criteria, indicators, and levels of their readiness for professional practice; and the justification of pedagogical conditions for integrating digital technologies and artificial intelligence tools into the professional preparation of future physical education specialists.

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АКТУАЛЬНІ ПРОБЛЕМИ СПОРТИВНОЇ ПЕДАГОГІКИ В КОНТЕКСТІ ПІДГОТОВКИ МАЙБУТНІХ ФАХІВЦІВ ФІЗИЧНОЇ КУЛЬТУРИ

Л. Г.Цибулько, О.І. Холодний, І.Д. Боженко

У статті здійснено теоретичний аналіз актуальних проблем спортивної педагогіки в контексті професійної підготовки майбутніх фахівців фізичної культури. Обґрунтовано, що трансформація соціальних функцій фізичної культури, цифровізація освітнього процесу, поширення інклюзивних практик, персоналізація рухової активності та зміна вимог до професійної компетентності фахівця зумовлюють необхідність переосмислення концептуальних і технологічних засад спортивно-педагогічної освіти.

Зазначено, що спортивна педагогіка є міждисциплінарною педагогічною галуззю, предметом якої виступають закономірності навчання, виховання, розвитку та становлення особистості у фізкультурно-спортивній діяльності, що є актуальним у зв'язку з переходом від технократичної моделі передавання спортивних знань і рухових навичок до особистісно орієнтованої, рефлексивної та суб'єктно-діяльної парадигми навчання.

На основі аналізу сучасних наукових праць виокремлено ключові проблемні напрями спортивної педагогіки: суперечність між традиційною спортивно-тренувальною моделлю і компетентнісною парадигмою професійної підготовки; недостатню інтеграцію цифрових технологій і засобів цифрового здоров'я; фрагментарність підготовки до діяльності в інклюзивному освітньому середовищі; обмежене використання рефлексивних і саморегуляційних механізмів професійного розвитку; недостатню індивідуалізацію освітнього процесу; розрив між теоретичною, методичною та практичною складовими підготовки. Робиться висновок, що модернізація спортивної педагогіки повинна бути спрямована на зміну логіки професійної підготовки: від засвоєння нормативно заданих алгоритмів до формування здатності майбутнього фахівця аналізувати професійну ситуацію, проектувати педагогічні рішення, реалізовувати його та рефлексивно оцінювати отриманий результат.

Ключові слова: спортивна педагогіка, фізична культура, професійна підготовка, майбутні фахівці з фізичної культури, професійна компетентність, цифрові технології, інклюзивна освіта, рефлексивна практика, персоналізація навчання.

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