




# Experiences And Challenges Faced by Students with Special Needs in Faculties of Sport Sciences

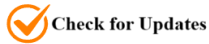
\*Sevim Handan YILMAZ <sup>1</sup>  Dilara ÖZENÇOĞLU <sup>2</sup>  Mehmet ÇETİN <sup>3</sup> 

<sup>1</sup> Bartın University, Faculty of Sport Sciences; Bartın/Türkiye

<sup>2</sup> Bartın University, Faculty of Sport Sciences; dilaraozencoglu@gmail.com; Bartın/Türkiye

<sup>3</sup> Fatih Sultan Mehmet Science High School; mehmet.cetin.78@hotmail.com; Karabük/Türkiye

\* Corresponding author: Sevim Handan Yılmaz; hyilmaz@bartin.edu.tr



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**Abstract:** The aim of the present study is to investigate the experiences of students with special needs enrolled in faculties of sport sciences, to identify the challenges they encounter, and to offer potential solutions. This study employed a qualitative research design, specifically utilizing the phenomenological approach. In this study, the criterion sampling method—one of the purposive sampling techniques—was employed to identify participants. Research consists of 8 individuals with special needs. In order to collect data for the study, a semi-structured interview form consisting of five questions was administered to the participants. The data were analyzed using the content analysis method. The themes of “Impact of the Educational Experience in the FSS on Life”, “Course Experiences and Pedagogical Barriers of Individuals with Special Needs”, “Social and Academic Interactions of Individuals with Special Needs in the Faculty of Sport Sciences”, “Challenges Encountered and Coping Strategies”, “Suggestions for Improving University Life for Individuals with Special Needs” were determined. The findings suggest that while individuals with special needs studying in faculties of sport sciences gain a sense of achievement and perseverance, they face significant physical and systemic challenges, particularly in transportation, accessibility, classroom conditions, and learning materials.

**Keywords:** Disability, sports, special needs, university.

## 1. Introduction

Despite all the differences they may have, every individual strives to hold on to life. The competencies and limitations that may influence the entire course of their development play a significant role in shaping their lives—this is equally true for individuals with special needs (İlhan & Esentürk, 2014). The term individuals with special needs refers to those who undergo developmental stages that differ from individuals with typical development. These needs may arise due to various factors occurring before birth, during birth, or after birth (İlhan & Yarımkaya, 2022). Nevertheless, every individual bears the responsibility to contribute to society in their own unique way and to enhance their personal qualities. In this regard, society is also obliged to support and foster the development and transformation of individuals.

In our country, individuals with special needs frequently face various challenges in numerous areas such as education, socialization, employment, and accessibility (Sevinç & Çay, 2017). These individuals often experience significant difficulties in adapting to social life, forming social relationships, meeting their basic needs, managing daily routines, using transportation, operating vehicles, participating in sports activities, and engaging in educational processes (Artar & Karabacakoglu, 2003). In this context, education encompasses all parameters that aim to elevate individuals to a more qualified and mature state, thereby giving their lives greater meaning. It serves as a guide for individuals to make sense of themselves and their environment, to become integrated into society, to adapt to the innovations of the modern era,

and to establish healthy communication (Gün, 2015). From this perspective, education functions as a means for individuals with special needs to develop themselves and enhance their overall competencies.

Universities are institutions entrusted with the mission of supporting individuals' development and progress. They encompass both typically developing individuals and those with special needs, playing a pivotal role in shaping their future. However, unfortunately, students with special needs may encounter significant challenges within educational processes, particularly in social, environmental, and emotional dimensions. Nevertheless, the educational journey of individuals with special needs is even more vital compared to their typically developing peers. The inclusion of these individuals in educational settings is essential for minimizing the negative effects stemming from their limitations, recognizing and developing their abilities, and enhancing their level of knowledge. In fact, the number of studies focusing on individuals with special needs has been steadily increasing (Daşkesen et al., 2024; Fakazlı et al., 2021; Kozak et al., 2019; Uzunçayır et al., 2023; Yarayan et al., 2023). Furthermore, such educational environments contribute to social integration by fostering individuals' perception of inclusion in society, which in turn promotes a sense of life acceptance and enhances overall well-being (Sevinç & Çay, 2017). Therefore, one of the most critical conditions for enabling individuals with special needs to participate in society is ensuring full accessibility to educational institutions in every aspect. These environments should be designed in a way that allows individuals with special needs to feel safe and comfortable, both physically and psychologically (Hacıhasanoğlu, 2003).

Of course, the process is not limited to spatial accessibility alone. Ensuring equal opportunities in education, allowing every individual to experience the learning process fairly and equitably, addressing the specific needs of individuals with special needs without neglect by society (Zhang et al., 2020), and preventing negative attitudes such as exclusion, pity, or stigmatization are also critical components. In this context, it has been observed that the fundamental needs and challenges faced by students with special needs enrolled in universities are often similar. These students frequently encounter difficulties related to planning, curriculum, accessibility, transportation, social environments, and the attitudes and approaches of society throughout their university education (Mengi, 2014). A few common examples include the lack of appropriate ramps for individuals using wheelchairs, the inaccessibility of toilets and showers, the absence of instructional materials designed specifically for their needs, the failure to adapt campus facilities to accommodate individuals with disabilities, the non-ergonomic design of sports equipment, uneven or damaged sidewalks, and the insufficiency of elevators (Lape et al., 2018; Urbański et al., 2021).

Particularly in faculties of sport sciences—where facilities are generally more numerous compared to other faculties—students with special needs face various challenges. These include insufficient guidance within faculty buildings and sports facilities, lack of instructional materials adapted for students with special needs, difficulty accessing faculty offices and classrooms, poor road conditions, inadequate desk space in classrooms for writing, desks that are not accessible for wheelchairs, difficulties in reaching sports halls, the absence of braille signage, and limited access to essential facilities such as cafeterias, changing rooms, and dining halls. Moreover, the lack of designated staff to assist students with special needs further complicates their experience (Ayдын, 2012; Burcu, 2002; Esatbeyoğlu, 2014; Martin, 2011; Yılmaz et al., 2021). In addition to these physical barriers, unfortunately, students with special needs may also face exclusion, marginalization, and a lack of peer support. All these parameters can leave lasting negative impressions on these students, potentially reducing their quality of life and leading to avoidance behaviors in the long term (Çınar, 2010; Gurgis et al., 2022; Kang et al., 2007; Sevinç & Çay, 2017; Wilson, 2010). Nonetheless, universities are among the most effective environments not only for academic development but also for enabling individuals with special needs to socialize and integrate into society. Therefore, it is crucial to examine the current issues they face and to propose viable solutions. Based on this perspective, the aim of the present study is to investigate the experiences of students with special needs enrolled in faculties of sport sciences, to identify the challenges they encounter, and to offer potential solutions.

## 2. Materials and Methods

### 2.1. Research Group

This study employed a qualitative research design, specifically utilizing the phenomenological approach. The phenomenological design is a qualitative research method used to explore the shared meanings of individuals'

experiences related to a particular phenomenon—how they understand, perceive, judge, and feel about it. This approach aims to comprehend and uncover social reality by examining individuals' lived experiences (Creswell, 2014).

## 2.2. Research Design

This study employed a quantitative research design utilizing the descriptive survey method. The survey method is defined as an approach that explains a past or current situation as it exists (Büyüköztürk, 2018). In the descriptive research process, the stages of determining the research problem and objectives, defining the variables, selecting the sample, collecting data, and analyzing the data are carried out systematically. In this study, an attempt was made to reveal whether the self-efficacy levels of different sports branch referees show differences according to the variables of gender, age, previous playing status in the branch of the referee, sport branch and years of being a referee.

**Table 1.** Demographic Information of the Participants

No	Participant Cosw	Gender	Type of Disability	Age	Duration of Disability (Years)	Sport Discipline	Department
1	Ö1	Male	Physical and visual	20	8	Bocce	Coaching
2	Ö2	Male	Physical	22	Since birth	Amputee Football	Coaching
3	Ö3	Male	Physical	22	Since birth	Amputee Football	Physical Education and Sport
4	Ö4	Male	Visual	24	19	Goalball,	Recreation
5	Ö5	Female	Hearing	20	17	Taekwondo	Coaching
6	Ö6	Male	Physical	19	Since birth	Amputee Football	Coaching
7	Ö7	Female	Visual	21	21	Taekwondo	Sports Management
8	Ö8	Female	Hearing	21	21	Karate	Physical Education and Sport

## 2.3. Data Collection

In order to collect data for the study, a semi-structured interview form consisting of five questions was administered to the participants. The interview questions were developed based on a review of the relevant literature. The draft version of the form was then reviewed by an assessment and evaluation specialist, a special education expert, and an academician. Based on their feedback, necessary revisions were made.

To enhance the validity of the interview form, a pilot study was conducted with three students with special needs. Following the pilot interviews, questions that were not clearly understood were revised, and the form was finalized after obtaining additional expert opinions. The questions included in the semi-structured interview form are presented below:

- How does studying at the Faculty of Sport Sciences make you feel?
- What are your experiences regarding theoretical and practical courses? What kinds of challenges do you encounter?
- What are your thoughts on your social and academic communication within the faculty?
- What kinds of difficulties do you face in your faculty? What coping strategies do you use?
- What are your opinions and suggestions for improving your educational experience?

The data were collected through face-to-face interviews. A semi-structured interview form developed by the researchers was used to facilitate data collection. Prior to the interviews, participants were informed about the purpose of the study. Interviews were conducted at dates and times convenient for the participants who agreed to take part in the study. With their consent, the interviews were audio-recorded after necessary explanations were provided. All interviews took place in safe, private settings where participants could feel comfortable and where no third parties were present.

## 2.4. Data Analysis

The data were analyzed using the content analysis method. Content analysis involves organizing and interpreting similar data under certain concepts and themes, presenting the results in a way that is clear and understandable to readers (Yıldırım & Şimşek, 2013). This method was chosen because it allows for the establishment of conceptual connections between the collected data and the research objectives (Büyüköztürk, 2013).

In this study, content analysis was carried out in the following stages: coding the data, identifying themes, organizing codes and themes, describing the findings, and interpreting them (Yıldırım & Şimşek, 2006). First, the audio recordings obtained from the interviews were transcribed. Participants were coded as Ö1, Ö2, Ö3, Ö4, Ö5, Ö6, Ö7, and Ö8. The resulting data were analyzed and presented in tables based on identified themes and codes. The findings were interpreted and supported with direct quotations from the participants. To ensure the reliability of the research, the formula proposed by Miles and Huberman (1994) was used:  $\text{Reliability} = \text{Agreement} / (\text{Agreement} + \text{Disagreement}) \times 100$ . As a result, the reliability of the analysis was calculated as 82%.

### 2.5. Ethics Committee Permission

Ethical approval for this study was obtained from the Ethics Committee of Social and Human Sciences at Bartın University with the protocol number 2025-SBB-0062, dated January 29, 2025. Participation in the study was based on voluntary consent, and all ethical principles and guidelines were strictly followed throughout the research process. Before data collection, participants were thoroughly informed about the study through a detailed presentation and subsequently provided written consent. The research was carried out in accordance with the ethical guidelines of the Declaration of Helsinki.

## 3. Results

In this section of the study, the findings obtained from the analysis of the views of individuals with special needs (ISNs) regarding their educational experiences in the Faculty of Sport Sciences (FSS) are presented and interpreted under relevant themes.

**Table 2.** Feelings and Perceptions of Individuals with Special Needs Regarding Their Educational Experience in the Faculty of Sport Sciences

Theme	Sub-theme	Code	Participant(s)
Impact of the educational process in FSS on life	Personal development	Life satisfaction	Ö3 Ö5 Ö6 Ö7 Ö8
		Spirit of perseverance	Ö1 Ö2 Ö6 Ö7
		Personal transformation	Ö1 Ö2
		Healthy lifestyle	Ö2
		Socialization	Ö1
	Professional development and attitude	Sense of professional belonging	Ö3 Ö5
		Learning motivation	Ö8
		Contribution to subject knowledge	Ö3
	Negative experiences	Difficulty and stress	Ö4

As shown in Table 2, the theme titled “Impact of the Educational Experience in the FSS on Life” was derived from the views of individuals with special needs (ISNs), along with three related sub-themes: personal development, professional development and attitude, and negative experiences. Within the personal development sub-theme, participants expressed that studying in the Faculty of Sport Sciences (FSS) contributed to their life satisfaction, fostered a spirit of perseverance, supported personal transformation, promoted a healthy lifestyle, and enhanced opportunities for socialization and forming social circles. Under the sub-theme of professional development and attitude, participants shared that pursuing education in the FSS helped them develop a sense of professional belonging, increased their learning motivation, and despite their disabilities, participating in practical courses contributed positively to their subject knowledge. Regarding the negative experiences sub-theme, only one participant reported experiencing stress and difficulty during their educational process in the FSS. Some noteworthy statements from ISNs regarding this theme are as follows:

*“I am making an effort for myself, and I have a goal. Right now, I think I’m progressing well toward that goal.”*

— Ö6 (Life Satisfaction)

*“Studying at the FSS makes me feel like I can hear everything. I push my mental limits by overcoming barriers. This empowers me. I don’t just see—I feel.”*

— Ö7 (Spirit of Perseverance)

*“By engaging in sports at the FSS, I am broadening my perspective.”*

— Ö2 (Personal Transformation)

"Because I have a physical disability, doing sports helps me significantly improve my health."

— Ö2 (Healthy Lifestyle)

"Also, since I haven't given up on life despite my disability, doing sports helps me shift my outlook."

— Ö2 (Spirit of Perseverance)

"Studying in the Faculty of Sport Sciences changed everything in my life—socially and in terms of my environment. I've become more social."

— Ö1 (Socialization / Personal Transformation)

"It was a department I liked. It was a discipline I loved. I love sports. That's why I chose to study physical education teaching."

— Ö3 (Sense of Professional Belonging)

"Being in the FSS is very exciting. What I learn in classes contributes a lot to me. Developing in this field is very enjoyable."

— Ö8 (Learning Motivation)

"In practical courses, they had me perform all of the exercises. I'm happy about that because I'm going to be teaching this sport, and if I hadn't done it myself, I wouldn't be able to demonstrate it to children."

— Ö3 (Contribution to Subject Knowledge)

"Normally, it's good, but due to limited facilities, there are times I feel tense and stressed."

— Ö4 (Difficulty and Stress)

**Table 3.** Experiences of Individuals with Special Needs in Course Processes and the Pedagogical Barriers They Encounter in the Faculty of Sport Sciences

Theme	Sub-theme	Code	Participant(s)
Experiences and pedagogical barriers in course processes	Practical course experiences	Difficulty in active participation	Ö1 Ö2 Ö4 Ö5 Ö6 Ö7 Ö8
		Need for support or assistance	Ö4 Ö5 Ö7 Ö8
	Theoretical course experiences	Communication problems	Ö2 Ö3 Ö5
		Perception of courses as rote learning	Ö3
		Lack of inclusive teaching	Ö2 Ö4 Ö5 Ö7
	Educational exclusion	Intensity of the course schedule	Ö1
		Non-inclusive assessment and evaluation	Ö1

As shown in Table 3, the theme "Course Experiences and Pedagogical Barriers of Individuals with Special Needs" was identified based on participants' views. This theme includes three related sub-themes: *practical course experiences*, *theoretical course experiences*, and *educational exclusion*. Within the *practical course experiences* sub-theme, participants reported difficulties in actively participating in practical courses and expressed a need for additional support and assistance during these sessions. In the *theoretical course experiences* sub-theme, some participants stated that, similar to practical courses, they experienced barriers to active participation in theoretical courses due to their disabilities. Additionally, issues related to communication, either stemming from their disability or from a lack of awareness on the part of instructors, were also highlighted. The final sub-theme under this category, *educational exclusion*, includes codes related to a lack of inclusive teaching practices by faculty members, challenges posed by course schedules that do not consider the needs of students with disabilities, and non-inclusive assessment and evaluation methods. Some of the notable statements by individuals with special needs regarding this theme are as follows:

"I struggle physically—some practical exercises are difficult for me to perform."

— Ö1 (Difficulty in Active Participation)

"I have a hearing impairment, and during practical courses like athletics, I find it difficult to follow when I am far from the instructor or classmates."

— Ö5 (Difficulty in Active Participation)

"Although I have low vision, I still struggle in practical classes. But there are also students who are completely blind. There should be an additional teacher or student assigned to support us."

— Ö4 (Difficulty in Active Participation / Need for Support or Assistance)

"Teachers should provide more explanations and offer more help to students."

— Ö8 (Need for Support or Assistance)

"When my hearing is at its lowest, I can't understand well. And with some instructors, it becomes impossible. I usually try to sit in the front rows, and my right ear has zero hearing. I can only hear from the left, so I position myself so that the entire class is to my right side."



– Ö5 (Communication Problems)

*"I've never liked theoretical courses that rely solely on rote memorization."*

– Ö3 (Perception of Courses as Rote Learning)

*"I really wish instructors understood the capacities of students with disabilities."*

– Ö2 (Lack of Inclusive Teaching)

*"In communication with instructors, I'm often faced with questions like how to access visual materials or how to make course content more accessible."*

– Ö7 (Lack of Inclusive Teaching)

*"There are too many overlapping courses. Going directly from one class to another is difficult. There's no break; when courses are scheduled back-to-back, it becomes overwhelming."*

– Ö1 (Intensity of the Course Schedule)

*"Let me put it this way—I have 51% visual impairment. During exams, I have the font size increased and request about 15 extra minutes so I can fully comprehend the questions."*

– Ö1 (Non-Inclusive Assessment and Evaluation)

**Table 4.** Thoughts and Experiences of Individuals with Special Needs Resulting from Their Interactions with Others in the Faculty of Sport Sciences

Theme	Sub-theme	Code	Participant(s)
Social and Academic Interactions of Individuals with Special Needs in the Faculty of Sport Sciences	Academic Staff Approach and Competence	Positive Interaction	Ö1 Ö6 Ö7 Ö8
		Supportive Approach	Ö8
		Being Sensitive	Ö5
	Attitudes of Academic Staff and Communication Problems	Experiencing Communication Problems	Ö3 Ö5
		Lack of Inclusivity	Ö2 Ö4
		Indifference	Ö2 Ö4
		Lack of Awareness	Ö5
		Positive Interaction	Ö3 Ö7 Ö8
	Peer Interaction and Support	Support and Helpfulness	Ö4 Ö7 Ö8
		Shared Vision Through Common Experience	Ö1 Ö7
		Sport Discipline	Ö4
		Respect	Ö4
		Lack of Awareness	Ö2 Ö5
	Negative Peer Attitudes	Cognitive Dissonance	Ö2

As shown in Table 4, based on the views of individuals with special needs, the theme titled "Social and Academic Interactions of Individuals with Special Needs in the Faculty of Sport Sciences" was identified. This theme includes two sub-themes related to academic staff—academic staff approach and competence and attitudes of academic staff and communication problems—as well as two sub-themes related to peers: peer interaction and support and negative peer attitudes. In the sub-theme of academic staff approach and competence, participants reported that academic staff generally established positive interactions with them, exhibited supportive behaviors, and acted sensitively in response to their disabilities. On the other hand, in the sub-theme attitudes of academic staff and communication problems, participants noted that they experienced communication difficulties with instructors, that instructors lacked an inclusive pedagogical approach, and were often indifferent to students' disabilities. It was also noted that many instructors were unaware of the presence of students with disabilities in their classes beforehand, which led to a general lack of awareness among the faculty members. Within the peer interaction and support sub-theme, participants stated that they experienced positive interactions with their peers throughout their undergraduate education. They often received support and help from peers, made collaborative plans with them, and shared a common vision. One participant also noted that peers within the faculty had a strong sense of sports discipline and mutual respect, which helped foster reciprocal respect in social interactions.

In the negative peer attitudes sub-theme, similar to the findings related to academic staff, participants mentioned that their peers were often unaware of their disabilities beforehand, which they perceived as a drawback. Additionally, it was reported that while people generally expect non-disabled individuals to succeed, they were criticized for achieving success despite their disabilities. This situation was identified in the study findings as an example of cognitive dissonance. Some of the notable statements by individuals with special needs regarding this theme are as follows:

"I never have any issues with the faculty members at school. When I do, I send them an email. If I can't send an email, I go to their office when I'm on campus and explain my excuse in person."

— Ö1 (Positive Interaction)

"Instructors often ask questions about how to make the lessons more accessible. I have good communication with them, and it's easy to get their support."

— Ö8 (Supportive Approach)

"I wasn't able to establish communication with the instructor."

— Ö3 (Experiencing Communication Problems)

"I told my instructor that I couldn't hear and that I pretended to understand and continued. The instructor asked why I pretended. I said I didn't want to keep asking because I was hesitant. But after the instructor showed sensitivity, I no longer hesitate—I ask questions, and they respond with understanding."

— Ö5 (Initial Lack of Awareness → Being Sensitive After Realization)

"Some instructors treat students with disabilities just like students without disabilities."

— Ö4 (Lack of Inclusivity)

"They have to practice at least some degree of positive discrimination because we have a special condition. They are educators, not guards or watchmen—they must help us."

— Ö2 (Indifference)

"I have never experienced any bullying from my peers due to my disability."

— Ö3 (Positive Interaction)

"These experiences strengthen our communication and allow us to work more harmoniously toward a shared goal."

— Ö7 (Shared Vision Through Common Experience)

"My peers are very helpful. Thanks to them, I can understand the lessons much better."

— Ö8 (Support and Helpfulness)

"Since they are athletes themselves, my peers are usually respectful and disciplined. I respect them too. I've never had any issues at school."

— Ö4 (Sport Discipline / Respect)

"In the beginning, my classmates didn't know me or my disability. I always leaned to the left due to my condition, and they thought I was ignoring them when they called out to me. They even said they found me annoying at first. Later, when we talked about it, they realized it wasn't intentional—it was because I couldn't hear them. That's when things changed."

— Ö5 (Lack of Awareness)

"I play amputee football, so some of my teammates have no leg, and I have no hand—but we never give up and we play for the national team. But my peers without disabilities give up easily because they're lazy or unmotivated. It really upsets me. It should actually be the opposite—I'm a person with a disability, so I should be the one to give up easily. I already carry the psychological weight of starting 1–0 behind in life. It's frustrating to see my peers give up when I keep pushing forward."

— Ö2 (Cognitive Dissonance)

**Table 5.** Challenges Faced by Individuals with Special Needs and Their Coping Strategies

Theme	Sub-theme	Code	Theme
Challenges Encountered and Coping Strategies	Accessible Campus	On- and Off-Campus Transportation	Ö1 Ö4 Ö6 Ö8
		Lack of Braille Signage	Ö4 Ö7
		Accessible Communication for Individuals with Hearing Impairments	Ö5 Ö8
		Issues with Tactile Ground Surface Indicators	Ö4
		Lack of Audio Guidance and Signage	Ö7
		Elevator Accessibility Problems	Ö6
		Slippery Surfaces	Ö4
		Motivational Support from Social Environment	Ö1 Ö2 Ö3 Ö7 Ö8
	Coping with Challenges	Self-Efficacy Skills	Ö2 Ö3 Ö5 Ö6 Ö7
		Support from Academic Staff and Peers	Ö2 Ö5 Ö8
		Experience	Ö6
		Navigating Bureaucratic Procedures	Ö4

As shown in Table 5, the theme titled "Challenges Encountered and Coping Strategies" was developed based on the views of individuals with special needs. Two sub-themes were identified under this theme: accessible campus and coping with challenges.

Within the accessible campus sub-theme, participants reported several accessibility-related difficulties. These included the unavailability of suitable transportation or shuttle services for individuals with disabilities, inadequate on-campus mobility infrastructure, lack of tactile paving (e.g., yellow embossed walking paths for the visually impaired), insufficient Braille signage, limited accessible communication tools for individuals with hearing impairments, absence of audio guidance and clear visual signage, malfunctioning elevators designed for accessibility, and slippery floor surfaces.

In the coping with challenges sub-theme, participants stated that they overcame these difficulties with the help of motivational support from their social environment, their own self-efficacy skills, and support from academic staff and peers. Moreover, they emphasized that the experiences gained while facing such challenges also played a significant role in developing coping mechanisms. Another coping strategy frequently mentioned was the use of bureaucratic procedures, such as filing formal petitions or complaints, to address problems and advocate for solutions. Some of the notable statements from individuals with special needs regarding this theme are presented below:

*"My main problem is that the school is far from my home. When classes start at 8:30 or 9:00 in the morning, I struggle to get there on time since I rely on the bus. While this is a valid excuse for me, it's not always considered acceptable by instructors, which causes difficulties."*

— Ö1 (On- and Off-Campus Transportation)

*"Some instructors have their nameplates above the door, instead of at eye level. This makes it difficult for me to see. There should be tactile writing (not necessarily Braille), but because it's missing, students who are completely blind can't find out where the instructor's office is."*

— Ö4 (Lack of Braille Signage)

*"Some of our instructors speak very softly—so softly that even my classmates say they have trouble hearing them. When my hearing is at its lowest, I just can't understand. I usually try to sit in the front. My right ear has zero hearing, so I position myself so the entire class is on my left side where I can hear better."*

— Ö5 (Accessible Communication for Individuals with Hearing Impairments)

*"There are yellow tactile guide paths for the visually impaired, but many of them are either missing or incorrectly installed."*

— Ö4 (Issues with Tactile Ground Surface Indicators)

*"The biggest physical challenge at school is that some campus routes are complex, and some areas are not accessible for people with disabilities. It's especially difficult to navigate because the auditory and visual signs and directions aren't helpful to me."*

— Ö7 (Lack of Audio Guidance and Signage)

*"Once the elevators were out of service—that was my only major issue at the time."*

— Ö6 (Elevator Accessibility Problems)

*"Some of the pathways inside the campus are slippery or cut off before reaching the destination, which is a problem for visually impaired individuals."*

— Ö4 (Slippery Surfaces)

*"I ask people around me. I get support from my social environment."*

— Ö3 (Motivational Support from Social Environment)

*"I always try to stay motivated and see obstacles as opportunities. I try to treat every situation as a learning experience."*

— Ö7 (Self-Efficacy Skills)

*"To cope with difficulties, I seek help from both instructors and friends."*

— Ö8 (Support from Academic Staff and Peers)

*"First I go through the difficulty, and then I try to face it and turn it into something manageable."*

— Ö6 (Experience-Based Learning)

*"If necessary, I inform the rector, the dean, or the department head through formal petitions. I also ask for support from instructors I feel comfortable with."*

— Ö4 (Navigating Bureaucratic Procedures)

As shown in Table 6, based on the views of individuals with special needs, the theme "Suggestions for Improving University Life for Individuals with Special Needs" was identified. Three related sub-themes emerged: academic inclusivity, social support, and accessible campus. Under the academic inclusivity sub-theme, participants suggested that academic staff should receive further training in special education. They emphasized the need for instructors to adopt inclusive practices in teaching, assessment, and content development, ensuring that students with disabilities are



considered in curriculum design, instructional delivery, and exam formats. In the social support sub-theme, participants proposed that information regarding students' disabilities should be shared with instructors and classmates at the beginning of the academic year to promote awareness.

**Table 6.** Opinions and Suggestions of Individuals with Special Needs for Improving University Life

Theme	Sub-theme	Code	Theme
Suggestions of Individuals with Special Needs for Improving University Life	Academic Inclusivity	Competent and Inclusive Academic Staff	Ö2 Ö4 Ö7 Ö8
		Inclusive Curriculum, Content, and Assessment Practices	Ö1 Ö7 Ö8
	Social Support	Confidential Disclosure and Awareness	Ö4 Ö5
		Peer Support	Ö7
		Empathy	Ö3
		Academic Coaching and Mentoring	Ö5
	Accessible Campus	Accessible Campus Practices	Ö6 Ö7 Ö8

They also highlighted the importance of receiving more peer support, fostering empathy among those around them, and expanding academic coaching and mentoring programs specifically tailored to students with disabilities at universities. Finally, under the *accessible campus* sub-theme, participants recommended implementing various practical improvements to facilitate the daily lives of students with disabilities—such as accessible transportation, enhanced signage, and support services designed to promote independence and inclusion. Some of the notable suggestions from individuals with special needs regarding this theme are as follows:

*"Some instructors try to treat students with disabilities like everyone else—as best as they can—but we still need a bit of positive discrimination. They should be inclusive educators, not act like guards or gatekeepers."*

— Ö4 (Competent and Inclusive Academic Staff)

*"I really wish our instructors understood the capacities of students with disabilities. If they reassured us a bit and showed some trust, there would be no problems."*

— Ö7 (Competent and Inclusive Academic Staff)

*"There are too many overlapping courses at the university. You leave one class and go straight into another without any break. When courses are scheduled back-to-back like that, it gets overwhelming. We can't keep up like students without disabilities."*

— Ö1 (Inclusive Curriculum and Course Content)

*"Instructors should provide more course materials in both audio and written formats so that all students can participate more equally in class."*

— Ö7 (Inclusive Curriculum and Course Content / Competent and Inclusive Academic Staff)

*"Instructors should offer us more audio and written materials."*

— Ö8 (Inclusive Curriculum and Course Content)

*"I don't want to be the one to inform every instructor about my disability. Instead, I suggest that the department head notify instructors in a sealed envelope and request necessary adjustments. Sure, I can tell a teacher I have a visual impairment, but a student who doesn't want to say it should still have the instructor informed beforehand. It would be easier for me too if the instructor came prepared."*

— Ö4 (Confidential Disclosure / Awareness)

*"Strengthening peer support systems is important."*

— Ö7 (Peer Support)

*"The instructor's attitude toward the student should be thoughtful. You really need to have experienced something similar yourself to understand. If you haven't lived it, you can't truly understand what a student with a disability is going through."*

— Ö3 (Empathy)

*"Someone going to university for the first time wouldn't even know how to be exempt from an English course. An advisor should meet with students, especially based on the number of hearing-impaired students in the class and explain clearly: 'You're exempt from this course, you can replace it with another one.' This kind of information must be provided."*

— Ö5 (Academic Coaching / Mentoring)

*"To improve the process, the first thing needed is to increase accessibility on campus."*

— Ö7 (Accessible Campus Practices)

*"The campus should be more accessible."*

— Ö8 (Accessible Campus Practices)

## 4. Discussion

This study was conducted to explore the challenges, experiences, and suggestions of individuals with special needs (ISNs) enrolled in faculties of sport sciences. The prerequisite for the social inclusion and integration of individuals with disabilities is, in essence, the development of an “accessible living” mindset. This refers to eliminating the barriers that hinder the integration of ISNs into society in every aspect of life. Within this framework, eight individuals (five male, three female) with various disabilities participated in the study. These participants had physical, visual, or hearing impairments and were enrolled in different departments of the faculty of sport sciences, including coaching, physical education and sports, recreation, and sports management. While three of the participants had congenital disabilities, five acquired their disabilities later in life. Participants represented various age groups and were active in sports such as bocce, goalball, amputee football, taekwondo, and karate.

When participants responded to the question “How does studying in the faculty of sport sciences make you feel?”, the overarching theme “Impact of Educational Experience in the Faculty of Sport Sciences on Life” emerged, along with the sub-themes personal development, professional development and attitude, and negative experiences. Participants expressed that studying in the faculty gave them a sense of life satisfaction, strengthened their perseverance, supported their personal transformation, helped develop a healthy lifestyle, and enabled them to build a social network. They also reported feeling a sense of belonging and progress in their professional knowledge and skills. As evidenced in participant narratives, studying in the faculty of sport sciences fostered a strong sense of resilience and inner strength. For instance, one participant shared: “Studying in the faculty feels like hearing everything around me. I push my mental limits by overcoming obstacles. It empowers me. I don’t just see—I feel.” (P7 – Perseverance). Despite these positive emotions, participants also reported occasional stress, particularly linked to the inadequacy of existing campus facilities (P4). It is evident that lack of physical accessibility and societal attitudes toward disability can contribute to emotional strain. Inadequate infrastructure and limited interaction with the broader student body can negatively affect emotional well-being (Mengi, 2019). Equal access to education for ISNs, just as for their typically developing peers, is essential to reduce such stressors. Sevinç and Çay (2017) also reported that the lack of adequate facilities during university education had a negative impact on students with disabilities. Similarly, Mengi (2019) emphasized that insufficient facilities led to stress and feelings of exclusion among disabled students.

Participants' responses to the question “What are your experiences with theoretical and practical courses, and what challenges do you face?” revealed the theme “Course Experiences and Pedagogical Barriers”, with sub-themes including practical course experiences, theoretical course experiences, and educational exclusion. Findings indicated that participants experienced difficulties in participating in practical sessions, required additional support, and struggled with communication in some learning environments. They expressed that their needs were often overlooked in course planning and assessment processes, highlighting a lack of inclusivity. For example, one participant stated: “Although I have low vision, I still struggle in practical classes. And there are students who are completely blind—an additional instructor or assistant should be assigned to help us.” (P4 – Need for Assistance). Sarıkaya and Börekeçi (2016) found similar results, noting that educational adaptations and teaching resources often failed to accommodate students with special needs, with faculty members lacking sufficient preparation. This is echoed in other studies (Jangra et al., 2007; Kalia et al., 2010; Montarzino et al., 2007). Therefore, it is crucial to increase the sensitivity and pedagogical competencies of faculty members, particularly through adaptive physical education courses and disability-awareness training across all levels of education (Kaygısız et al., 2011; Tekin, 2019).

When asked about their experiences and thoughts regarding interactions with others in the university environment, participants revealed the theme “Social and Academic Interactions in the Faculty of Sport Sciences”. Two sub-themes related to academic staff—approach and competence and attitudes and communication problems—were identified, as well as two sub-themes concerning peers: peer interaction and support and negative peer attitudes. While participants reported receiving support and maintaining positive communication with academic staff, they also noted that instructors often lacked inclusive pedagogical practices and awareness about disability issues. This aligns with findings by Dökmen and Kışlak (2004), who emphasize the importance of instructors' adaptation skills, classroom management, professional knowledge, and pedagogical approaches. Regarding peer interactions, participants similarly reported both supportive and challenging experiences. Some felt that their peers lacked awareness of disability-related issues. Numerous studies support the claim that societal awareness of disability remains limited (Marston & Golledge, 2003;

McAlliste & Gray, 2007). Burcu (2002) also noted that individuals with special needs may encounter difficulties with peer acceptance and communication. Therefore, increasing inclusive environments within and beyond the classroom is essential to improving peer relationships (Piştav Akmeşe & Kayhan, 2020).

Responses to the question "What challenges do you face at your university?" revealed the theme "Challenges Encountered and Coping Strategies", with sub-themes accessible campus and coping with challenges. This was the most frequently reported area of difficulty. Participants highlighted issues such as inadequate campus transportation, missing or improperly constructed tactile ground surfaces, insufficient Braille signage, and a lack of audio and visual guidance. One participant noted: "Some instructors' names are not posted at eye level, but rather above the door. This makes it difficult for visually impaired students. There should be tactile writing, but since it's missing, blind students cannot locate instructors' offices." (P4 – Braille Signage Issue). Although participants received support from peers and faculty, they still felt the negative impact of these physical and systemic barriers (Sevinç & Çay, 2017). Sarı (2005) reported similar findings, emphasizing the steepness of ramps, inaccessible classrooms, and inadequate restroom facilities as key challenges for students with disabilities.

When asked "What would you suggest to improve the process?", participants proposed solutions under the theme "Suggestions for Improving University Life", including the sub-themes academic inclusivity, social support, and accessible campus. They called for increased competence among academic staff in addressing the needs of students with disabilities, particularly in assessment, classroom management, and course content design. Participants emphasized that instructors should be educated about how to plan inclusive teaching strategies. They also recommended that peers adopt more empathetic attitudes and that universities develop structured mentoring systems to support students with disabilities. Most importantly, participants expressed a strong need for accessible campuses and classrooms, and for practical implementations that support daily life. These results are consistent with Erkal and Şahin (2012), who found that universal accessibility was one of the most emphasized needs in educational settings for individuals with disabilities.

## 5. Conclusions

In conclusion, the findings suggest that while individuals with special needs studying in faculties of sport sciences gain a sense of achievement and perseverance, they face significant physical and systemic challenges, particularly in transportation, accessibility, classroom conditions, and learning materials. Although they receive occasional support from peers and faculty, participants noted that the academic staff often lack sufficient knowledge and awareness of inclusive education practices. Peer support was also found to be limited due to low levels of disability awareness. Participants identified social support and personal motivation as primary coping mechanisms and recommended awareness-raising initiatives to improve inclusivity in higher education. Based on the findings, it is recommended that targeted awareness and training programs be implemented to facilitate the integration of individuals with special needs into educational and social life.

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## References

Artar, Y., & Karabacakoğlu, Ç. (2003). *Türkiye'de özürlüler turizminin geliştirilmesine yönelik olarak konaklama tesislerindeki alt yapı olanaklarının araştırılması*. Milli Prodüktivite Merkezi.

- Aydın, A. (2012). Görme engelli üniversite öğrencilerinin bilgi erişim sorunları üzerine yapılmış bir araştırma. *Information World/Bilgi Dünyası*, 13(1), 93-116. <https://doi.org/10.15612/BD.2012.170>
- Burcu, E. (2002). Üniversitede okuyan özürli öğrencilerin sorunları: Hacettepe Beytepe kampüsü öğrencileri örneği. *Hacettepe Üniversitesi Edebiyat Fakültesi Dergisi*, 19(1), 83-103.
- Büyüköztürk, Ş., Kılıç Çakmak, E., Akgün, Ö. E., Karadeniz, Ş., & Demirel, F. (2013). *Bilimsel araştırma yöntemleri*. Pegem Akademi.
- Creswell, J. W. (2014). Araştırma yaklaşımının seçimi: Nitel, nicel ve karma yöntem yaklaşımları araştırma deseni. A. B. Demir (Ed.), *Araştırma deseni* (Çev. ed.). Eğiten Kitap.
- Çınar, N. (2010). *Üniversite kampüslerindeki peyzaj erişilebilirliğinin engelliler açısından irdelenmesi* [Yüksek lisans tezi]. Ankara Üniversitesi.
- Daşkesen, S. S., Yarayan, Y. E., & İlhan, E. L. (2024). Tekerlekli sandalye basketbolcularının zihinsel antrenman ve mücadele düzeyleri arasındaki ilişkinin incelenmesi. *Gazi Beden Eğitimi ve Spor Bilimleri Dergisi*, 29(4), 210-215. <https://doi.org/10.53434/gbesbd.1472593>
- Dökmen, Z. Y., & Kışlak, Ş. T. (2004). Engelli olan ve olmayan üniversite öğrencilerinin demografik ve psikolojik özellikleri ile sorunlarının karşılaştırılması. *Kriz Dergisi*, 12(2), 33-47.
- Şahin, H., & Erkal, S. (2012). Ortopedik ve görme engelli bireyler için konaklama tesislerinde yapılması gereken düzenlemeler. *Hacettepe Üniversitesi Sosyolojik Araştırmalar Dergisi*, 1, 13.
- Esatbeyoğlu, F., & Karahan, B. G. (2014). Engelli bireylerin fiziksel aktiviteye katılımlarının önündeki engeller. *Spor Bilimleri Dergisi*, 25(2), 43-55.
- Fakazlı, A. E., İlhan, L., & Yarayan, Y. E. (2021). Engelli bireyler ile çalışma değişkeni bakımından spor eğitmenlerinde empatik eğilim. *Gazi Beden Eğitimi ve Spor Bilimleri Dergisi*, 26(2), 235-246.
- Gurgis, J. J., Kerr, G., & Darnell, S. (2022). 'Safe sport is not for everyone': Equity-deserving athletes' perspectives of, experiences and recommendations for safe sport. *Frontiers in Psychology*, 13, 832560. <https://doi.org/10.3389/fpsyg.2022.832560>
- Gün, A. (2015). İtme engelliler ortaokulunda okuyan öğrencilerin din kültürü ve ahlak bilgisi dersine yönelik tutum ve değerlendirmeleri: Amasya ve Samsun örneği. *Hitit Üniversitesi İlahiyat Fakültesi Dergisi*, 14(28), 61-92.
- Hacıhasanoğlu, I. (2003). Evrensel tasarım. *Tasarım Kuram*, 2(3), 93-101. <https://doi.org/10.23835/tasarimkuram.240838>
- İlhan, E. L., Yarımka, E., & Esentürk, O. K. (2022). Özel gereksinimli bireyler için uyarlanmış beden eğitimi ve spor. Pegem Akademi.
- İlhan, E., & Esentürk, O. (2014). Zihinsel engelli bireylerde sporun etkilerine yönelik farkındalık ölçeği (ZEBSEYFÖ) geliştirme çalışması. *CBÜ Beden Eğitimi ve Spor Bilimleri Dergisi*, 9(1), 19-36.
- Jangra, D., Ganesh, A., & Thackray, R. (2007). Psychosocial adjustment to visual loss in patients with retinitis pigmentosa. *Ophthalmic Genetics*, 28, 25-30. <https://doi.org/10.1080/13816810701201930>
- Kalia, A. A., Legge, G. E., Roy, R., & Ogale, A. (2010). Assessment of indoor route finding technology for people who are visually impaired. *Journal of Visual Impairment and Blindness*, 104(3), 135-147. <https://doi.org/10.1177/0145482X1010400303>
- Kang, M., Zhu, W., Ragan, B. G., & Frogley, M. (2007). Exercise barrier severity and perseverance of active youth with physical disabilities. *Rehabilitation Psychology*, 52(2), 170-176. <https://doi.org/10.1037/0090-5550.52.2.170>
- Kaygısız, E. G., Keskin, İ., & Oğuz, N. (2-4 Şubat 2011). Görme ve işitme engellilerin üniversite internet sayfalarına erişilebilirliği (Yedi üniversite internet sayfası üzerinde bir değerlendirme). *Akademik Bilişim'11 - XIII. Akademik Bilişim Konferansı Bildirileri*, İnönü Üniversitesi, Malatya.
- Kozak, M., İlhan, E. L., & Yarayan, Y. E. (2019). Zihinsel yetersizlik, spor ve ruhsal uyum ilişkisi. *Beden Eğitimi ve Spor Bilimleri Dergisi*, 13(1), 51-65.
- Lape, E. C., Katz, J. N., Losina, E., Kerman, H. M., Gedman, M. A., & Blauwet, C. A. (2018). Participant-reported benefits of involvement in an adaptive sports program: A qualitative study. *PM&R*, 10(5), 507-515. <https://doi.org/10.1016/j.pmrj.2017.10.008>
- Marston, J. R., & Golledge, R. G. (2003). The hidden demand for participation in activities and travel by persons who are visually impaired. *Journal of Visual Impairment and Blindness*, 97, 475-488. <https://doi.org/10.1177/0145482X0309700803>
- Martin, M. R., & Speer, L. (2011). Leveling the playing field: Strategies for inclusion. *A Journal for Physical and Sport Educators*, 24(5), 24-27. <https://doi.org/10.1080/08924562.2011.10590949>
- Maxwell, J. A. (2018). *Nitel araştırma tasarımı- Etkileşimli bir yaklaşım* (M. Çevikbaş, Çev. Ed.). Nobel Akademik Yayıncılık.
- McAllister, R., & Gray, C. (2007). Low vision: Mobility and independence training for the early years child. *Early Child Development and Care*, 177(8), 839-852. <https://doi.org/10.1080/03004430600594096>
- Mengi, A. (2019). Engelli öğrencilerin üniversite eğitimi sürecinde karşılaştığı güçlükler: Van Yüzüncü Yıl Üniversitesi örneği. *Van Yüzüncü Yıl Üniversitesi Eğitim Fakültesi Dergisi*, 16(1), 147-170. <http://dx.doi.org/10.23891/efdyyu.2019.122>
- Miles, M. B., & Huberman, A. M. (1994). *Qualitative data analysis: An expanded sourcebook* (2nd ed.). SAGE Publications.
- Montarzano, A., Robertson, B., Aspinall, P., Ambrecht, A., Findlay, C., Hine, J., & Dhillon, B. (2007). The impact of mobility and public transport on the independence of visually impaired people. *Visual Impairment Research*, 9, 67-82. <https://doi.org/10.1080/13882350701673266>
- Piştav Akmeşe, P., & Kayhan, N. (2020). Özel Eğitim Öğretmenliği Öğrencilerinin Koronavirüs (COVID-19) Salgın Sürecinde Uygulama Derslerine İlişkin Deneyimleri. *Journal of Turkish Studies*, (15), 3669-3688.

- Sarı, H. (2005). Selçuk Üniversitesi'nde öğrenim gören bedensel engelli ve görme engelli öğrencilerin karşılaştıkları sorunlar ve çözümüne yönelik çağdaş öneriler. *Selçuk Üniversitesi Sosyal Bilimler Enstitüsü Dergisi*, (13), 335-355.
- Sarıkaya, B., & Börekçi, M. (2016). İşitme engelli öğrencilerin eğitiminde yaşanan sorunlar ve çözüm önerileri: Erzurum ili örneği. *Ekev Akademi Dergisi*, (66), 177-194.
- Sevinç, İ., & Çay, M. (2017). Fiziksel engelli bireylerin üniversite eğitimi sırasında karşılaştıkları sorunlar (Akdeniz Üniversitesi örneği). *Selçuk Üniversitesi Sosyal ve Teknik Araştırmalar Dergisi*, (13), 219-238.
- Tekin, H. H. (2019). Engelli üniversite öğrencilerinin eğitim yaşamındaki sorunları: Konya örneği. *MANAS Sosyal Araştırmalar Dergisi*, 8(2), 1531-1548. <https://doi.org/10.33206/mjss.479132>
- Urbański, P., Szeliga, Ł., & Tasiemski, T. (2021). Impact of COVID-19 pandemic on athletes with disabilities preparing for the Paralympic Games in Tokyo. *BMC Research Notes*, 14(1), 233. <https://doi.org/10.1186/s13104-021-05646-0>
- Uzunçayır, D., Yılmaz, S. H., & Yarayan, Y. E. (2023). Yoga temelli fiziksel aktivite programına katılan otizm spektrum bozukluğu olan çocukların kazanımları; ebeveyn ve öğretmen görüşleri doğrultusunda fenomenolojik bir araştırma. *Trakya Eğitim Dergisi*, 13(3), 2165-2177. <https://doi.org/10.24315/tred.1343553>
- Wilson, P. E., & Clayton, G. H. (2010). Sports and disability. *American Academy of Physical Medicine and Rehabilitation*, 2(3), 46-54. <https://doi.org/10.1016/j.pmrj.2010.02.002>
- Yarayan, Y. E., İlhan, E. L., Esentürk, O. K., Arı, Ç., & Gülşen, D. B. A. (2023). Does emotional intelligence affect mental toughness in physically disabled athletes? *Spor Bilimleri Araştırmaları Dergisi*, 8(2), 231-242. <https://doi.org/10.25307/jssr.1228541>
- Yıldırım, A., & Şimşek, H. (2006). *Sosyal bilimlerde nitel araştırma yöntemleri* (6. Baskı). Seçkin Yayıncılık.
- Yıldırım, A., & Şimşek, H. (2013). *Sosyal bilimlerde nitel araştırma yöntemleri* (9. Baskı). Seçkin Yayıncılık.
- Yılmaz, S. H., İlhan, E. L., & Yarayan, Y. E. (2021). Engelli bireylerde spora katılımın önündeki zorlanmalar ölçeği geçerlik ve güvenirlik çalışması. *Gazi Beden Eğitimi ve Spor Bilimleri Dergisi*, 26(3), 315-332. <https://doi.org/10.53434/gbesbd.900837>
- Zhang, X., Tlili, A., Nascimbeni, F., Burgos, D., Huang, R., Chang, T. W., Jemni, M., & Khribi, M. K. (2020). Accessibility within open educational resources and practices for disabled learners: A systematic literature review. *Smart Learning Environments*, 7(1), 1-19. <https://doi.org/10.1186/s40561-019-0113-2>

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