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# INCLUSION, BARRIERS, AND NEEDS OF STUDENTS WITH DISABILITIES IN THE ACADEMIC CONTEXT

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***ABSTRACT:*** *This study aims to analyze the process of academic adaptation for students with disabilities, specifically identifying the key barriers and needs they encounter within higher education. The research focused on obstacles related to infrastructure and the attitudes of other university actors. We also investigated the educational needs and academic performance of the sample. The methodology employed was quantitative, utilizing a survey questionnaire. The sample is one of convenience. The findings reveal that the primary barriers are physical, including the lack of properly adapted tables, compliant ramps, and appropriate access routes. Regarding the social environment, students with disabilities did not perceive discriminatory situations, reporting instead that they feel accepted and integrated within the groups they act in. Most participants actively engage in volunteer and extracurricular activities, which indicates successful social integration in various settings. However, a problematic finding is the low rate of membership in student associations, which may contribute to inadequate representation of students with disabilities at the university level. Academic performance is high, with the majority of respondents reporting a grade average above 8 for the previous academic year and demonstrating high participation in courses and seminars. Satisfaction with educational accessibility—particularly counselling services, social support, learning platforms, and assessment accessibility—was determined to be medium. In conclusion, our findings underscore the need for continued implementation of specific measures to enhance physical accessibility and foster the comprehensive inclusion of students with disabilities.*

***Keywords:*** *Academic adaptation; inclusion; academic performance of students with disabilities; educational accessibility.*

## Introduction

In the modern academic landscape, the focus on disability has completely shifted. It has moved from the idea of simply having access to the building to the idea of inclusion, that is, ensuring that the student can fully participate in the academic environment and thrive.

While higher education institutions increasingly recognize diversity as a strength, students with disabilities often face a unique set of challenges that can make the academic environment exclusionary in some situations. True inclusion requires increased attention to barriers, not just physical ones, but also invisible obstacles found in attitudes, curricula, and spaces [Gin et al., 2022].

Therefore, while inclusion is a recognized goal, there is a real need to better understand students' practical experiences. So, this study primarily aims to analyze the academic adaptation process for students with disabilities in the academic environment.

## 1. Theoretical Framework

Studies in this field often mention barriers related to infrastructure and the physical environment. This situation is also due to the location of universities in historic buildings, which are not adapted or modified to the current needs of students with disabilities, like elevators, ramps, grab bars, etc. [Fernández-Batanero et al., 2022]. Also, other studies have emphasized the need for increased attention to building elements such as: entrances to buildings, toilets, signs (visual and audio), ramps and doors with dimensions in accordance with the necessary standards, non-existent thresholds or ones that can be easily crossed, adapted desks [Ashraf & Rahat, 2023a; García-González et al., 2021; Mamuladze et al., 2023; Milic Babic & Dowling, 2015].

The literature also highlights the important role of teachers in the inclusion process of students with disabilities [Hewett et al., 2017]. This involves adapting the timetable, offering online course options, and diversifying assessment

methods to meet the needs of students with disabilities [Aguirre et al., 2021; Moswela & Mukhopadhyay, 2011].

At the same time, social integration and peer support are determining factors for university retention of students with disabilities [Moriña et al., 2020]. Beyond the objective reality, the way students with disabilities perceive the educational environment is decisive. Interaction with teachers and peers depends not only on the opportunities offered, but especially on the student's perception. If they feel a strong stigma or perceive a distant attitude from teachers, communication barriers will persist [Edwards et al., 2022]. Also, the perceptions of people with disabilities have not always been inclusive. One recent study highlights the fact that they experience cultural stigmas and social exclusion [Liban & Ahsan, 2024]. In the same vein, the idea of spoiled identity is also discussed, because there is a tendency for a person to be defined by their disability and not by the qualities they have [Ashraf & Rahat, 2023b].

In order to have a good environment at university, students identify psychological and social support as a fundamental necessity, not just an optional benefit. This translates into the need for an individualized curriculum, personal assistance and specialized guidance, along with an adequate technical infrastructure, with which both students and their families are known [Simonova & Luchinina, 2022].

Moreover, psychological barriers (anxiety, trauma etc.) can block the assimilation of information even in the case of physical presence in classes. In this context, absence should not be interpreted as disinterest, but as a limitation imposed by the state of health, the optimal solution being the implementation of asynchronous learning [Edwards et al., 2022]. Another need is to create a safe university environment, where there is no marginalization or denigration from colleagues or even staff. Therefore, students with disabilities need to be included in social activities, not treated with pity or isolated [Holzbauer & Conrad, 2010; Simonova & Luchinina, 2022].

Although less discussed, there is another important aspect that can bring economic insecurity, which can amplify the perception of disability as a major obstacle. So, the difficulty of accessing internships or part-time jobs often confirms their fears about their professional future [Ashraf & Rahat, 2023b].

In conclusion, given the complexity of the challenges highlighted, from infrastructure-related obstacles to emotional impact, this investigative approach aims to provide a clear and substantiated perspective on the reality experienced by these students in the university environment.

## 2. Methodology

Drawing upon the comprehensive review of the existing literature, the following research objectives have been formulated:
RO1: Identification of the barriers faced by students with disabilities in higher education;
RO2: Identification of the attitudes of university staff and students towards students with disabilities, from their perspective;
RO3: Analysis of the required academic needs of students with disabilities within the university environment.

This research is designed as an exploratory study, utilizing a survey based on a questionnaire as the primary data collection instrument. The respondents participating in the study are students currently enrolled in higher education, ensuring that the findings reflect their active and ongoing academic experiences.

### *Sample strategy and structure*

A convenience sample involving 18 students (11 females and 7 males), with an average age of 26 years, 14 bachelor's degrees, and 4 master's degrees, was used for the research.

Regarding the faculties they are enrolled in, the data shows that most of them are studying at the Faculty of Social and Humanities and the Faculty of Medicine (Fig. 1).

In terms of disability degree, most of the study participants have severe disability (10 of the respondents), according to the certificate they hold (Fig. 2).

## 3. Research Findings

### 3.1. Barriers related to infrastructure

Regarding the pre-coded, multiple-choice question on "What barriers do you face in the academic environment?", the majority of

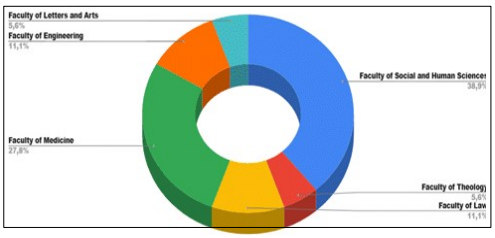


Fig. 1. Distribution of respondents by faculty

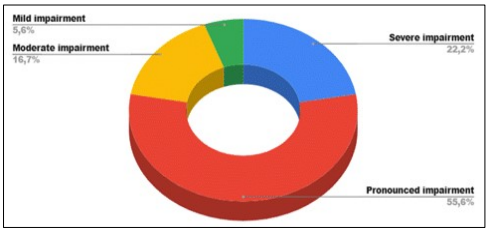


Fig. 2. Distribution of respondents by disability degree

respondents selected the following options:

- Desks or benches not adapted for people with disabilities: 44,4%
- Online learning platforms without assistive technologies: 33,3%
- Non-compliant ramps at building: 27.8%
- Toilets not adapted for people with disabilities: 27.8%
- Presence of inaccessible thresholds: 27.8%
- Canteen without adapted infrastructure: 27.8%.

The most frequent difficulty reported pertains to unadopted desks or benches, which are a minimum requirement for conducting course and seminar activities.

Concerning the open-ended question, "What is the greatest difficulty you face and how could it be solved?", responses were diverse. However, the majority converged on the difficulty of accessing lecture halls due to unadapted infrastructure:

*"the only difficulty is the ramp inside the faculty, which is made of slippery glossy tiles";*
*"I am bothered by the difficulty of reaching the classroom";*
*"stairs to the upper floors or basement are very inconvenient, with inadequate railings".*

Proposed solutions included: "applying anti-slip strips", ensuring constant operation of elevators, constructing new elevators, and organizing courses in a hybrid format (physical and online) to allow participation from personal comfort.

Another significant issue raised was the lack of medical education within the academic community, specifically regarding *"essential information about first aid in case of certain medical conditions"*. This results in a lack of confidence that the environment could provide instant medical assistance. Furthermore, limited employment options for people with disabilities after graduation were another aspect mentioned.

Regarding barriers, as the literature mentions, too, infrastructure is an important condition that needs to be adapted to the needs of students with disabilities. The physical environment is the first factor that will facilitate or make difficult the accessibility to the educational process.

### 3.2. Attitudes of University Staff and Students

Attitudes were measured using a 5-point Likert scale (where 1 means ”to a very small extent” and 5 means ”to a very large extent”). For each statement, the arithmetic mean was calculated. The results are as follows:

- I am included in decision-making at the specialization and year of study level: score 3.88
- I am marginalized by my colleagues: score 1.33
- I am ignored by professors: score 1.16
- I am ignored by colleagues: score 1.27
- Others lack confidence in my abilities: score 1.55
- Professors exhibit overly protective behavior: score 1.66
- Colleagues exhibit overly protective behavior: score 1.72

The low mean scores for the above statements reflect a non-discriminatory attitude from the academic collective towards students with disabilities. For the two statements where they are asked to evaluate whether they feel ignored by their professors and colleagues, the arithmetic means are equal to 1.16 and 1.27. This shows that they feel ignored to a very small extent, which is a positive aspect. This shows that students with disabilities feel included in the university environment. In other words, students do not perceive a low degree of differential treatment from students and teachers, but they also report a high degree of inclusion in the decision-making process (mean 3.88).

These results suggest that supportive relationships are maintained without compromising student autonomy.

### 3.3. Level of Academic Integration

Regarding the perceived level of integration into the academic community, we still use the same 5-point Likert scale, where 1 means ”to a very small extent” and 5 means ”to a very large extent. This time, we chose to observe the percentage of respondents who feel included in the academic environment. Thus, from the analyzed data, it can be observed that a cumulative percentage of 72.6% of respondents feel to a great extent and to a very great extent included (38.9% and 33.3%, respectively) (Fig. 3).

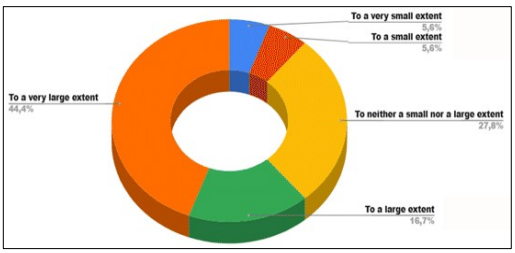


Fig. 3. The perception of inclusion in academic community

On the same 5-point Likert scale, we measure interaction with colleagues in general and in different contexts.

So, when we talk about interaction, most students with disabilities do it for completing assignments and projects (mean of 3.72), followed closely by situations requiring clarification and task resolution (means of 3.55 and 3.5, respectively). The least frequent interaction is for spending leisure time (mean of 3.16). Overall, responses were close to the midpoint, suggesting rather balanced interactions, even if the collaboration tends to be functional and task-oriented, driven by academic necessities

In addition to the idea of interaction, we also wanted to observe preferences for spending time at the university. In this case, the respondents were split: 50% preferred spending time with students without disabilities, and 50% preferred spending time with both students with and without disabilities. No respondent reported spending university time exclusively with disabled peers.

The total absence of respondents who isolate themselves exclusively with disabled peers is a powerful indicator that the students do not perceive the need for an isolated social environment. This preference reflects a significant level of comfort, belonging and integration.

The above-mentioned idea is also supported by the following results related to participation in extracurricular activities, which also measure academic integration:

- 11 respondents reported participating in volunteer activities
- 11 respondents reported participating in extracurricular activities
- Only 3 students reported being part of a student association.

The majority of respondents participated in volunteering and general extracurricular activities, which confirms the successful integration of students with disabilities into the university community. It is also noted that from the current sample, only three students are members of a student association. This result suggests that students with disabilities are underrepresented in the university's formal decision-making process.

### 3.4. Academic Adaptation Needs

The extent to which the university offers various services was measured using the same 5-point Likert scale. Students evaluated the next statement, and the results in terms of mean score were:

- Counselling services for students with disabilities: score 3.22
- Alternative evaluation methods that consider the student's disability: score 3.44
- Modifications to make exams more accessible: score 3.11
- Social support from the university/ faculty: 3.35
- Platforms adapted to the student's disability: 3.03

The midpoint scores suggest that respondents perceive the availability of educational accessibility measures as neither low nor high/great. The most recognized measures are the use of alternative evaluation methods and the offered social support.

Also, the need for assistive technologies is highly pronounced, with students deeming them very useful (a score of 8.88 on a 1-10 scale, where 1 means ”not useful at all” and 10 means ”very useful”).

A critical observation is the contrast between the moderate satisfaction with institutional services and the extremely high perceived need for assistive technologies (8.88). This highlights that students recognize technology as an essential tool for ensuring academic equity and reducing

disparities between students with and without disabilities.

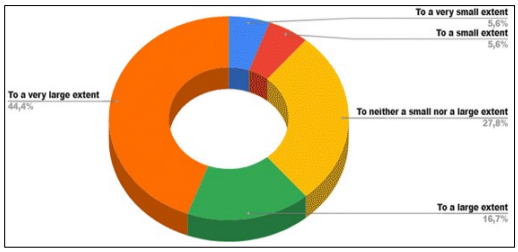


Fig. 4. The contribution of assistive technology to reducing disparities between students with and without disabilities

### 3.5. Academic Performance

The majority of respondents have a general average grade from the previous year between 8 and 9.55 and declare attending courses and seminars frequently or very frequently. They reported being consistently active in class and successfully completing all requirements in a timely manner. This can be clear evidence of the students' strong resilience and high intrinsic motivation. Also, the majority are very determined or determined to complete their studies, with only one person reporting being undecided.

This success, achieved despite recognized moderate physical and institutional barriers, suggests that when effective (even partial) support and accommodation are in place, students with disabilities are fully capable of achieving excellent academic results, directly challenging any assumptions about their competence. Also, academic performance and the trust to complete the studies could be an indicator of inclusion in the academic environment.

## Conclusions and discussions

Taking into account each research objective, several essential conclusions were outlined, which can contribute to understanding the current reality of inclusion for students with disabilities in higher education.

First, the identified obstacles are predominantly physical, such as the lack of appropriate desks, compliant ramps, and adapted access routes. This shows that sometimes students with disabilities will need someone to help them. Because of this, they will not feel autonomous and will need to make sure they have someone to turn to in case of need. Therefore, these barriers not only create inconvenience, they pose a serious threat to academic equity, sometimes limiting their full participation in activities. These findings are sustained by the current literature addressing the barriers related to infrastructure and the physical environment for students with disabilities [Ashraf & Rahat, 2023a; García-González et al., 2021; Fernández-Batanero et al., 2022; Mamuladze et al., 2023; Milic Babic & Dowling, 2015].

Second, regarding the attitude of the university community, respondents did not perceive discriminatory situations, reporting that they feel accepted, integrated into their groups, and included. This positive social environment helps students with disabilities to shift their focus from their disabilities to the educational process and makes them feel part of the university environment. It also contributes significantly to their intrinsic motivation, as well as to their overall psychological comfort. The creation of this inclusive environment has also led to the involvement of many students in volunteer activities, as well as extracurricular activities.

This result is a positive aspect underlined by other studies that sustain the idea that a perception of students related to the attitude of the academic community as being non-discriminatory is an important factor that facilitates communication and integration [Edwards et al., 2022].

Unfortunately, a noted issue is the low membership in student associations, which may lead to poor representation of students with disabilities at the university level. Basically, this limits their ability to make their needs known at the institutional level, especially regarding physical accessibility and the acquisition of necessary assistive technology.

Third, the student evaluations of educational accessibility provided by the faculty are around the midpoint of the Likert scale, highlighting an uncertain situation. The midpoint evaluation of educational accessibility signifies that while support measures are in place, they are not consistently effective or comprehensive enough to satisfy student needs fully. So this aspect highlights the need for constant improvements in this regard. If we also take into account the high perceived need for assistive technologies, then we can see the segment where improvements would be needed. These kinds of needs are underlined by other researchers in their studies, too [Simonova & Luchinina, 2022].

Our study results demonstrate once again that it is important to streamline the educational process for students with disabilities, precisely to motivate them to develop certain skills and support them in the educational process.

## Study Limitations

The limitations include the small sample size and potential respondent reluctance to answer the questionnaire.

It is anticipated that these issues will diminish as such studies become more frequent.

The topic also asks for a qualitative approach to complete the image.

The situation of students with disabilities could be very different depending on the type of disability, which makes it important to explore the personal perspective and experience, to collect detailed opinions and suggestions.

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