



# Coaches readiness to work with athletes with special educational needs: a nationwide study based on the COM-B model

Olesia K. Shevchuk<sup>1ABCDE</sup>, Iryna O. Kohut<sup>1ABE</sup>, Viktoriia L. Marynych<sup>1ABE</sup>

National University of Ukraine on Physical Education and Sport, Ukraine

**Authors' Contribution:** A – Study design; B – Data collection; C – Statistical analysis; D – Manuscript Preparation; E – Funds Collection.

**Corresponding Author:** Iryna Kohut, kogut\_irina@ukr.net

## Abstract

**Background and Study Aim.** Social changes and contemporary global challenges, including the COVID-19 pandemic and ongoing armed conflicts, have heightened the importance of inclusion in all areas of life, including sports. Sports can play a significant role in promoting social integration. Nevertheless, many individuals, especially those with atypical physical, psycho-emotional, social, and other characteristics, and thus with special educational needs, continue to face systemic exclusion in sports. Coaches, as key figures in the sports environment, have the potential to implement inclusive practices in their teams, but their readiness to do so remains insufficiently researched. The COM-B model, which considers capabilities, opportunities, and motivation as key determinants of behavior, provides a comprehensive framework for understanding and enhancing coaches' readiness to work inclusively. By addressing three research questions, this study aims to identify, using the COM-B model, the perceptions of Ukrainian coaches regarding their capabilities, opportunities, and motivation to coach athletes with special educational needs.

**Material and methods.** A survey conducted between September 2023 and March 2024 involved 379 Ukrainian coaches across 58 sports. Of these, 217 (57.3%) were men and 162 (42.7%) were women, with an average age of 37 ( $\pm 14$ ) years. The survey was based on the COM-B model, data collection was carried out using Google Forms, and statistical calculations were performed using Microsoft Office Excel 2010. The methods applied included questionnaires and a range of general scientific and statistical (descriptive statistics) methods.

**Results.** Among the components that determine behavior according to the COM-B model, coaches rated their motivation the highest. However, a low level of capability and opportunities for working with athletes with special educational needs (SEN) was also identified, indicating existing challenges that hinder the effective implementation of inclusivity in the training process. Approximately half of the respondents believed that they had not received adequate training (54.9%), lacked appropriate equipment and conditions (52.8%), and did not have the necessary methodological resources (46.2%) for coaching athletes with SEN. About 20% of the surveyed coaches acknowledged having a strong desire (20.6%) and intention (17.7%) to coach athletes with SEN, as well as possessing the necessary interpersonal communication skills (19%). These percentage results are supported by central tendency measures at levels below the median value.

**Conclusions.** The survey results indicate the need for further measures to change coaches' behavior, taking into account their perceptions of their capabilities, opportunities, and motivation to coach athletes with SEN. This will not only improve the quality of training for all athletes but also contribute to the sustainable development of inclusivity in sports.

**Key words:** inclusion, sports, capability, opportunity, motivation, SEN.

## Анотація

**Вплив освітнього процесу на психологічний стан студентів та викладачів з фізичної культури і спорту під час війни**

**Олеся Шевчук, Ірина Когут, Вікторія Маринич**

**Передумови та мета дослідження.** Соціальні зміни та сучасні глобальні виклики, зокрема пандемія CO-





COVID-19 і триваючі збройні конфлікти, підвищили важливість інклюзії в усіх сферах життя, зокрема у спорті. Спорт може відігравати значну роль у сприянні соціальній інтеграції. Незважаючи на це, багато людей, особливо з нееталонними фізичними, психоемоційними, соціальними та іншими характеристиками, а отже, особливими освітніми потребами, продовжують стикатися з системною ексклюзією у спорті. Тренери, як ключові фігури у спортивному середовищі, мають потенціал для впровадження інклюзивних практик у своїх командах, проте їхня готовність до цього залишається недостатньо дослідженою. Модель COM-B, яка розглядає здібності, можливості та мотивацію як ключові детермінанти поведінки, забезпечує комплексну основу дослідження для розуміння та підвищення готовності тренерів до інклюзивної роботи. Відповідаючи на три дослідницькі питання, це дослідження має на меті визначити з використанням моделі COM-B особливості сприйняття українськими тренерами своїх здатностей, можливостей та мотивації до тренування спортсменів з особливими освітніми потребами.

**Матеріал і методи.** В опитуванні, що проходили з вересня 2023 по березень 2024 року взяли участь 379 тренерів України з 58 видів спорту. Серед яких 217 (57,3%) чоловіків, 162 (42,7%) жінки. Середній вік – 37 ( $\pm 14$ ) років. Опитування проводилось за моделлю COM-B, збір даних – за допомогою Google Form, статистичні розрахунки – з використанням Microsoft Office Excel 2010. Застосовані: анкетування, низка загальнонаукових та статистичних (описова статистика) методів.

**Результати.** Серед складових, які обумовлюють поведінку згідно із моделлю COM-B, найвище тренери оцінюють свою мотивацію. Проте, ідентифікований також низький рівень здатності та можливостей тренерів до роботи зі спортсменами з особливими освітніми потребами (ООП), свідчить про наявні складнощі, які перешкоджають ефективній імплементації інклюзивності у навчально-тренувальний процес. Близько половини респондентів переконані, що вони не пройшли відповідну підготовку (54,9%), не мають належного обладнання та умов (52,8%), а також необхідних методичних ресурсів (46,2%) для тренування спортсменів з ООП. Близько 20% опитаних тренерів визнають наявність у себе стійкого бажання (20,6%) та наміру (17,7%) тренувати спортсменів з ООП, а також наявність необхідних навичок міжособистісного спілкування (19%). Такі відсоткові результати підтверджуються показниками мір центральної тенденції на рівні нижче середнього значення.

**Висновки.** Результати опитування свідчать про необхідність подальших заходів задля зміни поведінки тренерів з урахуванням їх сприйняття власних здатностей, можливостей та мотивації до тренування спортсменів з ООП. Це дозволить не тільки покращити якість тренувань для всіх спортсменів, але й сприяти сталому розвитку інклюзивності в спорті.

**Ключові слова:** інклюзія, спорт, здатність, можливість, мотивація, ООП.

## Introduction

### *Background*

In the context of social changes occurring in highly developed societies, there is a growing emphasis on equality, justice, and social inclusion across various domains of life. Contemporary challenges, including the COVID-19 pandemic, ongoing military conflicts, and other current issues, have highlighted the importance of inclusion like never before. Sports, in turn, can play a crucial role in promoting inclusion by providing a platform for social interaction, physical activity, and personal development. Sports have the potential to break down barriers and foster a sense of belonging among participants, regardless of their individual characteristics. Despite these and other benefits of sports, many individuals – particularly those with non-normative physical, psycho-emotional, social, and other characteristics, and thus with special educational needs in sports – continue to face systemic exclusion [1; 2]. The situation is further complicated by the fact that statistics measuring the engagement and quality of participation of different population groups in

sports are either unreliable or nonexistent [3; 4; 5]. Nonetheless, the role of coaches is undeniably critical in shaping a quality sports experience for all athletes. Coaches can either promote adaptive practices that enhance participation and inclusion for athletes with diverse abilities and needs or reinforce maladaptive practices that hinder inclusion. As such, coaches act as agents of change, directly influencing the implementation of inclusive philosophies and policies within their teams [6]. Therefore, their readiness to effectively coach athletes with special educational needs is crucial to making inclusion in sports a reality.

### *Persons with Special Educational Needs*

Researches indicate that some people encounter greater challenges in accessing and participating in quality sporting activities. For instance, scholars assert that women experience reduced opportunities to engage in sports due to prevailing social stereotypes and inadequate support [7; 8]. Numerous studies and empirical evidence have demonstrated that individuals with disabilities face considerable physical and social barriers



that hinder their participation in sporting events [5; 9; 10]. Although there are problems with the lack of involvement in sports in childhood, there are also concerns about access to sports for older people, who are often left out of sports programs that are mainly aimed at children and youth [11]. Internally and externally displaced individuals also require societal acknowledgment of their physical, racial, religious, cultural, speech, and other differences, necessitating a positive societal perception of diversity and, subsequently, inclusive practices [12]. Consequently, these are people with different characteristics, which, in fact, reflect human diversity. Gender and age, sexual orientation and gender identity, race and ethnicity, indigenous or migratory backgrounds, language, culture and religion, financial means, socioeconomic status, disability, etc. significantly influence sports participation opportunities [2; 13]. Recognizing these disparities is critical for understanding that each individual experiences unique forms of discrimination and/or barriers to engagement in sports [13; 14].

It is essential to underscore that within the framework of an inclusive approach to sports, the focus should be on equality of access and quality of participation for all individuals, irrespective of differences, rather than on categorization. Exclusion and discrimination, particularly in the context of sports, cannot be justified by individual characteristics. However, currently, when specific characteristics govern participation and contribute to experiences of marginalization or potential exclusion, these individuals are often classified as belonging to "at-risk populations", "marginalized groups", "categories of people vulnerable to exclusion", "individuals with fewer opportunities", or "persons with special needs".

Given the following considerations: 1) the absence of a clear, universally accepted inclusive terminology within the global sports context; 2) the insufficient development of inclusive policies in Ukraine's regulatory and legal framework pertaining to sports; 3) thorough elaboration of inclusion-related issues within the educational sector in both Ukraine and globally, including the terminology associated with inclusive education; 4) affiliation, or at least tangency, of the educational and sports sectors to the broad field of pedagogy (physical education and sports); and 5) extrapolating to the field of sports a term that is widely used in pedagogical research and policy, particularly "persons with special educational needs", — this study employs the concept of "athletes with special educational needs" (SEN). However, in practice, a coach's willingness to train athletes with SEN implies a readiness to train all individuals.

#### *Coaches' Readiness to Work with Athletes*

#### *with SEN and the COM-B Model*

Coaches' readiness to work with SEN is a multifaceted concept that goes beyond psychological, pedagogical, physical, and technical-tactical structural components. In the context of this study, coaches who demonstrate readiness are specialists who possess not only the necessary competencies but also the resources and intention to effectively train athletes with SEN. This means they have the requisite knowledge and skills, tools and support, as well as the desire and commitment to implement inclusive practices in the sports environment. This readiness transforms into inclusive coaching behavior.

The behavioral COM-B model, developed for the analysis and understanding of behavioral change, is part of a broader approach known as the Behaviour Change Wheel (BCW). It was first introduced in a study conducted by Susan Michie and colleagues in 2011 [15]. This model serves as the primary tool in the current study for analyzing coaches' readiness to work with athletes with special educational needs. The model encompasses three key components.

**Capability:** this refers to the skills and knowledge an individual must possess to perform a specific behavior. Capability can be physical or psychological and requires knowledge, technical, tactical, and communication skills, as well as the completion of relevant training to work effectively with athletes with special educational needs. The first research question thus investigates whether coaches possess the necessary knowledge and skills to work with diverse athletes, including those with special educational needs in sports.

**Opportunity:** this refers to external factors that can influence an individual's ability to perform a behavior. Opportunities may include access to resources, social support, or infrastructure. For instance, access to specialized equipment or support from sports organizations can affect a coach's ability to adapt their activities for diverse athletes. The second research question asks whether coaches are provided with the necessary resources and support to train athletes across the spectrum of human diversity.

**Motivation:** this encompasses the internal processes that drive an individual to engage in a specific behavior. Motivation can be reflective or automatic, and it may depend on personal beliefs, professional satisfaction, or external rewards. The third research question examines whether coaches have the motivation and desire to work with athletes, regardless of their unique characteristics and differences.

Despite the potential value of this model for application in an inclusive sports context, to date, no studies have been found that explore Ukrainian coaches' perceptions of their capabilities, op-



portunities, and motivation to work with athletes with special educational needs.

*Relationship of the Study with Scientific Programs, Plans, and Themes.* This research was conducted in accordance with the Research Plan of the National University of Physical Education and Sport of Ukraine for 2021–2025, under the theme 1.4, “Theoretical and Methodological Foundations for the Development of Professional, Non-Olympic, and Adaptive Sports in Ukraine in the Context of Reforms in the Field of Physical Culture and Sports” (State Registration Number 0121U108294).

**The purpose of the study** is to determine the characteristics of Ukrainian coaches’ perceptions of their capabilities, opportunities, and motivation to train athletes with special educational needs using the COM-B model.

## Material and methods

### Participants

The survey involved 379 respondents from across Ukraine, including 217 (57.3%) men and 162 (42.7%) women. These participants are coaches with an average of 12 ( $\pm 11$ ) years of experience across 58 sports disciplines, including adaptive sports. They coach athletes ranging in age from 3 to 70 years. The average age of the respondents is 37 ( $\pm 14$ ) years, with 188 (49.6%) being over 35 years old. The minimum and maximum ages of the participants are 19 and 73 years, respectively. Following V. Pečnikar Oblak et al. [2], we consciously avoid dividing sports into sport and parasport or sport for people with disabilities. This is because the concept of inclusion in sports is characterized by its encompassing nature, which covers sports as a whole.

### Procedure

The survey administered to the coaches consisted of seven sections, one of which included the COM-B questionnaire. The three dimensions of the COM-B model—capability, opportunity, and motivation—were assessed using a questionnaire developed by S. Michie et al. [15], with guidelines for creating COM-B measures, and incorporating instructions for questionnaire development based on the Theoretical Domains Framework by J. M. Huijg et al. [16]. Additionally, the questionnaire was adapted to the context of sports coaches as recommended by the Coaches Association of Ontario [17; 18]. Specifically, responses were provided on 11 items (4 items related to capability, 5 to opportunity, and 2 to motivation) using a 5-point Likert scale, with endpoints labeled 1 - Strongly Disagree, and 5 - Strongly Agree.

The COM-B questionnaire was adapted according to the guidelines of the International Test Commission. For linguistic and contextual adapta-

tion, two linguists performed forward and backward translations (English–Ukrainian–English) of the scale items. This process was supplemented by a review from experts in adaptive sports to ensure the appropriateness of the statements within the Ukrainian context and the sports field.

Data collection took place from September 2023 to March 2024. The participants completed the questionnaire using Google Forms, which minimized material costs and improved response rates. The data exported from Google Forms were reviewed for errors and missing information. Mathematical and statistical calculations were performed using Microsoft Office Excel 2010 spreadsheets. The study adhered to the ethical principles and guidelines outlined in the Helsinki Declaration of the World Medical Association for research involving human subjects. While some socio-demographic data, such as gender, age, work experience, and type of sport, were collected, the questionnaires were anonymous, and participation was voluntary, as communicated to the participants. Before beginning the survey, coaches were provided with an informational letter and an online consent form that detailed the procedures, benefits, and risks of participation, the storage of responses, and the researchers’ contact information. Completing this part of the online questionnaire, including the COM-B survey, took approximately 7 minutes.

### Statistical analysis

A range of methods was employed to achieve the research objective. Among them were general scientific methods such as analysis, synthesis, generalization, methods of induction and deduction, as well as systematic and logical analysis. Within the scope of qualimetry methods, a sociological approach—specifically, a questionnaire survey—was applied. The evaluation of the data obtained in the study was conducted using statistical methods, following recommendations outlined in specialized literature. Descriptive statistics were utilized through three main approaches: the calculation of statistical measures, tabular representation, and graphical presentation. The primary statistical measures used to describe the dataset included measures of central tendency (median, mode) and measures of variability (25th and 75th percentiles).

## Results

The survey conducted using the COM-B questionnaire provided comprehensive information regarding Ukrainian coaches’ perceptions of their capabilities, opportunities, and motivation to train athletes with special educational needs (SEN). Notably, the number of responses scoring below 3 across all questionnaire items exceeded the num-



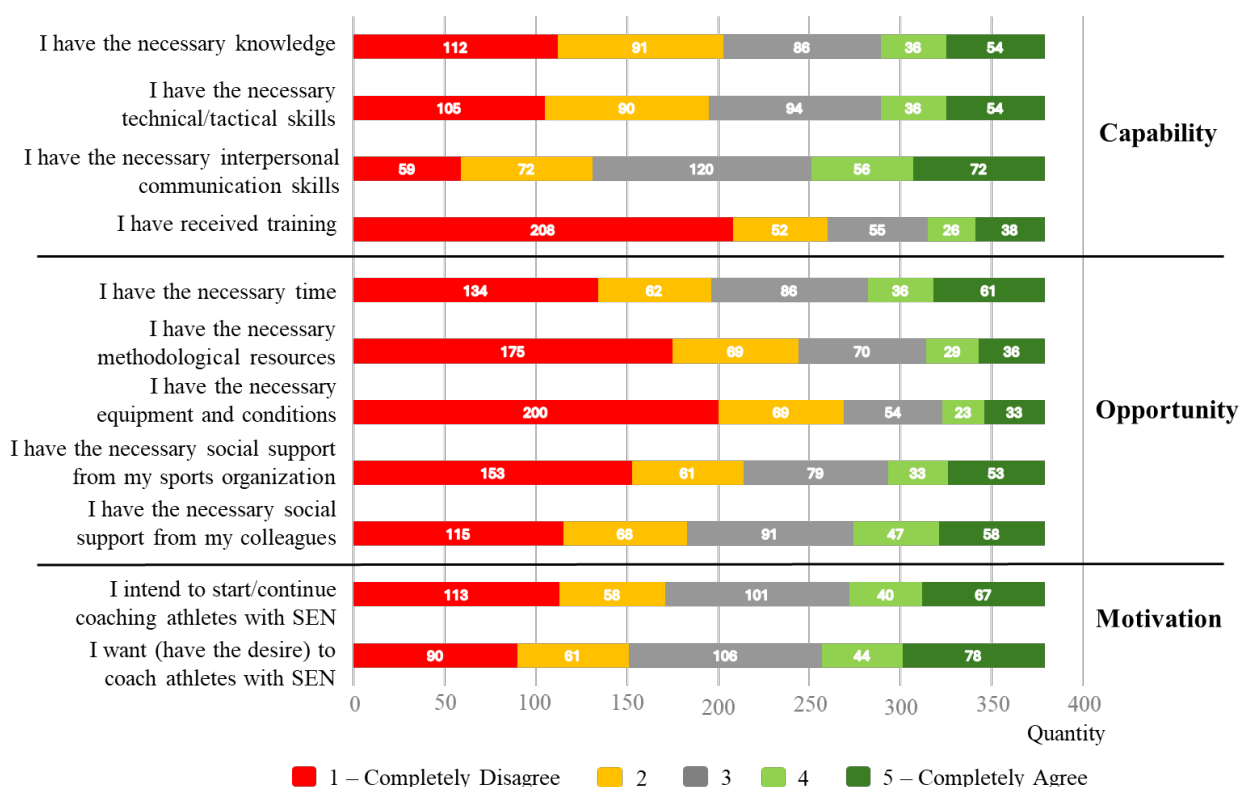
ber of responses scoring above this value. The highest concentration of responses at the lowest score of 1, indicating complete disagreement with the given statement, was observed in the following items: Question 4, related to the (lack of) appropriate training, in the "Capability" section (208 respondents; ~54.9% of the total); Question 6, indicating the absence of necessary methodological resources (175 respondents; ~46.2%); and Question 7 in the "Opportunity" section, concerning the presence—or in this case, the absence—of essential equipment and conditions for training athletes with SEN (200 respondents; ~52.8%).

Among all the items in the COM-B questionnaire, the highest number of responses at the maximum score of 5, indicating full agreement with the given statement, was found in Question 3, which pertains to the possession of necessary interpersonal communication skills, in the "Capability" section (72 respondents; ~19%), as well as in two items from the "Motivation" section: Question 10 (67 respondents; ~17.7%) and Question 11 (78 respondents; ~20.6%), which relate to the intention and desire to coach athletes with SEN, respectively (Fig. 1).

Overall, the respondents reported perceiving their ability to coach athletes with special educational needs (SEN) at a low level (2; 1, 3) (Tab. 1). However, the central tendency of responses to the statement "I have the necessary interpersonal communication skills to coach diverse ath-

letes, including those with SEN, and to ensure quality training for all" was higher, averaging 3 (2; 4) points (Fig. 2). It is noteworthy that this question received a mode of 3 points from respondents (120 individuals, ~31.7% of the total), whereas the mode for other questions in this section was 1 point. On the other hand, it is equally significant that the surveyed coaches believe they have not undergone adequate training to coach athletes with SEN and to ensure quality training for all, as indicated by the lowest median value in this section (1; 1, 3) (Tab. 1, Fig. 2). This finding highlights a potential area for improvement in enhancing coaches' ability to train athletes with SEN.

Respondents generally rated their **opportunity** to coach athletes with SEN at 2 (1; 3) out of 5 points (Tab. 1). The physical opportunities provided by the environment (Questions 5-7) were also rated by coaches at 2 (1; 3) points. The lowest median score within the "Opportunity" section was recorded for Question 7, indicating that the surveyed coaches do not believe they have the necessary equipment and conditions to train athletes with SEN, and consequently, they may not be able to ensure the quality of training for all (1, 1; 3) (Fig. 2). The group average for coaches' responses regarding the social opportunities provided by the sociocultural environment, which often influences how people perceive or evaluate specific aspects (Questions 8-9), was 2 (1;

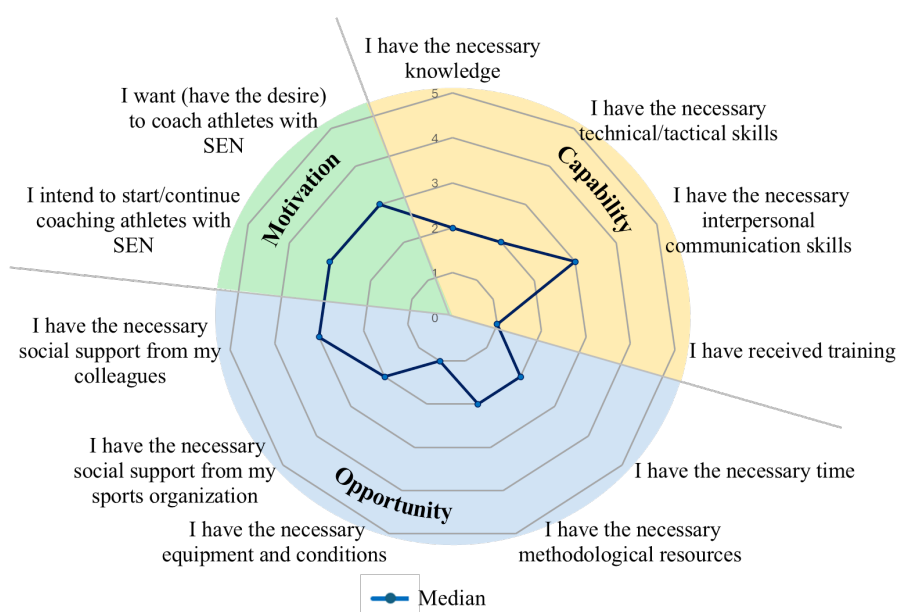


**Figure 1. Coaches' Perceptions of Their Capabilities, Opportunities, and Motivation to Train Athletes with Special Educational Needs**

**Table 1. Coaches' Assessment of Their Capabilities, Opportunities, and Motivation to Train Athletes with SEN (n=379)**

COM-B Questionnaire	Me	25%	75%	Mo
<b>Capability</b>	<b>2</b>	<b>1</b>	<b>3</b>	<b>1</b>
1. I have the necessary knowledge to coach athletes with SEN (including athletes with varying degrees of disability) and to ensure quality training for all.	<b>2</b>	<b>1</b>	<b>3</b>	<b>1</b>
2. I have the necessary technical/tactical skills to coach athletes with SEN (including athletes with varying degrees of disability) and to ensure quality training for all.	<b>2</b>	<b>1</b>	<b>3</b>	<b>1</b>
3. I have the necessary interpersonal communication skills to coach diverse athletes, including those with SEN, and to ensure quality training for all.	<b>3</b>	<b>2</b>	<b>4</b>	<b>3</b>
4. I have received training to coach athletes with SEN and to ensure quality training for all.	<b>1</b>	<b>1</b>	<b>3</b>	<b>1</b>
<b>Opportunity</b>	<b>2</b>	<b>1</b>	<b>3</b>	<b>1</b>
5. I have the necessary time to coach athletes with SEN and to ensure quality training for all.	<b>2</b>	<b>1</b>	<b>4</b>	<b>1</b>
6. I have the necessary methodological resources (manuals, professional development courses, etc.) to coach athletes with SEN and to ensure quality training for all.	<b>2</b>	<b>1</b>	<b>3</b>	<b>1</b>
7. I have the necessary equipment and conditions to coach athletes with SEN and can ensure quality training for all.	<b>1</b>	<b>1</b>	<b>3</b>	<b>1</b>
8. I have the necessary social support from my sports organization/club/federation to coach athletes with SEN.	<b>2</b>	<b>1</b>	<b>3</b>	<b>1</b>
9. I have the necessary social support from my colleagues to coach athletes with SEN.	<b>3</b>	<b>1</b>	<b>4</b>	<b>1</b>
<b>Motivation</b>	<b>3</b>	<b>1</b>	<b>4</b>	<b>3</b>
10. I intend to start/continue coaching athletes with SEN (including athletes with varying degrees of disability) over the next 2 years and ensure quality training for all.	<b>3</b>	<b>1</b>	<b>4</b>	<b>1</b>
11. I want (have the desire) to coach athletes with SEN (including athletes with varying degrees of disability) over the next 2 years and ensure quality training for all.	<b>3</b>	<b>2</b>	<b>4</b>	<b>3</b>

Note: Me – Median, 25% – 25th Percentile, 75% – 75th Percentile, Mo – Mode.

**Figure 2. Coaches' Assessment of Their Capabilities, Opportunities, and Motivation to Train Athletes with Special Educational Needs**



4) points (Tab. 1). Notably, the median response to the question about having the necessary social support from colleagues to coach athletes with SEN was 3 (1, 4) points, the highest median within this section (Fig. 2).

The **"Motivation"** section consisted of two questions, with the median response being 3 (1; 4) points and a mode of 3, representing the highest scoring among all three sections of the COM-B questionnaire (Tab. 1, Figure 2). However, when asked about their desire to coach athletes with SEN (including athletes with varying types of disability) over the next two years, coaches most frequently rated their desire at 3 points, compared to a mode of 1 point for a similar question that focused on the direct intention to start or continue such training (Table 1).

## Discussion

The results of the current study, aimed at identifying coaches' perceptions of their capabilities, opportunities, and motivation to train athletes with SEN show certain differences from the findings of similar Canadian studies [17; 18]. The average group ratings obtained using the COM-B questionnaire among Canadian coaches for all three behavior-determining aspects were above the midpoint ( $4.58 \pm 1.54$ ;  $4.50 \pm 1.58$ ;  $4.85 \pm 1.99$  out of 7 points, respectively), highlighting the existing barriers and challenges that coaches in Ukraine face when implementing inclusivity in their professional activities. Alongside, Canadian coaches identified the most significant barriers to coaching individuals with disabilities as the insufficient level of (a) training, (b) methodological support, and (c) equipment and facilities [17], which correspond to the three lowest-rated items in the current survey of Ukrainian coaches. Five years later, although the need for further changes and improvements is still emphasized, but the latest Canadian national study in 2023 [18] indicates a positive trend in Canadian coaches' responses regarding their capability ( $5.3 \pm 1.25$  points), opportunity ( $5.02 \pm 1.24$  points), and motivation ( $5.52 \pm 1.45$  out of 7 points, respectively) to coach athletes with disabilities. Therefore, although our initial results are lower, the Canadian experience underscores the importance of systematic efforts and demonstrates that, with awareness of the current situation and the implementation of appropriate changes, outcomes can be improved for the successful inclusion of athletes with SEN.

Alongside other concepts, scholars have drawn attention to the Theory of Planned Behavior [19], which is frequently used and widely recognized across various fields, including psychology, sociology, marketing, education, and management. The Theory of Planned Behavior posits that behavioral intentions are based on three factors:

(a) an individual's attitude toward the behavior, (b) their perception of the social pressure (subjective norm) to engage in that behavior, and (c) their belief in their ability to perform the behavior (perceived behavioral control) [20]. The recommendations for assessing this concept were considered in the conducted study.

The results of our study corroborate findings in the scientific literature that coaches often do not include individuals with disabilities in their mainstream training groups [3]. Townsend et al. [21] emphasize the status quo in coaching work with individuals with disabilities, concluding that this work is often relegated to a secondary priority within sports clubs and organizations, indicating a lack of prioritization of inclusion. This diminishes opportunities for athletes to participate in sports training on equal terms. Social norms and the level of social support also play a crucial role in shaping inclusive behavior among coaches. Several scholars have noted that without adequate support from sports organizations, coaches are less likely to involve individuals with diverse needs in their training sessions [22; 23].

In addition, considering the limited research using these concepts in the context of sports, studies from the field of pedagogy were also examined [24]. Researchers such as Conatser et al. [25] found that teachers often hold certain biases and lack confidence in their ability to effectively teach in inclusive settings, due to insufficient experience or knowledge in working with individuals with disabilities. On the other hand, positive experiences contribute to greater confidence in teachers' skills and enhance their willingness to work in inclusive environments [26]. When teaching in inclusive classrooms, teachers often face numerous challenges, including a lack of not only social support but also material support and resources. The Salamanca Declaration [27] emphasizes the importance of supporting teachers to ensure the inclusion of students with SEN; however, as noted by Sharma et al. [28], insufficient funding and lack of resources continue to be significant obstacles. Another research [29] indicates that large class sizes and student behavior issues further complicate the implementation of inclusive practices. These same issues can be extrapolated to the sports context, where coaches may also encounter difficulties in managing training sessions with a large number of athletes with diverse needs in a single class.

It is important to acknowledge certain limitations of this study. Although 379 coaches from all over Ukraine participated in the study, this sample may not fully represent the diversity of sports disciplines, geographical regions, and levels of coaching experience in the country. Additionally, the study relies on self-reported data,



which may be subject to biases such as social desirability or inaccurate self-assessment. Coaches might under- or overestimate their preparedness or awareness of the inclusive paradigm in sports, which could affect the results obtained. Furthermore, the study's design provides a snapshot of coaches' preparedness at a single point in time and does not capture changes over time. Future researches could benefit from larger, more diverse samples and longitudinal designs to track changes over time and assess the effectiveness of various support measures.

Despite these limitations, this study is the first of its kind to provide comprehensive findings on the readiness of Ukrainian coaches to work with athletes with SEN based on evidence-based concepts, particularly the COM-B model. The results offer valuable insights for both theorists and practitioners, providing a structured framework for understanding the factors that influence coaches' readiness and identifying specific areas that require improvement. This serves as a foundation for developing effective strategies and interventions aimed at enhancing inclusivity in sports training and creating equal opportunities for all participants.

## Conclusions

The survey of coaches using the COM-B model yielded the following findings:

1. Among the components that determine behavior according to the COM-B model, coaches rated their motivation (3, 1; 4 points) to train athletes with SEN the highest. However, the average group results indicate a need for improvement across all three components of coaches' behavior—capability, opportunity, and motivation.

2. Approximately half of the respondents ( $n=379$ ) believe that they have not received adequate training (54.9%), do not have appropriate equipment and conditions (52.8%), and lack the necessary methodological resources (46.2%) to train athletes with SEN. The average group results indicate a general trend in these responses (1, 1; 3) for the first two aspects, highlighting the areas that require the most significant changes.

3. Around 20% of the surveyed coaches acknowledge having a strong desire (20.6%) and intention (17.7%) to train athletes with SEN, as well as the necessary interpersonal communication skills (19%). The average group trend confirms that these two aspects, along with the availability of social support from colleagues to coach athletes with SEN, are perceived more positively than other aspects, though still not above the midpoint value (3, 2; 4).

The findings of this study are practically significant as they provide a clear picture of the current state of readiness among Ukrainian coaches

to train diverse athletes and offer a better understanding of the aspects that need improvement to ensure effective inclusion in sports training. This lays the groundwork for developing effective strategies for implementing inclusivity in sports, ultimately contributing to a supportive sports environment for all.

**Future research** should focus on exploring the interrelationships between the different components of coaches' behavior as outlined by the COM-B model – Capability, Opportunity, and Motivation. This will provide a deeper understanding of how each of these aspects influences coaches' readiness to work with athletes with special educational needs and will contribute to the further refinement of strategies for increasing inclusion in sport.

## References

1. Lim SY, Warner S, Dixon M, Berg B, Kim C, Newhouse-Bailey M. Sport Participation Across National Contexts: A Multilevel Investigation of Individual and Systemic Influences on Adult Sport Participation. *Eur Sport Manag Q* [Internet]. 2011 Jun [cited 2024 Aug 22];11(3):197-224. Available from: <https://doi.org/10.1080/16184742.2011.579993>
2. Pečnikar Oblak V, Campos MJ, Lemos S, Rocha M, Ljubotina P, Poteko K, Kárpáti O, Farkas J, Perényi S, Kustura U, Massart A, Doupona M. Narrowing the Definition of Social Inclusion in Sport for People with Disabilities through a Scoping Review. *Healthcare* [Internet]. 2023 Aug 14 [cited 2024 Aug 22];11(16):2292. Available from: <https://doi.org/10.3390/healthcare11162292>
3. Hammond AM. The relationship between disability and inclusion policy and sports coaches' perceptions of practice. *Int J Sport Policy Politics* [Internet]. 2022 May 20 [cited 2024 Aug 22]:1-17. Available from: <https://doi.org/10.1080/19406940.2022.2074515>
4. Hammond A, Jeanes R. Federal Government Involvement in Australian Disability Sport, 1981–2015. *Int J Hist Sport* [Internet]. 2017 Oct 9 [cited 2024 Aug 22];35(5):431-47. Available from: <https://doi.org/10.1080/09523367.2017.1337000>
5. The level of involvement of children and youth in motor and physical activity and the impact of sport on physical and mental health: a report on the results of the study [Internet]. Kyiv; 2023. 62 p. Available from: [https://dismp.gov.ua/wp-content/uploads/Zvit\\_ruhova-aktivnist.pdf](https://dismp.gov.ua/wp-content/uploads/Zvit_ruhova-aktivnist.pdf) (in Ukrainian)
6. Rynne SB, Mallett CJ. *The Routledge Handbook of Coach Development in Sport* [Internet]. New York: Routledge; 2024 [cited 2024 Aug 22]. Available from: <https://doi.org/10.4324/9781003160939>
7. Australian Sports Commission [Internet]. Women in Sport; [cited 2024 Aug 22]. Available from: <https://www.clearinghouseforsport.gov.au/kb/women-in->





## sport

8. European Commission: Directorate-General for Education. Towards more gender equality in sport – Recommendations and action plan from the High Level Group on Gender Equality in sport [Internet]. Publications Office of the European Union; 2022. 41 p. Available from: <https://data.europa.eu/doi/10.2766/10036>
9. Ascondo J, Martín-López A, Iturricastillo A, Granados C, Garate I, Romarateabala E, Martínez-Aldama I, Romero S, Yanci J. Analysis of the Barriers and Motives for Practicing Physical Activity and Sport for People with a Disability: Differences According to Gender and Type of Disability. *Int J Environ Res Public Health* [Internet]. 2023;20(2):1320. Available from: <https://doi.org/10.3390/ijerph20021320>
10. Chen M, Li Q, Wang L. Understanding factors influencing people with disabilities' participation in sports and cultural activities. *BMC Public Health* [Internet]. 2024 Feb 6 [cited 2024 Aug 22];24(1). Available from: <https://doi.org/10.1186/s12889-024-17791-9>
11. Zhou F, Zhang H, Wang HY, Liu LF, Zhang XG. Barriers and facilitators to older adult participation in intergenerational physical activity program: a systematic review. *Aging Clin Exp Res* [Internet]. 2024 Feb 12 [cited 2024 Aug 22];36(1). Available from: <https://doi.org/10.1007/s40520-023-02652-z>
12. UNHCR's Division of External Relations. More than a Game: The UNHCR Sport Strategy 2022 – 2026 [Internet]. UNHCR; 2022. 56 p. Available from: <https://www.unhcr.org/media/unhcr-sport-strategy-more-game>
13. Shevchuk O, Kohut I, Marynych V. Organizational Principles of Implementing Inclusivity in Sports. *Theory and Methods of Physical Education and Sports* [Internet]. 2023 Aug 19 [cited 2024 Aug 22];(3):86-95. Available from: <https://doi.org/10.32652/tmfvs.2023.3.86-95>
14. Townsend RC, Smith B, Cushion CJ. Disability sports coaching: towards a critical understanding. *Sports Coach Rev* [Internet]. 2015 Jul 3 [cited 2024 Aug 22];4(2):80-98. Available from: <https://doi.org/10.1080/21640629.2016.1157324>
15. Michie S, van Stralen MM, West R. The behaviour change wheel: A new method for characterising and designing behaviour change interventions. *Implement Sci* [Internet]. 2011 Apr 23 [cited 2024 Aug 22];6(1). Available from: <https://doi.org/10.1186/1748-5908-6-42>
16. Huijg JM, Gebhardt WA, Crone MR, Dusseldorp E, Pesseau J. Discriminant content validity of a theoretical domains framework questionnaire for use in implementation research. *Implement Sci* [Internet]. 2014 Jan 15 [cited 2024 Aug 22];9(1). Available from: <https://doi.org/10.1186/1748-5908-9-11>
17. Canadian Disability Participation Project & Ontario Parasport Collective. An investigation of coaches' and classifiers' perceptions of working with athletes with a disability. [Internet]. Kingston: Queen's University; 2018. 70 p. Available from: <https://bit.ly/3VQn911>
18. Canadian Disability Participation Project & Ontario Parasport Collective. An investigation of coaches' and classifiers' perceptions of working with athletes with a disability. [Internet]. Kingston: Queen's University; 2023. 85 p. Available from: <https://bit.ly/3P8nQZ1>
19. Ajzen I. The theory of planned behavior. *Organ Behav Hum Decis Process* [Internet]. 1991 Dec [cited 2024 Aug 22];50(2):179-211. Available from: [https://doi.org/10.1016/0749-5978\(91\)90020-t](https://doi.org/10.1016/0749-5978(91)90020-t)
20. Urton K, Wilbert J, Krull J, Hennemann T. Factors explaining teachers' intention to implement inclusive practices in the classroom: Indications based on the theory of planned behaviour. *Teach Teach Educ* [Internet]. 2023 Oct [cited 2024 Aug 22];132:104225. Available from: <https://doi.org/10.1016/j.tate.2023.104225>
21. Townsend RC, Huntley T, Cushion CJ, Fitzgerald H. 'It's not about disability, I want to win as many medals as possible': The social construction of disability in high-performance coaching. *Int Rev Sociol Sport* [Internet]. 2018 Sep 9 [cited 2024 Aug 22];55(3):344-60. Available from: <https://doi.org/10.1177/1012690218797526>
22. Conatser P, Block M, Gansneder B. Aquatic Instructors' Beliefs Toward Inclusion: The Theory of Planned Behavior. *Adapt Phys Act Q* [Internet]. 2002 Apr [cited 2024 Aug 22];19(2):172-87. Available from: <https://doi.org/10.1123/apaq.19.2.172>
23. Cregan K, Bloom GA, Reid G. Career Evolution and Knowledge of Elite Coaches of Swimmers With a Physical Disability. *Res Q Exerc Sport* [Internet]. 2007 Sep [cited 2024 Aug 22];78(4):339-50. Available from: <https://doi.org/10.1080/02701367.2007.10599431>
24. Chow WS. Examining factors influencing teachers' intentions in implementing inclusive practices in Hong Kong classrooms. *J Res Spec Educ Needs* [Internet]. 2023 Nov 28 [cited 2024 Aug 22]. Available from: <https://doi.org/10.1111/1471-3802.12632>
25. Conatser P, Block M, Lepore M. Aquatic Instructors' Attitudes Toward Teaching Students with Disabilities. *Adapt Phys Act Q* [Internet]. 2000 Apr [cited 2024 Aug 22];17(2):197-207. Available from: <https://doi.org/10.1123/apaq.17.2.197>
26. Rizzo TL, Bishop P, Tobar D. Attitudes of Soccer Coaches Toward Youth Players with Mild Mental Retardation: A Pilot Study. *Adapt Phys Act Q* [Internet]. 1997 Jul [cited 2024 Aug 22];14(3):238-51. Available from: <https://doi.org/10.1123/apaq.14.3.238>
27. UNESCO. Guidelines for inclusion: ensuring access to education for all. Paris: UNESCO Publishing; 2005.
28. Sharma U, Armstrong AC, Merumeru L, Simi J, Yared H. Addressing barriers to implementing inclusive education in the Pacific. *Int J Incl Educ* [Inter-



- net]. 2018 Aug 23 [cited 2024 Aug 22];23(1):65-78. Available from: <https://doi.org/10.1080/13603116.2018.1514751>
29. McDonald L, Tufue-Dolgoy R. Moving Forwards, Sideways or Backwards? Inclusive Education in Samoa. *Int J Disabil Dev Educ* [Internet]. 2013 Sep [cited 2024 Aug 22];60(3):270-84. Available from: <https://doi.org/10.1080/1034912x.2013.812187>

## Supplementary Information

### Article details

The online version available at  
<https://doi.org/10.15391/sns.v.2024-4.001>

### Conflict of interest

The authors declare that there is no conflict of interest.

**Received: August 22, 2024; Accepted: October 6, 2024**

**Published: December 30, 2024**

### Authors details

#### Olesia Shevchuk

<https://orcid.org/0000-0001-6331-8049>,

olesia.shevchuk@ukr.net

National University of Ukraine on Physical Education and Sport, Fizkul'tury str. 1, Kyiv, 03150, Ukraine

#### Iryna Kohut

<https://orcid.org/0000-0002-3042-2189>,

lkogut\_irina@ukr.net

National University of Ukraine on Physical Education and Sport, Fizkul'tury str. 1, Kyiv, 03150, Ukraine

#### Viktoriia Marynych

<https://orcid.org/0000-0003-2784-680X>,

wikleon@ukr.net

National University of Ukraine on Physical Education and Sport, Fizkul'tury str. 1, Kyiv, 03150, Ukraine