



Research Article

Higher Education Instructors with Special Needs Students: Challenges and Recommendations

Ayşegül GÖKDAĞ¹, Özge ÜNLÜ²

¹ Izmir Demokrasi University, Turkey, aysegulgokdag@gmail.com, <http://orcid.org/0000-0002-1969-3711>

² Izmir Demokrasi University, Turkey, ozgezybk@gmail.com, <http://orcid.org/0000-0003-2569-2851>

Received : 12.09.2023

Accepted : 17.10.2023

<https://doi.org/10.17522/balikesirnef.1359140>

Abstract – This research identifies the challenges encountered by higher education instructors who provide education to special needs students in their classes and the solutions they propose to address these challenges. The study investigated the level of knowledge of instructors regarding their students with special needs, the opinions of the instructors on encountered problems, the reasons and solutions of these problems, and the self-assessment of instructors and their institutions regarding the education provided to students with special needs. The participants of the study consisted of 25 higher education instructors who provide education to students with special needs in their classes. The participants were selected using maximum diversity and criterion sampling types of purposive sampling method. Data for the research were collected with semi-structured interview form and were analyzed using the descriptive content analysis method. Research findings showed that the instructors lacked sufficient knowledge about disabilities, did not feel qualified in terms of academic adaptations, found their higher education institution to be insufficient in terms of accessibility, and noted low awareness among academic and administrative staff. Research concluded that awareness-raising activities, personnel training regarding the characteristics of disabled students and possible accommodations, and necessary adjustments should be made in terms of accessibility. Recommendations were developed accordingly in this context.

Key words: academic adaptations, higher education instructors, students with special needs in higher education

Corresponding author: Ayşegül GÖKDAĞ, Izmir Demokrasi University, Turkey, aysegulgokdag@gmail.com.

Introduction

In Turkey, the higher education system was restructured under Law No. 2547 in 1981, which brought all higher education institutions under a single umbrella organization known as the Higher Education Council (Yükseköğretim Kurulu), making it the sole authority responsible for higher education in the country. Since 1982, the number of universities has increased from 27 to 208 as of the present day (Higher Education Council, 2023). Nationwide, there are a total of 8,296,959 students enrolled in higher education institutions, and among these students, 55,667 are classified as students with special needs (Higher Education Information Management System, 2022). According to Article 130 of the Turkish Republic Constitution, which encompasses higher education institutions, these students have the right to education based on contemporary principles of education and training, aiming to develop human resources in accordance with the needs of the nation and the country, and taking measures to ensure equal opportunities in higher education. Therefore, students with special needs have the same right to benefit from educational opportunities as their typically developing peers. In higher education programs, the rights and services of individuals with special needs are governed by the Higher Education Institutions Disabled Students Advisory and Coordination Regulation (YÖKEDKY) in Turkey. This regulation aims to facilitate the academic life of students with special needs, create the necessary academic environment, and ensure their full participation in the education and training processes by taking the necessary measures and making arrangements (YÖKEDKY, 2010).

According to the Regulation on the Advisory and Coordination Unit of Students With Disabilities a student with special needs is defined as "a higher education student who, due to various degrees of loss of physical, mental, emotional, and social abilities, either congenital or acquired at a later stage, faces difficulties in adapting to social life, meeting daily needs, and requires protection, care, rehabilitation, counseling, and support services" (YÖKEDKY, 2010). The education of students with special needs encompasses various areas, including daily life skills, social skills, academic skills, and personal hygiene skills. The prerequisite skills that need to be developed for individuals with special needs can vary depending on the type and severity of their disabilities, and the required education for each individual may differ (Hughes et al., 2016; Grigorenko et al., 2020; Hall et al., 2003; Spooner et al., 2011; Diken et al., 2021). In higher education, students with special needs receive their education based on the programs they are enrolled in, and this education is provided by the instructors' members working at the university.

In order to create the most suitable learning environment for individuals with special needs in higher education, it is of great importance that both academic and administrative staff members are knowledgeable about students with special needs (Love et al., 2015; Madaus and Newman, 2015; Rose et al., 2006). Furthermore, to ensure that individuals with special needs do not face any difficulties during their higher education and to facilitate their lives, necessary legal regulations have been established, and regulations have been put in place (OEHY, 2018). However, studies that have gathered the opinions of students with special needs in higher education and the instructors' members who provide them with education indicate that these staff members may lack adequate knowledge about the types of disabilities and how to deliver educational content to students with special needs (Gibbons et al., 2015; Muhamad Zaki and Ismail, 2021; Zhang et al., 2018).

In order to ensure equal educational rights for students with special needs in higher education and to facilitate their learning, various instructional adaptations need to be implemented. Academic adaptations involve making educational, environmental, and communicational adjustments based on the student's specific needs. These adaptations aim to prevent any challenges that may arise for both students with special needs and the instructor's providing education, ultimately benefiting both parties (Harrison et al., 2013; Lovett and Nelson, 2021; Yang and Ma, 2022). Academic adaptations encompass a range of modifications that address the physical and educational aspects of the learning environment. These adjustments apply to educators across all levels and disciplines, ensuring they can deliver inclusive education (Bohning, 2000; Williams, 2001). Academic adaptations typically involve alterations in the classroom setup, teaching materials, instructional methods, and interactions between instructors and students tailored to the specific type of disability. Moreover, adaptations can extend to assessment methods and assignments. The implementation of academic adaptations not only enhances the teaching performance of educators but also empowers students with special needs to achieve success comparable to their typically developing peers, without encountering significant obstacles (Accardo et al., 2019; Bourke et al., 2000; Costello-Harris, 2019).

Examining the academic adaptations provided to students with special needs in the instructional content, it is evident from the international literature that there are studies investigating the challenges faced by instructors' members who provide education to students with special needs in higher education. These studies indicate that instructors' members may lack sufficient knowledge about the academic adaptations required for students with special

needs and the characteristics of these students. Consequently, they encounter difficulties in implementing the necessary adaptations (Chan, 2016; Gaad and Almotairi, 2013; Holmqvist et al., 2019; Jones and Krumsvik, 2008; Morina, 2017; Muhamad Zaki and Ismail, 2021). Besides, to address these issues, there is evidence of the establishment of inclusive education programs and support units for students with special needs in higher education aimed at creating appropriate conditions for them (Hall et al., 2003; Harrison et al., 2013; Hong and Himmel, 2009; Klenotich, 2022; Kurth and Keegan, 2014; Newman and Madaus, 2015; Morina et al., 2017). Reviewing the literature in Turkey, it is observed that studies involving university instructors predominantly focus on a single type of disability, such as visual impairment, hearing impairment, or physical disability. These studies typically investigate the challenges faced by students with a specific type of disability in higher education institutions and the proposed solutions to these challenges (Gündoğar, 2020; Karakuş et al., 2017; Özsökmen, 2019). In his study, Özsökmen (2019) described the opinions of conservatory educators who have visually impaired students regarding the educational process. The sample of the study consisted of conservatory students with visual impairments and faculty members who have students with visual impairments. In the study, the attitudes and approaches of faculty members who have visually impaired students were determined, deficiencies in the education process were identified and solutions to these situations were offered. This research focused on a single type of disability, visual impairment. In his study, Gündoğar (2020) examined the opinions about academic adaptations made for visually impaired students attending higher education. The sample of this study consists of visually impaired students attending higher education and faculty members who have visually impaired students. Similar to the previous study, the current study focused on visual impairment, but students studying at the university instead of the conservatory and faculty members working at the university were selected as samples. In addition, as a result of the study, future suggestions were made by accessing the findings regarding the higher education life of students with visual impairments. Karakuş et al. (2017) examined the educational problems faced by students with special needs in the field of education at Selçuk University. The data was obtained from interviews with students, students' parents and faculty members, and from applications made by students, students' parents and faculty members to the Disabled Student Unit. According to the findings, it was seen that the group that had the most problems in applications was the faculty members and they generally had problems in adapting lectures and exams. In addition, suggestions have been made regarding the educational adaptations of students with visual impairment, hearing impairment and physical disability, but no recommendations have been

made regarding other types of disabilities. Consequently, within the Turkish literature, there is a lack of comprehensive studies addressing the challenges encountered by instructors targeting all types of disabilities. In this context, the objective of this research is to identify the issues faced by instructors who teach students with various types of disabilities in higher education and the solutions they propose for these problems. In pursuit of this goal, the following research questions were addressed:

1. What is the knowledge of instructors who have students with special needs in higher education institutions regarding these students?
2. What are the challenges faced by instructors who have students with special needs in higher education institutions?
3. What are the reasons behind the challenges faced by instructors who have students with special needs in higher education institutions?
4. How do instructors in higher education evaluate themselves and their institutions regarding the education provided to students with special needs?
5. What are the solution proposals offered by instructors who have students with special needs in higher education institutions to address the challenges they encounter?

Method

Research Design

In this study, a descriptive phenomenological design, which is one of the qualitative research methods, was employed. The research aimed to deeply investigate the problems faced by instructors working in higher education institutions who have students with special needs, the reasons behind these problems, and the solutions proposed to address these issues. Phenomenological design is a research approach that involves an in-depth and detailed examination of phenomena (events, experiences, perceptions, orientations, concepts, etc.) Conducting research where phenomena are recognized, however, our knowledge about them is lacking in depth and detail, a phenomenological design can provide a foundation for the study. The descriptive phenomenological design is formed by describing phenomena in a detailed manner (Silverman, 2011; Patton, 2014; Creswell and Creswell, 2018).

Participants

In this study, purposive sampling methods, specifically maximum diversity and criterion sampling types, were employed as qualitative research sampling methods. Purposive sampling involves the deliberate selection of a sample believed to adequately represent a specific population. The maximum diversity approach within purposive sampling aims to construct a concise sample while maximizing the diversity of individuals who can significantly contribute to the issue under investigation (Cohen et al., 2018; Mills and Gay, 2012; Yıldırım and Şimşek, 2021). The criterion sampling type within purposive sampling involves selecting cases that meet predetermined criteria. In determining the research sample, contact was established with the Disability Student Units of universities to access various faculties and departments in higher education institutions, following the maximum diversity type. Additionally, for the criterion sampling type, the criteria were set as follows: (a) currently serving as instructors at higher education institutions in Izmir province and (b) having students with special needs enrolled in their courses. Consequently, the research participants consist of a total of 25 individuals who are instructors serving in state universities, private universities, state vocational schools, and private vocational schools in Izmir province. Participant P01 was not included in the data analysis of the study and to Table 1. below because he was a research assistant and did not meet the criteria of a lecturer, and P08 was not included in the data analysis of the study and the Table 1. below because his student did not meet the criterion of a student with special needs. Information about participants and students with special needs is presented in Table 1.

Table 1 Information about Participants and Students with Special Needs

Code	Gender	Age	Title	Faculty/Higher Education Institution	Type(s) of Disability of The Students
P02	Female	38	Lecturer	School of Foreign Languages	Asperger
P03	Female	30	Lecturer	Child Development and Youth Services	Hearing Impairment/ Intellectual Disability
P04	Female	29	Lecturer	Child Development and Youth Services	Hearing Impairment/ Learning Disability/ Intellectual Disability
P05	Female	34	Research Professor, Ph.D.	Faculty of Education	Visual Impairment
P06	Male	30	Research Professor, Ph.D.	Faculty of Education	Speech and Language Impairment/ Physical Disability/ Visual Impairment
P07	Male	40	Research Professor, Ph.D.	Faculty of Fine Arts	Down Syndrome/ Autism Spectrum Disorder/ Dyslexia
P09	Female	48	Professor, Ph.D.	Faculty of Communication	Speech and Language Impairment/ Physical Disability/ Attention Deficit and Hyperactivity Disorder/ Autism Spectrum

				Disorder/ Learning Disability/ Intellectual Disability	
P10	Female	42	Research Professor, Ph.D.	Faculty of Communication	Speech and Language Impairment/ Physical Disability /Visual Impairment
P11	Male	40	Research Professor, Ph.D.	Faculty of Communication	Physical Disability/ Dyslexia
P13	Female	36	Associate Ph.D.	Faculty of Education	Physical Disability/ Visual Impairment
P14	Female	48	Associate Professor	Faculty of Education	Speech and Language Impairment/ Physical Disability
P15	Male	48	Professor	Faculty of Science	Physical Disability/ Attention Deficit and Hyperactivity Disorder/ Head Injury*
P16	Male	41	Research Professor, Ph.D.	Faculty of Science	Speech and Language Impairment/ Physical Disability/ Attention Deficit and Hyperactivity Disorder
P17	Female	42	Associate Ph.D.	Faculty of Science	Hearing Impairment
P18	Female	39	Research Professor, Ph.D.	Faculty of Education	Hearing Impairment
P19	Female	39	Research Assistant	Faculty of Education	Physical Disability/ Visual Impairment
P20	Male	40	Associate Ph.D.	Faculty of Education	Speech and Language Impairment/ Hearing Impairment
P21	Female	34	Lecturer	Child Development and Youth Services	Speech and Language Impairment/ Physical Disability/ Visual Impairment/ Attention Deficit and Hyperactivity Disorder/ Hearing Impairment/ Intellectual Disability
P22	Female	26	Lecturer	Faculty of Fine Arts	Down Syndrome/ Autism Spectrum Disorder
P23	Female	38	Research Professor	Faculty of Literature	Speech and Language Impairment/ Physical Disability/ Visual Impairment/ Autism Spectrum Disorder/ Asperger
P24	Female	42	Research Professor	Faculty of Education	Physical Disability/ Visual Impairment/ Hearing Impairment/ Autism Spectrum Disorder
P25	Male	42	Research Professor, Ph.D.	Faculty of Engineering	Hearing Impairment/ Autism Spectrum Disorder/ Dyslexia
P26	Female	34	Lecturer	School of Foreign Languages	Visual Impairment
P27	Female	28	Lecturer	School of Foreign Languages	Visual Impairment
P28	Female	43	Professor	Faculty of Economics and Administrative Sciences	Physical Disability

Upon reviewing Table 1, it is observed that the types of disabilities among the students with special needs include physical disability, visual impairment, hearing impairment, language and speech disorders, Autism Spectrum Disorder, Attention Deficit Hyperactivity Disorder, intellectual disability, Down Syndrome, and Specific Learning Difficulties. To ensure the anonymity of the participants, the instructors have been assigned code names ranging from "P02, P03..., to P28". Upon examining the faculty/higher education institutions

where instructors are currently employed , it is observed that the participants are currently employed across eight different faculties or higher education institutions. To preserve anonymity, this table is provided separately.

Data collection

The study data were collected using a semi-structured interview form. The semi-structured interview form was developed by drawing on theses and articles in the field of special education (Gündoğar, 2020; Özsökmen, 2019; Zeybek, 2015). After its development, the form was submitted for review to three experts who hold doctoral degrees in the field of Special Education. Necessary modifications were made based on the experts' feedback, and the semi-structured interview form was finalized. The final version of the semi-structured interview questions used in the research consists of a total of nine questions.

A pilot interview was conducted with a faculty member who met the sample criteria to evaluate the questions in the interview form. Subsequently, interviews were conducted face-to-face and online in quiet environments with participants who volunteered and expressed their willingness, between the dates of July 17, 2022, and October 13, 2023. Before the interviews began, a detailed consent form outlining the research objectives and process, along with a demographic information form, was provided to the participants. Interviews were recorded with the consent of the participants. The interview form is designed with nine open-ended questions that aim to explore the challenges faced and solutions suggested by instructors who have students with special needs. The duration of the interviews ranged from 12 to 45 minutes. The recorded data was transcribed by the researcher and transferred to a digital format and analyzed using content analysis.

Data Analysis

The collected data were analyzed using inductive content analysis, one of the qualitative data analysis methods. Inductive content analysis is the process of uncovering the concepts within the data to reach unknown phenomena and develop theory (Miles et al., 2014). Concepts form the codes, and relationships form the themes. In inductive coding, codes are directly obtained from the research data. After transcribing the recorded interviews, the researcher participated in the coding process, noting thoughts and impressions related to the content. The researcher formed codes based on similar expressions and patterns and established themes based on the relationships and distinctive differences among codes. To ensure coding reliability, the necessary data for coding reliability were sent to two faculty members in the field of Special

Education who were experienced on qualitative research field. In line with the literature, necessary adjustments have been made on the codes and themes, and a consensus has been reached to finalize them. Within the scope of content analysis, important opinions of the participants have been provided as direct quotes under the relevant themes. According to the reliability formula proposed by Miles and Huberman (1994), the inter-coder agreement rate has been determined as 91.17%. An agreement rate of 70% and above is considered as a sufficient reliability value. The themes and sub-themes obtained as a result of the data analysis are presented in Table 2.

Table 2 Themes and Sub-Themes Related to the Views of Instructors

Theme	Sub-Theme
1. Knowledge of instructors about individuals and students with special needs	1.1. Knowledge status of instructors about individuals with special needs 1.2. Instructors' awareness of their students with special needs
2. Instructors' competencies in teaching students with special needs	2.1. The knowledge/education of instructors about teaching students with special needs 2.2. Adaptations made by instructors for their students with special needs 2.3. Instructor's views about the education they provided to students with special needs
3. The views of the instructors on the services for individuals with special needs provided by the higher education institution they work in	
4. Challenges faced by instructors in the higher education institution where they work	
5. Reasons for the challenges encountered by instructors	
6. Suggestions by instructors for better education for students with special needs	

Validity and Reliability

While validity and reliability are expressed with numerical data in quantitative research, qualitative research does not employ numerical data for these purposes. Therefore, the validity and reliability of studies in qualitative research are ensured through trustworthiness. Criteria for trustworthiness are grouped under four headings: credibility, dependability, confirmability, and transferability (Guba and Lincoln, 1982). The trustworthiness of research findings is established through various factors, such as the researcher taking necessary precautions, clearly and thoroughly describing the research process and data and selecting a sample size that is sufficiently large (Başkale, 2016).

Credibility

For a study to be scientifically accepted, both the research process and its findings need to be transparent. Various strategies exist to ensure credibility. In this research, credibility has been established through expert review. During the expert review, the expert monitors the entire process from data collection to its analysis and the writing of the results, providing critical feedback to the researcher. This strategy can be implemented in two ways: either through a review meeting between the expert and the researcher or by sending all the data to the expert for feedback (Yıldırım and Şimşek, 2021). In the present study, the former strategy was employed by the study's researchers.

Transferability

The concept of generalizability in quantitative research is referred to as transferability in qualitative research. Detailed descriptions or purposeful sampling methods are used to increase the transferability of study results (Yıldırım and Şimşek, 2021) In this study, purposeful sampling was used to ensure transferability.

Findings

The findings obtained at the end of the research are grouped under six themes: the knowledge level of instructors about individuals and students with special needs, the competence of instructors in teaching students with special needs, the quality of services provided to individuals with special needs by the higher education institution where instructors work, the problems faced by instructors in their higher education institution, the reasons for the problems encountered by instructors, and the suggestions of instructors for better education for students with special needs. Codes related to the themes and direct quotations have been presented in sequence.

Knowledge of Instructors About Individuals and Students with Special Needs

Themes and codes related to the knowledge of instructors who have students with special needs in their classes are presented in Table 3.

Table 3. Knowledge Status of Instructors About Individuals with Special Needs

Codes	<i>f</i>
I have knowledge about the types of disabilities	13
I have knowledge about the problems and needs they experience	10
I don't have comprehensive knowledge about students with special needs	7
I have knowledge about the education and training of individuals with special needs	6
I have knowledge about legal studies related to individuals with special needs	2

Upon examining Table 3., it has been determined that the majority of participants possess knowledge regarding the types of disabilities related to individuals with special needs and the challenges and necessities these individuals face. Among other topics that participants are knowledgeable about include the education and teaching of individuals with special needs and legal initiatives undertaken for these individuals. Seven participants have expressed that they do not possess comprehensive knowledge about students with special needs. Some statements from the participants is as follows:

"Individuals with learning difficulties, visual impairments, physical disabilities, those who cannot use their limbs, such as Asperger syndrome." (P26)

"It's not just one disability group, it's not just one inadequacy group. I know they are all grouped under a large umbrella. Even if they have received the same diagnosis under this umbrella, I am aware that there are still individual differences." (P03)

"I have some knowledge that they have different characteristics, and based on these characteristics, they may experience some difficulties in performing certain actions that other individuals can do." (P24)

"There are individuals who exhibit different behaviors, and different learning techniques need to be applied to them." (P22)

"I know that they have the right to education, and this is also supported by the law. I know that, in university education, in accordance with certain guidelines determined by the Council of Higher Education (YÖK), it is foreseen that specific conditions should be met for them to be equal with other students and to ensure equal opportunities for them." (P10)

"In reality, we don't have much information about the students." (P20)

"I don't know any students other than the one in my class." (P02)

The Awareness of Instructors Regarding Students with Special Needs

The themes and codes related to instructors' awareness of students with special needs enrolled in their courses are presented in Table 4.

Table 4. Awareness of Instructors Regarding Students with Special Needs in Their Classes

Codes	<i>f</i>
I was not informed about the student with special needs enrolled in my class	11
<i>I learned about the student by seeing them in the classroom</i>	8
<i>The student with special needs informed me themselves by chance</i>	3
I was informed by the school about the student with special needs enrolled in my class	10
I was informed about the student with special needs by the student themselves or their parent	4

Examining Table 4., it can be observed that participants were either unaware of the students with special needs registered in their classes, learned about them by seeing the students in the classroom, or were informed by the students themselves by chance. In cases where awareness existed, it was typically due to the school, the students themselves, or their parents' providing information regarding the student's special needs. Some of the participants' statements are as follows:

"We are conducting the course remotely, and for seven weeks, I had no idea. I only found out when there was an issue with the assessment assignment. I saw the student for the first time when they came to the laboratory for the initial class." (P19)

"On the very first day, when I came to class, as soon as we arrived at the first class, I noticed that my student had a visual impairment. I became aware of it through visual observation. I was not informed beforehand." (P05)

"I learned it in the special education class. When we were discussing special education, especially hearing impairments, the student mentioned that they had a hearing impairment." (P18)

"I later found out that he was hearing impaired. I used to think he was a very disinterested student in class... he always sat at the back. When I said something like, 'Did you forget how to do this?' he replied, 'I can't hear you, teacher.'" (P20)

"We receive information before the classes start. The disability support unit gathers information about the student and informs the teachers. If the student declares their disability on the registration system, we receive the information. We receive three notifications during the semester." (P21)

"Our disability support unit informs us after the student registers and applies to the relevant units." (P04)

"After course selections are completed, the relevant unit informs us about the student via email. Information explaining the student's situation and needs is conveyed through the system." (P25)

"At the very beginning of the semester, the disability support unit informs the student, assigns an academic advisor, and the academic advisor communicates with other instructors to explain the student's situation." (P14)

"His family came and talked to me when the classes started." (P02)

"The student themselves came and provided information before the class." (P17)

The Competence of Instructors in Providing Education to Students with Special Needs

Participants' competence in providing education to students with special needs, including their level of knowledge/education, adaptations they make, and the quality of

education they provide to students, is evaluated through themes and codes presented in Tables 5. and 6.

Table 5. The level of knowledge/education of instructors about teaching students with special needs

Codes	<i>f</i>
I received training/education	16
<i>I took courses at the undergraduate or graduate level</i>	10
<i>I acquired knowledge through self-research</i>	9
<i>I gained experience by working with students with special needs</i>	4
<i>I acquired knowledge by attending events such as conferences, seminars, workshops</i>	4
<i>I received training provided by the disability support unit</i>	4
I did not receive any training	9

Examining Table 5., the responses to the question about participants' knowledge/education levels in providing education to students with special needs show that 16 participants received training/education, while nine participants did not receive any training. Some of the participants' statements are as follows:

"I took a lot of courses in undergraduate, graduate, and doctoral education on delivering this education." (P06)

"I research what I can do for my students." (P11)

"I worked with young children in a special education center." (P04)

"I participated in the inclusive education program. It was an in-service training." (P24)

"The disability support unit provides in-service training... When I need information I want to learn, I ask the disability support unit about the disability status or the support I need." (P21)

Table 6. Adaptations made by instructors for their students with special needs

Codes	<i>f</i>
I make adaptations in exams and/or assignments	20
<i>A helper/supervisor is provided and they are allowed to take the exam in a separate room</i>	13
<i>Extra time is provided for exams and assignments</i>	11
<i>Adaptations are made in exam questions</i>	8
<i>Questions are read aloud</i>	5
I make adaptations in the course content	18
<i>I make adaptations in course materials</i>	15
<i>I make adaptations and repetitions in course delivery</i>	13
I make physical environment adaptations	14
I utilize peer-assisted learning	5
I do not make adaptations	5

Examining Table 6., it is observed that participants make various adaptations for students with special needs. Twenty participants mentioned making adaptations in exams and/or assignments. Among these, 13 participants mentioned assigning a helper/supervisor to the student and allowing them to take the exam in a separate room. Additionally, participants mentioned providing extra time for exams and assignments, making adaptations in exam questions based on the student's special needs, and reading exam questions aloud to the student. In terms of other adaptations, 18 participants mentioned making adaptations in the course content, which includes adaptations in course materials and course delivery. Fourteen participants make physical environment adaptations, six participants utilize peer-assisted learning, and five participants do not make any adaptations. Some of the participants' statements are as follows:

"We conduct his exam separately to accommodate his attention span and ensure that surrounding stimuli do not disturb him." (P23)

"For the student with attention deficit disorder, we received information that we should provide extra time for about two or three students, so we did that, granting them 50% extra time for exams." (P15)

"In written notes and exams, we use a larger font. In written assignments, we ignore spelling mistakes based on the student's disability." (P21)

"If we usually listen to recordings, for this student, we read aloud and pause where he wants us to." (P26)

"We enlarge the fonts for him, and he can record audio. In some classes, if he wants, he can use Braille alphabet. Buttons on the slides are also enlarged. We provide class notes." (P06)

"We request all our instructors in the class to at least, you know, when he can't hear you clearly with your mask on or if he's been absent for a while, speak a bit more slowly and clearly. If the student has a chronic illness besides his own disability, he may have the need to go to the restroom or take a break during class or exams, so we accommodate these needs. We have many verbal cues. I often engage in a continuous question-and-answer session during the class." (P03)

"Our classes are on the ground floor for easy access for students. We have chairs with arm set in the front rows for them." (P10)

"We try to create an environment that makes him comfortable through his close friends. We do activities together as a class, not individually." (P04)

"In course delivery, so far, no student has come to me and said, 'I have this issue, can you do this for me?'" (P16)

It has been observed that the participants employ various adaptations in examinations, including allowing the student to take the exam in a separate room, assigning an additional proctor or a reader to the student, and reading the exam questions out loud. Adaptations specific to the student's unique needs in exam questions are also made, such as using larger fonts, colored paper, shorter questions, questions that require short answers, or offering multiple-choice questions instead of written ones. Electronic devices are also utilized in examinations, allowing students to type their answers and subsequently print them out. Additional adaptations include providing study sheets before exams, granting extra time for exams and assignments, allowing electronic submission of assignments instead of hand-written submissions, and requesting that classroom activities be submitted as homework assignments. It has been observed that the adaptations made by instructors in course content include adaptations in instructional materials (such as visually rich course content, allowing students to record audio, utilizing large font sizes in written materials, preparing and sharing supplementary notes, sharing comprehensive lecture notes, distributing course resources in PDF format, etc.); adjustments made in the course presentation (such as assigning appropriate roles in practical courses depending on the inadequacy situation, remaining within the student's line of sight for lip reading, providing the opportunity for the student to communicate via email when they have questions, allowing students to express themselves in class without a time constraint, and cautioning the student when necessary so as not to disrupt the flow and content of the course); and increased repetition by the instructor course delivery. Adjustments made by instructors in physical environments include modifications within the classroom setting, such as rearranging tables and chairs to allow the student to move more freely and seating the student closer to the instructor if they rely on lip-reading. Classroom selection is also tailored to meet the student's specific needs. For example, if the student has physical disabilities, a classroom on the first floor may be chosen, and if there is a hearing impairment, a classroom equipped with an FM or sound induction system may be utilized. Participants who benefit from peer-supported education receive peer assistance in various forms: assigning a student partner during in-class exercises, assigning a student to accompany them in practical lessons, conducting activities in team formats within the classroom rather than individually, and providing a student partner during assignment presentations to offer support.

Quality of Education Provided by Instructors to Students with Special Needs

Upon examining the responses regarding the quality of education provided to students with special needs, it was observed that 13 participants find the education they provide to be adequate, while 12 participants do not feel they are sufficient.

Table 7. Instructor's views about the education they provided to students with special needs

Codes	<i>f</i>
I do not feel I am sufficient in the education I provide	13
I feel I am sufficient in the education I provide	12

Some of the participants' opinions are as follows:

"I have not received training on teaching students with special needs, so I need to learn about this subject." (P11)

"There have been areas where I felt very lacking I don't know how to educate individuals with hearing and visual impairments in language learning. We don't know how to find Braille books." (P26)

"I have been able to be there for them emotionally and academically, and I'm satisfied with myself since their reactions were also good." (P14)

"Considering the education I have received; I think I am better at analyzing their needs. In other words, I know how to behave toward an individual with autism or how to behave toward someone with Down Syndrome." (P23)

Quality of Services Provided by Higher Education Institutions to Individuals with Special Needs as Perceived by Instructors

Instructors' opinions on the quality of services provided to individuals with special needs by the higher education institutions they work at have been collected. A theme regarding the quality of services provided to students with special needs by the Higher Education Institute has been established. The theme and codes are presented in Table 8.

Table 8. Instructors' Views on the Quality of Services Provided to Students with Special Needs by the Higher Education Institutions They Work At

Codes	<i>f</i>
I find the services provided by the higher education institution to be of high quality	14
<i>I find the student-focused academic or social activities to be of high quality</i>	8
<i>I find the arrangements in the physical environment to be of high quality</i>	8
<i>I find the work of the Disabled Student Unit to be of high quality</i>	5
I find some services to be of high quality and others to be of low quality	6
I do not find the services provided by the higher education institution to be of high quality	4
I have no opinion	1

Upon examining Table 8., it is found that 14 participants consider the services for individuals with special needs provided by their institution as high-quality. Six participants find some services to be high-quality and others to be of low quality, four participants do not find the services to be of high quality, and one participant has no opinion. The majority of the participants find the services provided to students with special needs at their institutions to be of high quality, particularly in terms of student-focused or social activities. Similarly, they find the physical environment adjustments and the work of the Disabled Student Unit to be of high quality. Some of the participants' statements are as follows:

"We use a system where lectures can be replayed and listened to again, lecture notes can be accessed, subtitles can be added, and you can enlarge the font size. Adaptations are easily made as the university infrastructure is suitable." (P21)

"Our department underwent significant construction last summer. Our doors were widened for wheelchair access, ramps were built everywhere, and an elevator was installed. I think the necessary facilities have been provided. Specifically, for someone with a physical disability, there's no class, no professor's office, nothing that they cannot access. There's a sound at the door in the cafeteria that bothers us; it's apparently to indicate the door's location for the hearing-impaired." (P16)

"The accessibility coordinator works well. Frequent discussions with students occur focusing on individual needs, suggestions, and complaints. Professors are regularly sent informative emails. Individual meetings with faculty are conducted. They are carrying out efforts to increase awareness and understanding." (P04)

"I don't think we are sufficient in terms of physical architecture. If we're talking about an accessible campus, every corner of the campus should be ergonomic for an individual with a physical disability." (P11)

P14 stated the service he considers high quality as follows: "Particularly, efforts related to our Accessibility Unit have significantly accelerated over the past 3-4 years. The establishment of this unit, along with having a representative in every faculty, has notably enhanced our awareness on this matter." "In terms of services deemed to be of low quality, Faculty Member P14 stated: 'Although it would perhaps be beneficial for all our buildings to be more highly friendly for individuals with disabilities, our buildings are quite old.'"

P03 noted both strengths and weaknesses in services, stating: 'We have both earned the 'Orange Flag' and made strides in terms of physical accessibility, even winning awards for these efforts. However, this is not enough. While ease of physical access is indeed crucial, there are gaps in the availability of educational resources. For example, the absence of any resources in Braille for our students with visual impairments reveals a shortfall on our part.'"

"Basic walking, vision, and mental health services. All are insufficient." (P06)

"I don't have much information about the services." (P17)

Challenges Faced by Instructors at Their Higher Education Institutions

Instructors' perspectives were obtained concerning the challenges they face in higher education institutions regarding students with special needs. A theme around these challenges has been developed. These themes and their respective codes are presented in Table 9.

Table 9. Instructors' Thoughts on Challenges Encountered in Their Higher Education Institutions

Codes	<i>f</i>
I experience problems	22
<i>I experience problems during lectures</i>	11
<i>I experience problems during assessment</i>	9
<i>I experience problems due to physical conditions</i>	6
<i>I experience problems in communicating with the student</i>	4
I don't experience any problems	3

Upon reviewing Table 10, based on responses to the interview questions, 22 participants indicated they experienced problems during the educational process at their higher education institution, while three participants mentioned they did not experience any problems. Eleven participants mentioned they experienced problems during lectures due to reasons such as the inability to provide support during practical lessons, the lack of knowledge regarding the level of a student's impairment which led to difficulties in making adaptations, student absenteeism, students not being able to adapt to program lessons because of their impairments, students lagging behind their peers in class activities, and the faculty's inability to cater simultaneously to students with special needs and the rest of the class, among other issues. Some of the participants' statements are as follows:

"In classes like Material Design, students with disabilities face challenges in design and creative thinking according to their type of disability. Practical lessons are problematic. There are difficulties in one-on-one lessons involving pre-service teachers with special needs." (P21)

"Students may choose not to attend class or even fall asleep during it. They can struggle with theoretical subjects. Lack of interest or understanding can lead them to make noises, talk to themselves, or lay their heads down and sleep. These behaviors can disrupt the concentration and motivation of the instructor and other students." (P07)

"I have a visually impaired student, and the subject of instructional technology is a very visual one. Perhaps he could have been exempted from it. Alternatively, we could have considered different ways to present the material. How do you expect someone to design something they can't see?" (P19)

"Depending on the severity of the situation, there can be instances of high stress, which can lead to sudden outbursts. There's definitely no violence involved, but these abrupt emotional spikes can occur." (P22)

"Students might lag behind a bit, meaning we have to proceed more slowly with them compared to the rest of the class. This might be due to their inability to see or hear. For instance, when I have a class of 25 students, finding the right balance becomes challenging." (P27)

"When the student is unable to scan the text, we can't assess that skill. The student can't progress by reading at their own pace; someone else has to read for them, or they have to read it slowly and magnified, making it difficult to assess their knowledge. They might be able to pronounce words, yet they don't know how to spell them." (P26)

"I faced a challenge during an exam when I encountered a student whose special needs I was unaware of. We couldn't conduct the exam, and I had to offer a re-examination." (P28)

"While evaluating, should I be lenient? For instance, should I award a BB grade instead of the DD they might actually deserve? There are such dilemmas." (P15)

"The student tried to gain sympathy. They did this even during exams, saying things like, 'I can't remember the answer; can you mark it for me?' There were various such requests." (P19)

"Classes were mistakenly assigned to other floors." (P10)

"We don't have a physical environment where my visually impaired student can walk independently. There's a significant need for technological support." (P23)

"At first, I attributed his communication difficulties to other reasons. However, when I learned about his hearing impairment, I realized he probably couldn't hear my questions, which is why there was no interaction in the classroom." (P18)

"Perhaps there's a need for one-on-one attention, especially in crowded settings or laboratory classes. The student approached me during the breaks, so there wasn't any problem." (P17)

Reasons for the Problems Experienced by Instructors

The views of instructors have been gathered regarding the issues they encounter in relation to their students with special needs. A theme concerning the reasons for these problems has been established. The theme and codes are presented in Table 10.

Table 10. Views of instructors on the reasons for the issues they encounter

Codes	<i>f</i>
I believe I encounter these problems due to the type of student's disability	8
I believe I encounter these problems since I don't have sufficient information about students with special needs	6
I believe I encounter these problems because the necessary conditions for students with special needs are not met in higher education institutions	6
I believe I encounter these problems due to societal prejudice	3
I believe I encounter these problems as sufficient information and proper guidance are not provided to students with special needs	3

Upon examining Table 10., after investigating the issues faced by participants working in higher education institutions, a survey question was posed to gather their views on the reasons behind these issues. Analyzing the obtained data, eight participants stated that the issues arise due to the disability type of the student. Eight participants stated that the issues arise due to the inadequacy type of the student. Seven participants mentioned they encounter problems since they lack sufficient knowledge about students with special needs. Six participants believe that they face challenges as the necessary educational conditions for students with special needs are not provided. Three participants mentioned that the problems arise from societal prejudices, and three other participants stated that issues arise for students with special needs are not given sufficient information and proper guidance. Some of the participants' statements are as follows:

"The reason for their inadequacy is not just because of the student's hearing impairment. In addition to hearing, they also have intellectual problems. The biggest problem we encounter is multiple disabilities." (P03)

"Some students may not want to attend the class. Perhaps their psychology is not suitable at that moment, or they may want to do something else. If they cannot express this, they might cause behavioral problems in the class, saying they want to leave, and if they leave, they will be marked absent." (P07)

"We don't know how to provide language education to a student with special needs due to their disability." P20

"The source of the problem is that if the students have a special need, I should have known about its weeks before the class because I already have to make these adaptations when the class starts." (P26)

"They don't want to deal with it in conservatories, or they might not even know. We don't have the personnel to teach the class." (P07)

"For instance, we don't have a physical environment where my visually impaired student can walk on their own." (P23)

"The biggest challenges are faced in practical classes. For example, in a group practical lesson, pre-service teachers go to the practice one-on-one with a child. When they go to the practice with a child, they face communication problems. The institution they go to might not want them. We have difficulty finding institutions. They say, 'This student has a hearing impairment.' They tell, 'This student has a physical disability.' Other parents don't want the children to see them. They don't want to work with them." (P21)

"It's very important to direct the child to the right profession. So now, if our student can somehow pass the classes, they become an adult who shows normal development after graduation. Yet, they still cannot manage to even talk with an individual or maintain a conversation. In university choices, it's very important to choose the right program and the right department. Recognizing the child's interests, abilities, and hobbies is quite important." (P03)

Suggestions from Instructors for Improving the Education of Students with Special Needs

Suggestions have been gathered from instructors regarding how to improve the educational experiences of students with special needs. A theme concerning suggestions for enhancing the education of students with special needs has been formulated. The theme and codes are presented in Table 11.

Table 11.2 Suggestions from Instructors for Improving the Education of Students with Special Needs

Codes	<i>f</i>
Academic and administrative staff should receive training about individuals with special needs	19
Existing conditions of the school should be improved	13
<i>Physical conditions of the school should be improved</i>	6
<i>Administrative functioning of the school should be improved</i>	5
<i>Activities of the Disabled Student Unit should be improved</i>	4
Social awareness activities should be carried out	9
All kinds of support should be provided to students with special needs according to their needs	8
Other	2

Upon examining Table 11., it can be observed that 19 participants suggested that academic and administrative staff should receive training about individuals with special needs in order to improve the education of students with special needs. Thirteen participants indicated that the existing conditions of the school should be improved for students with special needs. Nine participants suggested that social awareness activities should be

conducted. Eight participants recommended that all kinds of support should be provided to students with special needs according to their individual requirements. Some of the participants' statements are as follows:

"In-service trainings should be provided to inform the university's academic and administrative staff. Information about the types of disabilities and the educational adaptations and approaches that should be used must be given." (P05)

"Academic and administrative staff should receive training in this area. For instance, separate trainings could be provided for assessment and evaluation, as well as for communication. It would be beneficial if a seminar or training were given to the instructors before the academic term starts. Considering my own students, I would like to know about their needs even before they communicate them to me." (P11)

"For example, classes can be equipped with technical facilities; however, there are assistive technologies that could help individuals with special needs. The environment can be integrated with such assistive technologies. For instance, door sensors could be installed, which would be useful for all individuals, much like ATMs and lavatories. The principles of universal design should be applied." (P18)

"Educational institutions should be prepared. The system that the university has established for students with special needs to be made efficient and functional." (P09)

"Both students and instructors should be informed." (P25)

"Awareness-raising activities could also be increased throughout the university." (P18)

"The psychological support and employment opportunities offered to students with special needs should be increased. I think it would be appropriate to create a social environment where students with special needs and students with typical development can come together." (P05)

"Choosing a profession based on the child's interests and abilities in both high school and university is my utmost priority. I argue that families and experts in this field should direct the student and the child accordingly. Grading and group distribution should be done for students with special needs without discrimination, otherwise, we end up marginalizing them." (P03)

Discussions

Based on the findings of this study, this chapter discusses the competencies of instructors in higher education institutions with students with special needs in their courses. The discussion also covers their perspectives on the quality of the higher education institutions where they work, the challenges they face, and their proposed solutions.

Despite more than half of the participants indicating that they have some knowledge about different types of disabilities, the challenges, and the needs of students with special needs, it becomes evident from the gathered data that the instructors are, in reality, not adequately informed or equipped. Nearly all participants reveal that they are unable to make the necessary adaptations in the teaching process due to gaps in their knowledge. Moreover, they are largely unaware of the legal rights of students with special needs and struggle to communicate effectively with these students (Hong and Himmel, 2009; Özsökmen, 2019; Partici, 2018). Participants lacking comprehensive knowledge about students with special needs were found only to have as much information as what was provided to them regarding their own students. This information is limited to basic facts about physical disabilities, cognitive disabilities, and neurodevelopmental disorders. It is seen in the findings of the study that these participants obtained their knowledge through hearsay and personal experiences. The lack or limited knowledge of instructors regarding the types and severity of disabilities of students with special needs can lead to issues. These issues include students not benefiting from suitable course materials, the necessary preparations not being made, the lack of protective measures, the violation of legal rights, and challenges in accessing an accessible learning environment. If the nature and severity of a student's disability are unknown, it can lead to problems in making necessary academic adjustments and ensuring student accessibility, among other issues. In relation to these challenges, a study conducted by Karakuş et al. (2017) supports the findings of this research, suggesting that instructors need to be better informed about individuals with special needs.

It has been observed that more than half of the participants were not informed about having a student with special needs enrolled in their classes. Such lack of information prevents instructors from making the necessary preparations and adaptations prior to classes, securing appropriate teaching materials, making physical accommodations in the classroom, and effectively communicating with their students. Yet, in higher education institutions, information systems, student affairs, and offices for students with disabilities can inform instructors about students with special needs enrolled in their courses. In this study, however, only ten participants were notified about having a student with special needs in their classes. It is known that higher education institutions have systems in place where information regarding the special needs of students is entered at the time of university registration. The expansion of these systems can enhance the notification of instructors about students with

special needs. Thus, through a more accessible platform, it is possible to prevent potential problems that students with special needs may face.

More than half of the participants stated that they received training/information on teaching students with special needs. The findings obtained from the study show that although the participants stated that they had previously received training on individuals with special needs, they were sometimes unable to cope with the problems they mentioned. This situation suggests that faculty members at higher education institutions need more training regarding individuals with special needs and academic adaptations.. The interviewed instructors indicated that these challenges could lead to student absenteeism, distancing from their departments, and even dropping out of school. Instructors try to contribute to the higher education of their students with special needs through their own efforts, however, they acknowledge that they fall significantly short in providing the necessary support that should be given to these students in higher education settings. Similar results were found in a study by Gaad and Almotairi (2013), where educators did not undergo professional training on communication with and instruction for students with special needs. Educators adopted a trial-and-error approach, allowing the students to "educate" the educators as they tried to provide education for individuals with special needs. These similar findings indicate potential shortcomings in planning, implementing, and evaluating appropriate educational content if instructors do not undergo the necessary training. However, regardless of whether instructors have students with special needs in their courses, it is expected that they should be knowledgeable about these students' legal rights, necessary academic adjustments, and communication methods. Having such knowledge is believed to enhance the readiness and preparedness of instructors (Bourke et al., 2000; Gibbons et al., 2015; Hughes et al., 2016; Holmqvist et al., 2019; Khattab Shahleh, 2021; Love et al., 2015; Zhang et al., 2018). For instructors teaching students with special needs to be adequately equipped, it is suggested that they consult the relevant units within higher education institutions to address areas where they fall short. Additionally, it is important that periodic assessments be conducted to examine the needs and challenges faced by both instructors and students with special needs in higher education settings. The subsequent actions and preventive measures that need to be taken should be communicated to higher authorities for effective resolution. This approach is thought to provide an integrated and accessible educational environment for students with special needs and is corroborated by existing literature (Burgstahler, 2020; Reardon et al., 2021; Rose et al., 2006; Gonçalves et al., 2014; Morina et al., 2017).

Evaluating the adaptations made by participating instructors, it becomes evident that not all are aware of the necessary adaptations outlined in the regulations for special education and higher education for disabled students. Instructors appear to make some modifications based on requests from students with special needs and advisories from units specializing in disabled student services. However, even when the adaptations are accurate, their implementation is often flawed. For instance, regulations stipulate that additional exam time granted for specific disabilities should not exceed one-third of the total exam duration. Yet, it has been observed that some instructors either allocate significantly more additional time or fail to provide any extra time at all, thereby not adhering to the prescribed guidelines. Another example pertains to the assessment of reading skills in foreign language instruction for a student with a visual impairment. In such cases, if the instructor reads the text aloud to the student, the assessment actually tests listening skills rather than reading skills. In scenarios like this, it may be necessary either to exempt the student from specific sections of the course or to employ an alternative evaluation tool that takes into account the student's actual capabilities. In another example, a student with Autism Spectrum Disorder was provided with questions nearly identical to those on the upcoming exam, thereby facilitating a high score based on rote memorization. In such cases, the reliability of the assessment is observed to be compromised. These examples indicate a lack of compliance with regulations, legal rights, and appropriate academic adaptations. Moreover, it has been found that the majority of the instructors make adaptations primarily in exams and assignments, and often make these adjustments right before the exams, feeling compelled due to laws and regulations. It has been observed that instructors lack awareness about what kinds of adaptations are necessary for students' exams and what alternative options exist. For instance, they are not aware that instead of using a proctor, accessible reading can be facilitated through electronic means or that an alternative to handwriting might include using a computer keyboard or dictation to enable an environment where the student feels more comfortable and uninhibited in self-expression. Exposing students with special needs to exams, test environments, and evaluation methods that are not tailored to their specific needs can adversely impact their academic performance. To avoid such outcomes, it is essential that adaptations are made according to the type of disability and the needs of individual students. The findings obtained from the study show that the adaptations made in teaching materials are often based on the instructor's experience with their students, and it has been noted that they are generally aware of adjustments only for their own students. Besides, participants also have expressed feeling

inadequately equipped to make suitable adaptations for students with different types of disabilities (Accardo et al., 2019; Barnard-Brak et al., 2010; Chan, 2016; Harrison et al., 2013; Lefler et al., 2023; Ju et al., 2017). It should not be expected that students with special needs arriving at higher education institutions are fully aware of all possible adaptations that can be made for them, nor should the responsibility lie solely with them to communicate these needs to their instructors as they take steps toward becoming independent individuals in higher education institutions, it is the responsibility of the faculty to provide an environment and curriculum tailored to their needs and to support them accordingly. Otherwise, it appears unlikely for students with special needs to achieve academic and social success and, subsequently, to become independent individuals.

Instructors often feel ill-equipped to teach students with special needs, primarily as they haven't received adequate training on the subject. The sentiment of inadequacy extends to making academic accommodations for these students. It's seen that their knowledge is limited, and they are uncertain about how to accommodate students with disabilities different from those they have previously encountered. Similar conclusions have been drawn from studies conducted in Finland. These studies indicate that educators in higher education are keen to understand how to identify the specific needs of students with disabilities, especially when these students haven't been formally diagnosed or haven't disclosed their condition to their instructors. While this lack of preparedness may be due to insufficient knowledge in identifying and providing education for students with special needs in higher education, it also reveals that inclusive/integrated education in higher education is not always readily accessible (Karakuş et al., 2017). Some participants have indicated that, although they make academic accommodations, these efforts are not sufficient for supporting the student both academically and professionally. The reason cited is that the chosen field of study in higher education may not be suitable for the student with special needs, and due to the student's existing deficiencies, they encounter challenges in academic and vocational acquisition. Consequently, it is imperative for universities to provide expert guidance and support to students with special needs when they are choosing their majors. This informed guidance will enable these students to enroll in departments that align with their competencies, thereby facilitating their academic success and eventually empowering them to become independent individuals with careers post-graduation (Chan, 2016; Christensen, 2020; Jones and Krumsvik, 2008; Sevinç and Çay, 2017). In a study exploring the reasons behind the academic department choices of university students with visual impairments, it is revealed that these students predominantly opt for

departments with a focus on verbal skills. This preference is attributed to the lack of adequate curriculum adaptations for quantitative subjects during their primary and high school educations. As a result, these students are more inclined towards verbally oriented fields (Partici, 2018). Although nearly half of the participants claimed they had implemented the necessary academic accommodations and adjustments, received positive feedback from students, complied with regulations regarding students with disabilities, and considered themselves competent to teach in the field of special education, only three participants stated that they had not faced any issues in educating students with special needs. This discrepancy highlights a potential inconsistency between educators' perceptions and the reality of their practices.

In the study conducted across seven universities, it was found that more than half of the instructors considered the implemented measures to be adequate, whereas nearly half did not find their institutions to be qualified and made suggestions for enhancing the educational experience of students with special needs. These suggestions largely consisted of providing training to academic and administrative staff, improving existing facilities, conducting societal awareness campaigns, and offering comprehensive support tailored to the students' needs. These recommendations underscore the necessity of improving the quality of higher education institutions where these students are enrolled. According to the laws and regulations regarding higher education that encompass individuals with special needs, if institutions' academic and administrative personnel do not implement the regulations ensuring the higher education rights of students with special needs, it is believed that the students are adversely affected. In the literature, it is clearly stated that institutions must implement legal regulations to create environments in higher education that support the education and training of students with special needs and provide opportunities for independent living skills (Coriale et al., 2012; Karakuş et al., 2017; Kaya, 2019; Mengi, 2019; Sevinç and Çay, 2017; Tekin, 2019; Yusof et al., 2020).

The research conducted across seven different universities reveals that almost all of the nine instructors involved encounter challenges. Despite regarding their instruction and affiliated institutions as competent, these educators reported facing difficulties. Participants emphasized that many of these issues arose during lessons, pointing to communication barriers between students and instructors, as well as struggles in making academic adjustments. Such conditions are believed to potentially have a negative academic impact on students with special needs. Challenges also extend to evaluation procedures like exams and

assignments. This is perceived to arise from faculty's reluctance or inability to utilize appropriate assessment tools, make the necessary test or assignment modifications, and assign the necessary aids such as proctors or scribes for the students. Additionally, physical conditions were also identified as an issue. The lack of accommodations to make the school or classroom settings physically accessible for the students is believed to be a primary cause of these challenges. When participants were asked about the possible causes of the challenges they faced, the responses showed a similar distribution across the board. A significant number of participants pointed to the specific type of student's disability as a major factor leading to challenges. Instructors attributed the issues they faced to various reasons, including lack of adequate knowledge about the student's condition, the institution's failure to provide necessary accommodations, societal prejudices leading to challenges, and the absence of sufficient information and proper guidance for students with special needs. The causes of these problems cited by the participants appear to align closely with the issues reported in the existing literature from our country (Gündoğar, 2020; Karakuş et al., 2017; Mengi, 2019; Özsökmen, 2019; Partici, 2018).

Participants have suggested that in order to improve the quality of education for students with special needs, both academic and administrative staff should be educated about individuals with special needs. This recommendation is consistent with findings in the existing literature (Holmqvist et al., 2019; Karakuş et al., 2017; Muhamad Zaki and Ismail, 2021; Özsökmen, 2019; Partici, 2018). Thus, it is believed that academic and administrative personnel in higher education institutions would be better equipped to communicate with students with special needs, observe their legal rights, and successfully implement academic adaptations. This includes classroom practices and activities, the physical environment of both the classroom and the institution, and the assessments through homework and exams. Such preparedness is expected to alleviate challenges and contribute more effectively to the education of students with special needs. Instructors recommend improvements in the physical accessibility of their institutions, administrative processes, and the operations of the Units for Students with Disabilities. They also advocate for the provision of psychological, social, and housing support, as well as scholarship opportunities tailored to the needs of students with special needs. In this context, it is believed that students with special needs will not face any problems related to accessibility within the institution where they study. If the administrative operations and the activities of the Disabled Student Units are enhanced, from the first day they enroll in the university until the day they graduate, they will be able to

attend their courses without any issues. Their requests and suggestions are expected to be addressed more swiftly; they can participate in social activities and benefit from the necessary psychological, social, and housing support. Lastly, the participants recommend that awareness-raising activities be conducted to include faculty, administrative staff, and students undergoing typical development in the institutions where they work. These proposed awareness activities are considered extremely important for the full integration of students with special needs into the institutions where they study. They aim to facilitate the effective implementation of inclusive education initiatives and, in short, enable full integration into societal life.

Considering the National Action Plan on Educational Practices through Mainstreaming/Inclusion, published in 2022-2026 by the General Directorate of Special Education and Guidance Services in our country, it is assumed that increasing the qualified participation of students in general education environments will enable them to come to higher education systems more easily and more adequately (Özel Eğitim ve Rehberlik Hizmetleri Genel Müdürlüğü, 2023). It is recommended that similar practices can be planned at the higher education level and a plan such as the Mainstreaming/Integration Plan be prepared in higher education. At the same time, it is thought that students who have not yet started university will be informed together with their families and placed in the right programs and departments under mainstreaming and integration practices, and by taking these action plans into consideration, individuals with special needs will be guided correctly before university and ensure that they study in appropriate university departments.

Conclusion and Suggestions

The study examines the opinions and suggestions of instructors working in universities in İzmir regarding their experiences, challenges, and proposed solutions concerning students with special needs enrolled in their courses. To generalize the findings, the same study can be replicated in different cities with different participants and researchers. Similar studies can also be conducted with administrative staff or typically developing students who are enrolled in higher education institutions. Research employing different methodologies and larger sample sizes can also be conducted. Based on the needs expressed by instructors, studies could explore the effectiveness of education programs designed by special education experts to enhance the academic success of students with special needs. Research can be conducted with instructors who have not previously had students with special needs in their classes, and

the findings can be compared with the results of this study. A comprehensive study could be carried out to evaluate the competence of instructors in teaching students with special needs.

Typically developing students, as well as academic and administrative staff in higher education institutions, can be informed about students with special needs through awareness-raising activities. Training can be provided at regular intervals to instructors in higher education institutions on in-class applications, assignments, assessments, and possible adaptations in the physical environment of the class and institution for students with special needs. Higher education institutions can take necessary measures to ensure accessibility tailored to the needs of students with special needs.

Compliance with Ethical Standards

Disclosure of potential conflicts of interest

The author(s) declared no potential conflicts of interest with respect to the research, authorship, and/or publication of this article.

Funding

The author(s) received no financial support for the research, author-ship, and/or publication of this article.

CRedit author statement

Ayşegül GÖKDAĞ contributed to determining the subject of the study, collecting the data, analyzing the data and reporting the study. Özge ÜNLÜ contributed to the research design, data analysis and reporting of the study.

Research involving Human Participants and/or Animals

The Social and Humanities Scientific Research and Publication Ethics Committee of İzmir Democracy University has determined that this research is ethically appropriate, as per their decision number 2022/07-05, dated 06/07/2022.

Yükseköğretim Kurumlarında Özel Gereksinimli Öğrencisi Olan Öğretim Elemanlarının Karşılaştıkları Sorunlar ve Çözüm Önerileri

Özet:

Araştırmanın amacı yükseköğretim kurumlarında derslerinde özel gereksinimli öğrencilere eğitim sunan öğretim elemanlarının karşılaştıkları sorunları ve bu sorunlara getirdikleri çözüm önerilerini belirlemektir. Amaç doğrultusunda, öğretim elemanlarının özel gereksinimli öğrencilere ilişkin bilgi düzeylerine, karşılaştıkları sorunlara, bu sorunların sebeplerine ve yaşanan sorunlara yönelik çözüm önerilerine, özel gereksinimli öğrencilerine verdikleri eğitime ilişkin kendilerini ve kurumlarını değerlendirmelerine yönelik görüşlerine başvurulmuştur. Araştırmada nitel araştırma yöntemlerinden betimleyici fenomenolojik desen kullanılmıştır. Araştırmanın katılımcılarını Türkiye'nin İzmir ilindeki yükseköğretim kurumlarında görev yapmakta olan ve derslerinde özel gereksinimli öğrencilere eğitim sunan 25 öğretim elemanı oluşturmaktadır. Veriler yarı yapılandırılmış görüşme formu kullanılarak toplanmış ve betimsel içerik analizi yöntemi kullanılarak incelenmiştir. Araştırmanın bulguları öğretim elemanlarının derslerinde bulunan özel gereksinimli öğrencilerinin yetersizlik türleriyle ilgili yeterli bilgiye sahip olmadıkları, akademik uyarlamalara ilişkin kendilerini nitelikli hissetmedikleri, görev yapmakta oldukları yükseköğretim kurumunun erişilebilirlik açısından yeterli düzeyde olmadığı, akademik ve idari personelin farkındalığının düşük olduğu görülmüştür. Bulgular doğrultusunda farkındalığı artırıcı çalışmaları, üniversitede görev yapan personelin engelli öğrencilerin özelliklerine ve yapılabilecek uyarlamalara ilişkin eğitimleri ve erişilebilirlik konusunda düzenlemeleri kapsayan çalışmaların yapılması gerektiği sonucuna ulaşılmıştır ve öneriler geliştirilmiştir.

Anahtar kelimeler: akademik uyarlamalar, öğretim elemanları, yükseköğretimdeki özel gereksinimli öğrenciler

References

- Accardo, A. L., Kuder, S. J., & Woodruff, J. (2019). Accommodations and support services preferred by college students with autism spectrum disorder. *Autism: The International Journal Of Research And Practice*, 23(3), 574-583.
<https://doi.org/10.1177/13623613187604>
- Barnard-Brak, L., Lechtenberger, D., & Lan, W. Y. (2010). Accommodation strategies of college students with disabilities. *Qualitative Report*, 15(2), 411-429.
<https://doi.org/10.46743/2160-3715/2010.1158>
- Başkale, H. (2016). Nitel arařtırmalarda geerlik, gvenirlik ve rneklem byklgnn belirlenmesi [Determination of validity, reliability and sample size in qualitative studies]. *Journal of Nursing Effect (JNEF)*, 9(1), 23-28.
<https://dergipark.org.tr/tr/pub/deuhfed/issue/46796/586804>
- Bohning, K. (2000). Curricular and instructional adaptations for special needs students in the general education setting. *Graduate Research Papers*. 421.
<https://scholarsworks.uni.edu/grp/421>
- Bourke, A. B., Strehorn, K. C., & Silver, P. (2000). Faculty members' provision of instructional accommodations to students with ID. *Journal Of Learning Disabilities*, 33(1), 26-32. <https://doi.org/10.1177/0022219400033001>
- Burgstahler, S. E. (2020). *Creating Inclusive Learning Opportunities In Higher Education: A Universal Design Toolkit*. Harvard Education Press.
- Chan, V. (2016). Special needs: Scholastic disability accommodations from k-12 and transitions to higher education. *Current Psychiatry Reports*. 18(2):1-7.
<https://doi.org/10.1007/s11920-015-0645-2>
- Christensen, B. M. (2020). *Preparing students with disabilities for post-secondary life* [Unpublished master's thesis]. California State University.
- Cohen, L., Manion, L., & Morrison, K. (2018). *Research Methods in Education* (8th Ed.). Routledge. <https://doi.org/10.4324/9781315456539>
- Coriale, L., Larson, G., & Robertson, J. (2012). Exploring the educational experience of a social work student with a disability: A narrative. *Social Work Education*, 31(4), 422-434. <https://doi.org/10.1080/02615479.2011.564611>
- Costello-Harris, V. A. (2019). Evidence of inclusion on college websites: academic accommodations and human support. *Journal Of Postsecondary Education And Disability*, 32(3), 263-278. <https://eric.ed.gov/?id=EJ1236850>

- Creswell, J. W., & Creswell, J. D. (2018). *Research Design: Qualitative, Quantitative, And Mixed Methods Approaches*. Sage Publications.
- Diken, İ. H. (2021). Otizm spektrum bozukluğu (OSB) olan öğrenciler [Students with autism spectrum disorder (ASD)]. In İ. H. Diken (Ed.), *Özel eğitime gereksinimi olan öğrenciler ve özel eğitim [Students with special needs and special education]* (pp. 433-465). Pegem Akademi.
- Gaad, E., & Almotairi, M. (2013). Inclusion of student with special needs within higher education in UAE: issues and challenges. *Journal Of International Education Research*, 9(4), 287-292. <https://doi.org/10.19030/jier.v9i4.8080>
- Gibbons, M. M., Cihak, D. F., Mynatt, B., & Wilhoit, B. E. (2015). Faculty and student attitudes toward postsecondary education for students with intellectual disabilities and autism. *Journal Of Postsecondary Education And Disability*, 28(2), 149-162. <https://eric.ed.gov/?id=EJ1074661>
- Gonçalves, T., Borges, L., & Martins, M. (2014). Students with special educational needs in higher education reflections around inclusion [Conference e-book]. *Proceedings of Braga 2014 Embracing Inclusive Approaches for Children and Youth with Special Education Needs Conference*, 156. Braga, Portugal. https://includ-ed.eu/sites/default/files/documents/braga_2014.pdf
- Guba, E. G., & Lincoln, Y. S. (1982). Epistemological and methodological bases of naturalistic inquiry. *Educational Communication And Technology Journal*, 30(4), 233-252. <https://doi.org/10.1007/BF02765185>
- Gündoğar, A. N. (2020). *Yükseköğretime devam eden görme engelli öğrencilere yönelik öğretimsel uyarlamalar hakkındaki görüşler [Opinions about the instructional adaptations regarding the visually impaired students who continue higher education]* [Unpublished master's thesis]. Hasan Kalyoncu University.
- Hall, T., Vue, G., Strangman, N., & Meyer, A. (2003). *Differentiated instruction and implications for UDL implementation*. Wakefield, MA: National Center on Accessing The General Curriculum. <https://www.cast.org/products-services/resources/2014/ncac-differentiated-instruction-udl>
- Harrison, J. R., Bunford, N., Evans, S. W., & Owens, J. S. (2013). Educational accommodations for students with behavioral challenges: a systematic review of the literature. *Review Of Educational Research*, 83(4), 551-597. <https://doi.org/10.3102/0034654313497517>

- Holmqvist, M., Anderson, L., & Helstrm, L. (2019). Teacher educators' self-reported preparedness to teach students with special educational needs in higher education. *Problems Of Education In The 21st Century*, 77(5), 584-597. <https://doi.org/10.33225/pec/19.77.584>
- Hughes, E., Chitiyo, M., Itimu-Phiri, A., & Montgomery, K. (2016). Assessing the special education professional development needs of northern Malawian schoolteachers. *British Journal Of Special Education*, 43(2), 159-177. <https://doi.org/10.1111/1467-8578.12128>
- Jones, L. O., & Krumsvik, R. (2008). Special needs students in higher education. *Us-China Education Review*, 5(3), 58-67. <https://eric.ed.gov/?id=ED502659>
- Karakuş, ., Kalaycı Kırılıođlu, H. İ., Kırılıođlu, M., & Başer, D. (2017). niversitelerde engelli đrencilerin eđitim alanında karşılaştıkları sorunlar: Selçuk niversitesi rneđi [Problems that are encountered by the students with disabled in universities: sample of University of Selcuk]. *International Journal of Human Sciences*, 14(3), 2577-2589. <https://www.j-humansciences.com/ojs/index.php/IJHS/article/view/4701>
- Khattab Shahleh, O. (2021). *Engelli đrencilerin yksekđretim sreçlerindeki kolaylaştıracı ve engelleyici unsurlar: İstanbul niversitesi rneđi [Facilitators and barriers of students with disabilities in their higher education processes: Istanbul University sample]* [Unpublished master's thesis]. Istanbul University.
- Klenotich, A. (2022). *Exploring students with disabilities experiences in the classroom at midwestern community college* [Unpublished master's thesis]. St. Cloud State University.
- Kurth, J. A., & Keegan, L. (2014). Development and use of curricular adaptations for students receiving special education services. *The Journal Of Special Education*, 48(3), 191-203. <https://doi.org/10.1177/0022466912464782>
- Lefler, E. K., Alacha, H. F., Weed, B. M., Reeble, C. J., & Garner, A. M. (2023). Professor and peer perceptions of requests for academic accommodations in college: an examination of ADHD and specific learning disorder. *Psychological Reports*. <https://doi.org/10.1177/00332941231156821>
- Love, T., Kreiser, N., Camargo, E., Grubbs, M., Kim, E. J., Burge, P., & Culver, S. (2015). Stem faculty experiences with students with disabilities at a land grant institution. *Journal Of Education and Training Studies*, 3(1), 27-38. <https://eric.ed.gov/?id=EJ1054903>

- Lovett, B., & Nelson, J. M. (2021). Systematic review: educational accommodations for children and adolescents with attention-deficit/hyperactivity disorder. *Journal Of The American Academy Of Child & Adolescent Psychiatry*, 60(4), 448-457.
<https://doi.org/10.1016/j.jaac.2020.07.891>
- Mengi, A. (2019). Engelli öğrencilerin üniversite eğitimi sürecinde karşılaştıkları güçlükler: Van Yüzüncü Yıl Üniversitesi örneği [Difficulties faced by disabled students during university education: The case of Van Yüzüncü Yıl University]. *Van Yüzüncü Yıl University Journal of Education*, 16(1), 147-170.
<http://dx.doi.org/10.23891/efdyyu.2019.122>
- Mills, G. E., & Gay, L. R. (2012). *Educational research competencies for analysis and applications* (12th ed.). Pearson.
- Morina, A., Lopez-Gavira, R., & Morgado, B. (2017). How do Spanish disability support offices contribute to inclusive education in the university? *Disability & Society*, 32(10), 1608-1626. <https://doi.org/10.1080/09687599.2017.1361812>
- Muhamad Zaki, N. H., & Ismail, Z. (2021). Towards inclusive education for special need students in higher education from the perspective of faculty members: a systematic literature review. *Asian Journal Of University Education (AJUE)*, 17(4), 201-211.
<https://doi.org/10.24191/ajue.v17i4.16189>
- Newman, L. A., & Madaus, J. W. (2015). An analysis of factors related to receipt of accommodations and services by postsecondary students with disabilities. *Remedial And Special Education*, 26(4), 208-219. <https://doi.org/10.1177/0741932515572912>
- Özel Eğitim Hizmetleri Yönetmeliği (ÖEHY) [Special Education Services Regulation]. (2018, July 7). *T.C. Resmî Gazete [Official Gazette of Turkish Republic]*, 30471.
<https://www.resmigazete.gov.tr/eskiler/2018/07/20180707-8.htm>
- Özel Eğitim ve Rehberlik Hizmetleri Genel Müdürlüğü [General Directorate of Special Education and Guidance Services] (2023, June 1). Kaynaştırma/bütünleştirme yoluyla eğitim uygulamaları ulusal eylem planı (2022-2026) [National action plan on educational practices through mainstreaming/inclusion (2022-2026)].
<https://orgm.meb.gov.tr/www/kaynastirmabutunlestirme-yoluyla-egitim-uygulamalari-ulusal-eylem-planı-2022-2026-kapsamındaki-calismalar/icerik/2348>
- Özsökmen, A. (2019). *Görme engelli öğrencisi olan konservatuvar eğitimcilerinin eğitim sürecine ilişkin görüşlerinin betimlenmesi [The description of the interpretation of the*

- educators in the conservatory who have partially sighted students about the education process] [Unpublished master's thesis]. Afyon Kocatepe University.
- Partici, R. (2018). *Üniversitelerde eğitim gören engelli öğrencilerin eğitimleri sırasında karşılaştıkları problemler: Kırıkkale Üniversitesi örneği [The problems of the disabled students that have education at the universities during the training (Kırıkkale University example)]* [Unpublished master's thesis]. Kırıkkale University.
- Patton, M. Q. (2014). *Qualitative research and evaluation methods. Integrating theory and practice* (4th ed.). Sage Publications.
- Reardon, K., Bromley, K. W., Unruh, D. (2021). The promise of universal design in postsecondary education: a literature review. *Journal Of Postsecondary Education And Disability*, 34(3), 209-221. <https://files.eric.ed.gov/fulltext/EJ1325431.pdf>
- Rose, D. H., Harbour, W. S., Johnston, C. S., Daley, S. G., & Abarbanell, L. (2006). Universal design for learning in postsecondary education: Reflections on principles and their application. *Journal Of Postsecondary Education And Disability*, 19(2), 135-151. <https://eric.ed.gov/?id=ej844630>
- Sevinç, İ., & Çay, M. (2017). Fiziksel engelli bireylerin üniversite eğitimi sırasında karşılaştıkları sorunlar (Akdeniz Üniversitesi örneği) [Problems of physically disabled persons faced during university education (The case study of Akdeniz University)]. *Selcuk University Journal of Social and Technical Researches*, 13, 219-238. <http://dx.doi.org/10.23891/efdyyu.2019.122>
- Silverman, D. (2011). *Qualitative Research* (3rd ed.). Sage Publications.
- Smith, D. D., & Tyler, N.C. (2009). *Introduction to special education. Making a difference* (7th ed.). Pearson.
- Spooner, F., Knight, V. F., Browder, D. M., & Smith, B. R. (2011). Evidence-based practice for teaching academics to students with severe developmental disabilities. *Remedial And Special Education*, 33(6), 374-387. <https://doi.org/10.1177/0741932511421634>
- Tekin, H. H. (2019). Engelli üniversite öğrencilerinin eğitim yaşamındaki sorunları: Konya örneği [Problems of Disabled University Students During Their Educational Life: Konya Sample]. *Manas Journal of Social Studies*, 8(2), 1531-1548. <https://doi.org/10.33206/mjss.479132>
- Williams, J. (2001). Adaptations and accommodations for students with disabilities: Resources you can use. *NICHCY Bibliography* 15, 2-14. <https://files.eric.ed.gov/fulltext/ED455648.pdf>

- Yang, Y., & Ma, J. (2022). A study on the significance of UDL-based teaching practices for students with intellectual disabilities. *Advances In Educational Technology And Psychology*, 6, 17-22. <http://dx.doi.org/10.23977/aetp.2022.061203>
- Yıldırım, A., & Şimşek, H. (2021). *Sosyal Bilimlerde Nitel Araştırma Yöntemleri [Qualitative Research Methodology in Social Sciences]*. Seçkin Akademik ve Mesleki Yayınlar.
- Yusof, Y., Chan, C. C., Hillaluddin, A. H., Ramli, F. Z. A. R., & Saad, Z. M. (2020). Improving inclusion of students with disabilities in Malaysian higher education. *Disability & Society*, 35(7), 1145-1170. <https://doi.org/10.1080/09687599.2019.1667304>
- Yüksek Öğretim Bilgi Yönetim Sistemi [Higher Education Information Management System] (2022). <https://istatistik.yok.gov.tr/>
- Yüksek Öğretim Kurulu [Council of Higher Education] (YÖK) (2023). *Yüksek Öğretim Kurulu tarihçe*. <https://www.yok.gov.tr/kurumsal/tarihce>
- Yüksek Öğretim Kurumları Engelliler Danışma ve Koordinasyon Yönetmeliği [Higher Education Institutions Disabled Students Advisory and Coordination Regulation] (YÖKEDKY) (2010, August 14). *T.C. Resmî Gazete [Official Gazette of Turkish Republic]*, 27672. https://www.mevzuat.gov.tr/mevzuat?MevzuatNo=14214&MevzuatTur=7&MevzuatTe_rtip=5
- Zeybek, Ö. (2015). *İlköğretim okullarındaki İngilizce öğretmenlerinin kaynaştırma uygulamalarına ilişkin görüş ve önerileri [Opinions and suggestions of English teachers in primary schools about inclusive education]* [Unpublished master's thesis]. Anadolu University.
- Zhang, Y., Rosen, S., Cheng, L., & Li, J. (2018). Inclusive higher education for students with disabilities in China: what do the university teachers think? *Higher Education Studies, Canadian Center Of Science And Education*, 8(4), 104-115. <https://doi.org/10.5539/Hes.V8n4p104>