STUDYING AT HIGHER EDUCATION INSTITUTIONS IN POLAND AS SEEN BY STUDENTS WITH DISABILITIES IN THE CONTEXT OF THE GEOGRAPHICAL MODEL OF DISABILITY

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Abstract: The subject addressed in the present paper is important for the current social and educational policy regarding persons with disabilities. The development of the accessible education concept should be based on the geographical model of disability, whose main principle is to focus on the varied social needs and adjust the conditions of the geographical environment accordingly rather than to concentrate on the disability itself. The main aim of the study was to recognise the opinions of students with disabilities about studying at Polish higher education institutions (HEI). The study was based on the results of online interviews including standardised questions (open- and close-ended). The time scope of the study covers the years 2019 and 2021. The research has shown that some students hide their disability until it is visible. As a result, they do not receive adequate support and limit the achievement of goals that were the main motivation for studying. Measures taken to support students with different needs at HEIs must have a systemic nature and be addressed to the entire academic community, as well as to the society.

Keywords: accessibility, persons with disabilities, models of disability, higher education institutions

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Introduction

The development of modern societies is based on access to knowledge and one of the measures of this development is society's attitude to persons with disabilities. By ratifying the Convention on the Rights of Persons with Disabilities (CRPD, 2012), Poland acknowledged the right of people with disabilities (PwDs) to education and committed to providing an inclusive education system allowing for integration at all levels. Furthermore, Poland ensured that disabled persons would have access to general tertiary education, without discrimination and on an equal basis with others. One of the core obligations imposed on the States Parties to the CRPD is to raise awareness concerning PwDs throughout society and combat stereotypes, prejudices, and harmful practices against these persons[1]. At the tertiary education level, the inclusive education model has been fully implemented, enabling students with disabilities

[1] Article 8 (1)(a, b) of the Convention on the Rights of Persons with Disabilities, 2012.

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to receive education from the same teachers, at the same higher education institutions (HEIs), and during the same classes as their non-disabled peers. To strengthen the guarantee of education without discrimination and on the basis of equal opportunity, the Law on Higher Education Act was amended in 2018 (Act of 20 July 2018 – The Law on Higher Education and Science).

Creating conditions that would allow persons with disabilities to fully participate in the educational process and scientific research became one of the important tasks of HEIs. As a result, HEIs had to change their regulations in such a way as to clearly define the adjustment and adequate implementation of the teaching process to meet the particular needs of students with disabilities, including the adaptation of the study conditions to the type of disability. The number of students with disabilities has also been influenced by the abolition of general entrance exams for admission to HEIs and greater possibilities to conduct classes using modern technologies. Accessibility of HEIs has also been fostered by new investments supported by, e.g. European Funds.

With a broader understanding of this subject and a slightly philosophical approach to it, one may also interpret accessibility as the constant concern of a human continuously seeking comfort (Gonda 2021). Accessible education allows for free access to space, facilities and services, and their independent use by persons with disabilities. The needs of PwDs are not treated as special, but rather as some of the regular needs found in society, which should be reflected in universal design. The basic principles of universal design include: (1) equitable use by people with diverse abilities, (2) flexibility in use, (3) simple and intuitive use, (4) perceptible information, (5) tolerance for error, (6) low physical effort and (7) size and space for approach and use (Wysocki 2010; Sztobryn-Giercuszkiewicz 2021). The main objective of accessible education is to stop focusing on the features of disability, concentrating instead on the varied social needs and adapting the conditions of the geographical environment (social and physical) to those needs. Education must meet the condition of accessibility, i.e. the quality of being achievable, at one's disposal. As regards persons with disabilities, accessibility denotes the possibility of using the physical environment, transport, ICT (and other facilities and services on an equal basis with others (*European Disability Strategy 2010–2020* COM (2010), 636, Brussels: 7).

Despite many activities aimed at universal design and the accessibility of HEIs for PwDs, the research results in this area still indicate many problems. For example, the research of Kalka and Lockiewicz (2017) showed that students with dyslexia demonstrated lower levels of: life satisfaction, positive emotions, resiliency, perceived/expected emotional and practical support, and general social support. The research conducted by Lejzerowicz (2022) on disabled students showed their low level of social inclusion. In the conclusions of her research, Żuchowska Skiba (2018) stated that PwDs to a large extent still treat disability as a specific stigma that excludes them from society. The process of social inclusion in higher education is complex and possible primarily by respecting the needs and opinions of PwDs; hence, the main aim of the research was to recognise opinions of students with disabilities about studying at Polish HEIs.

Theoretical background

Geographical model of disability

The approach towards disability has greatly changed over the years. This process reflects the way disabled persons are perceived by society and themselves. The most concise way to define this change is the paradigm shift from 'object' to 'subject'. Societies have started to become sufficiently mature to perceive their role in creating the reality in which persons with disabilities live. Nowadays, equal opportunities and accessibility constitute the required standard of thinking about persons with disabilities. However, in practice, various perspectives remain intertwined.

According to the World Report on Disability (2011), disability is a complex multidimensional experience reflecting one's bodily characteristics and the features of the environment in which they live. The concepts of perceiving disability have been expressed in numerous models, including medical, social, geographical and economic ones. These models differ in their approach to disability (Table 1).

The geographical model of disability was developed in the course of socio-spatial research,

Table 1. Models of disability.

Medical	Social	Geographical	Economic
Personal problem	Social issues	Spatial issues	Demand issues
Medical care	Social integration	Spatial integration	Economic integration
Individual treatment	Social action	Accessibility of places and spaces	Product development
Professional help	Individual and collective responsibility	Exploitation of GIS to evaluate accessibility of space regarding individual needs	Innovation in design and function
Personal adjustment	Environmental manipulation	Universal design	Universal design
Focus on individual behaviour	Social attitude	Person as integral part of geographical environment	Culture (customer service)
Care	Human rights	Human rights	Competitive advantage
Health care policy	Politics, equality of opportunity	Politics, market forces	Market forces
Personal exclusion, adaptation	Integration, social change	Inclusion	Exclusion, integration, inclusion

Source: Forrester and Davis (2011), Zajadacz and Śniadek (2014).

which indicated multiple factors limiting access to spaces and public facilities, leading to the social marginalisation of PwDs (Buttler, Bowlby 1997; Gaines 2004: 80). The conceptualisation of this model was founded on the previous experience (related to the functioning of the medical and social models) and focused mainly on the relation 'disabled person – geographical space' (Chouinard et al. 2010; Zajadacz, Śniadek 2014). Geographers associate disability-causing factors (their disabling nature) with both social and spatial aspects of the human environment and promote the idea of more inclusive solutions that offer access to spaces, and a full spectrum of social life, including various degrees and types of disability. Chouinard et al. (2010) assume that limited ability is caused by both individual determinants (associated with a particular type of disability) and those present in one's physical and social environment, which are a source of restrictions in the relation 'disabled person–environment (social, physical)'. The geographical model of disability has adopted a significant paradigm of treating the needs associated with various degrees and types of disability not as 'special', but rather as some of the regular needs found in contemporary society. Therefore, their specific nature should be taken into account in universal design, when creating maximally accessible facilities, sites, and public services (Imrie 2012).

The geographical model of disability forms the basis for accessible education, higher education being one of its elements. The fundamental aim of inclusive higher education is to provide physical, psychological, and social accessibility in teaching and learning at Polish HEIs so that everyone has the same right and access to studies, irrespective of their characteristics.

Equal study rights for everyone

The context of equal study rights for everyone according to Karhu (2013) refers to inclusion in higher education and its main principle, which is paying attention to the diversity of the student body in practices and learning environments. In addition, inclusive higher education refers to:

- physical environment (buildings, learning materials, teaching methods and equipment which meet the diverse needs of students);
- social environment (knowledge, skills and attitudes of the learning community encourage participation and provide study opportunities for all members of the community);
- psychological environment (diversity is an asset for the higher education community).

The basic requirements of students with disabilities include access to:

- interpersonal communication with members of the academic community,
- the structured academic environment,
- printed or electronic educational materials,
- the board and presentations in classrooms and laboratories,
- exams/tests,
- information and website content.

The accessibility services provision model proposed by Kouroupetroglou et al. (2011) is founded on a student-oriented approach. It was created based on the analysis of the requirements of students with disabilities in higher education. Furthermore, the model has an impact on their academic environment and the accessibility policy within and outside HEIs. The main pillar of this model is the Accessibility Unit, which provides many supportive services, organised into three tiers according to their 'proximity' to the student – accessibility to: services addressed directly to the student, services applied to the student's environment and promoting services.

According to the concept of Kouroupetroglou et al. (2011), accessibility service provision model for students with disabilities includes three tiers. The services included in the first tier directly pertain to the specific requirements of persons with disabilities (students). They have a direct impact on a number of their activities, i.e.:

- participation in the educational process,
- interpersonal communication with other students, professors and HEI staff,
- transport and accommodation,
- interaction with the academic environment (e.g. libraries, laboratories).

The first tier comprises the following services:

1. Students Need Recording Service,
2. Abilities Evaluation Service,
3. Personal Assistive Technologies Service,
4. Transport Service,
5. Accessible Educational Material Service,
6. Psychological Counselling Service,
7. Sign Language Interpreting and Video Relay Service,
8. Volunteerism Service.

The second tier comprises services related to the improvement of physical accessibility to buildings, and training of volunteers and university staff to develop guidelines on the use of libraries and laboratories. These are the following services:

1. Buildings' Accessibility Service,
2. Accessible Libraries and Labs Service,
3. Guidelines Service,
4. Staff and Volunteers Training Service.

The third tier of the model includes services promoting education accessibility at HEIs. These services are to disseminate good practices in the academic community, educational system or even other communities outside the HEI. This influence can be achieved through several activities such as web accessibility evaluations, meetings and events, know-how dissemination, and research projects. The third-tier services are:

1. Web Accessibility Evaluation Service,
2. Events Service,
3. Know-How Dissemination Service,
4. Research Service.

The adjustment of numerous HEIs to the needs of persons with disabilities is often possible because of the earmarked subsidies from the government. In Poland, in 2019, a competition was announced within Activity 12 'Studies without Barriers' of the governmental programme 'Accessibility Plus' for the years 2018–2025. The main aim of the competition was to implement activities eliminating barriers to access to higher education by supporting organisational changes, raising awareness and developing competencies of university staff for the accessibility of the educational offer to persons with disabilities. Activities to be carried out depend on one of the three available paths.

The MINI path offered the opportunity to implement basic activities aiming at creating an HEI accessible to everyone. Examples of such activities within the MINI path include employment of a Rector's Proxy for persons with disabilities or creating a post for a person in charge of HEI accessibility and increasing the competencies of the university staff through participation in national thematic conferences related to accessibility.

The MIDI path was to result in a considerable improvement in a HEI's accessibility for persons with disabilities, as compared to the minimum level, through an increase in the accessibility of internal procedures, especially admissions, education and research, and dissemination of solutions providing accessibility in organisational units that are found lacking in this area. Examples of activities within this path include implementation of adjusted forms of physical education classes together with training provided to people responsible for conducting such classes, employment of educational advisors/counsellors, and additional remuneration for foreign language teachers, creators of sports classes and psychologists providing mental health support.

The MAXI path was intended for HEIs which play the leading role in implementing the idea of

accessibility. Within the MAXI path, it was possible to implement projects that proposed original solutions leading to a further increase in the accessibility of a given HEI and its environment. These solutions had to be based on the previous experience of the HEI in this area, e.g. offering support to new groups of stakeholders, developing specialist services, which had not been available at the HEI before or extending the scope of the existing services, and establishing *think tanks* that would work on new tools making it possible to expand the accessibility of the HEI and its environment. The financing from the MAXI path was available only for those HEIs whose Accessibility Unit had functioned for at least five years and which provided education to at least 150 students with disabilities.

The problem of research focused on inclusion of students with disabilities in higher education

According to Sachs and Schreuer (2011), "education in general, and post-secondary education in particular, is a predictor of gainful employment in meaningful occupations, opening opportunities for career development, hence for quality of life. This finding is even more significant for people with physical and sensory disabilities, whose range of employment is limited to jobs that require fewer physical abilities and skills" (Kendall, Terry 1996; McGeary et al. 2003). Accessibility to education is therefore especially important for PwDs (Inbar 1991, 2003; Drake et al. 2000; Getzel et al. 2001; Inbar 2003; Dorwick et al. 2005; Rimmerman, Araten-Bergman 2005). Research by Sachs and Schreuer (2011) showed that "although the academic achievements and experiences of students with and without disability are notably similar, the gap in social inclusion and involvement in extra-curricular activities is still wide. Apparently, accessibility rather than ability is the explanation for academic differences between students with and without disabilities. The former face difficulties in meeting the higher education requirements embedded in Western culture, which values time and imposes high speed on all people as a measure of productivity and excellence" (Lerner et al. 2003).

Kimball et al. (2016) in the review chapter entitled: "Students with disabilities in higher education: A review of the literature and an agenda for future research" note that "the literature overemphasizes to some extent the college experience for 'traditional' students making the transition from high school, rather than also considering the experiences of a vast array of 'non-traditional' students. (...) The vast heterogeneity of disability types within the population of students with disabilities makes conclusions and recommendations based on the literature difficult (...). While we have tried to be clear when specific subpopulations were the subjects of studies we reviewed, what the literature actually tells us may at best be unclear and at worst be misleading when we simultaneously review research on students with disabilities as diverse as dyslexia, blindness and depression" (Kimball et al. 2016: 133).

In recommendations for major research directions, Kimball et al. (2016) point out that the possibilities for future qualitative research are vast. Given the marginalisation of students with disabilities through mechanisms such as stigma and outright discrimination, methods that aim to address connections between lived experiences and social structures are particularly promising. Here once again, research addressing other underrepresented groups on college campuses can be used as models. Qualitative methods capable of testing and reconstructing existing conceptual models would prove helpful in this regard. Finally, qualitative researchers should consider the capacity of their research to give voice to students with disabilities. Participatory action research methods are already in use to some extent with students with disabilities (e.g. Rattray et al. 2008; Gillies, Dupuis 2013) but can be used to a greater extent. "These qualitative approaches and other methods that allow for the intentional exploration of differential experiences within and across disabilities would be particularly impactful on the campus-level and could also serve to catalyze additional person-centred quantitative research" (Kimball et al. 2016: 135).

Materials and methods

The study was based on an analysis of online interviews including standardised questions (open- and close-ended). The time scope of the

study covered the years 2019 and 2021. Owing to the COVID-19 pandemic, the in-depth interviews were conducted in March 2021 via MS TEAMS. The study included 27 students with disabilities from eight HEIs. The test was of an availability nature. The students represented 20 different majors: technical (16 students), social (7 students) and economic (4 students). They studied at various degree levels, from BA (9 students) and BSc (10 students) programmes to MA programmes (8 students). The respondents differed in terms of the degree and type of disability. Within the group studied, there were slightly more women (15) than men (12). They were between 19–35 years old. The group was small, yet quite heterogeneous. The research was carried out on a small sample, the description of the results consisted of standardised qualitative analyses, without reference to numerical values. The research questions posed included the following:

Q1: What problems do you encounter?
Q2: What motivated you to pursue higher education?
Q3: What makes studying difficult?
Q4: Do you seek assistance from the Office or Proxy for persons with disabilities?
Q5: Do you have any problems with managing your administrative affairs at the HEI?
Q6: Have you ever experienced any stressful situations at the HEI due to your disability?
Q7: What would you like to change/improve at your HEI so that it better meets the needs of persons with disabilities?

Results

The number of students with disabilities at Polish HEIs is difficult to determine, because students are not obliged to report the fact of disability. However, they can do it, especially when they expect education to be rationally adjusted to their individual needs. When deciding to pursue higher education, students with disabilities, just like their non-disabled peers, are faced with numerous choices. These decisions pertain not only to the HEI itself and a given major but also to the mode of study.

The most serious problem reported by the participants of the study is the exclusion of persons with disabilities from the group of students at certain HEIs. This practice, to a varying degree, is most commonly encountered at specialist HEIs or courses with a narrow educational profile (universities of physical education, fine arts, maritime, medical schools, and courses taught at these HEIs, e.g. physiotherapy), where the academic staff is deeply convinced that these schools are not intended for students with disabilities. Sometimes this exclusion is institutionalised in the form of specific provisions in the study regulations (excluding persons with disabilities from the group of prospective candidates or limiting this group to people with a specific degree of disability) or commissions, whose task is to verify the ability of individual candidates or students. The consequence of the problems described above is that some of the students hide their disability unless it is visible. As a result, they do not receive adequate support or it is sometimes provided unofficially. Nowadays, enabling devices and technologies allow persons with disabilities to pursue many professions that were previously inaccessible to them. Thus, any potential limitations as regards the accessibility of tertiary education must at all times be based on objective and rational arguments, and pertain to individual persons, rather than groups of PwDs treated as a whole.

It is worth emphasising that a HEI is obliged to provide support to PwDs early at the admission stage. A streamlined admission process is to be treated as the first step towards higher education, which will allow persons with disabilities to unlock their potential in the future. This is associated with enormous benefits, as higher education increases the odds of finding a job, although it is not a determinant of employment. The motivations for pursuing higher education by persons with disabilities are varied. The analysis of answers to the question: '**What motivated you to pursue higher education?**' revealed that the respondents mentioned: better career prospects after graduation, opportunity for personal development, pursuit of interest, money (possibility of higher salary), change of environment, new friends, independence from parents, prestige and possibility of rehabilitation.

Answers to the next question '**What makes studying difficult?**' uncovered the following issues: disability, health, financial problems and a lack of understanding from others. Less frequent

answers included: accommodation problems, family situations, or intolerance.

There was a common belief among the respondents about the necessity to adapt the HEI infrastructure to the needs of persons with disabilities. The technical barriers listed by the respondents included the lack of adjusted elevators, ramps, etc., accessibility inside classrooms and laboratories, high-contrast signage of communication routes, and induction loops. However, no such problems have been reported like the digital accessibility of the HEI's internet website and toilets for PwDs. As for the accessibility of technological aids—most of the answers in this category pointed to the maladjustments of teaching materials, i.e. photocopying of notes or a lack of large print.

A coordinator who offers assistance in solving administrative problems (e.g. individual course of study) and provides psychological support plays an important role for students with disabilities. At most HEIs, there are support offices or organisations for students with disabilities, which help these persons participate in the local community. When asked about '**whether they seek assistance from the Office or Proxy for persons with disabilities**', the respondents most often replied 'sometimes', 'several times a year' or 'never'. This stems from the unwillingness of students with disabilities to reveal their health conditions and from the problems related to the protection of personal data (Act of 29 August 1997 on the protection of personal data).

Another important issue concerns assistance provided by the administrative staff. When answering the question '**Do you have any problems with managing your administrative affairs at the HEI?**', the respondents provided several comments. These mainly pertained to the bureaucracy encountered at their respective HEIs: '*Every time I have a minor problem to deal with, I have to submit applications to the Dean*', '*There are stairs leading to the Dean's Office*' and, which is particularly unsettling, to a lack of goodwill: '*It is difficult to obtain assistance with filling out documents at the Dean's Office. Obtaining a given document requires several visits and waiting in long queues.*'

Students with disabilities can apply for institutional support. To do so, they must present a disability certificate. In many cases, where disability is non-obvious, students do not reveal that they have such a certificate. Interestingly, a vast majority of the respondents said they did not need any support. Several people pointed out the need for rehabilitation or physical education classes for students with disabilities. The remaining answers were varied. Generally, the respondents were positive about the level of psychological support.

The next open question was: '**Have you ever experienced any stressful situations at the HEI due to your disability?**' It was alarming to find that the respondents complained about humiliation and refusal to be given help. This was expressed in several comments like: '*When my health condition was very serious, the HEI additionally complicated the situation and caused me more stress*'. However, there were also some comforting comments such as: '*I only experience understanding and willingness to help*'.

The obtained answers to the question '**What would you like to change/improve at your HEI so that it better meets the needs of persons with disabilities?**', as well as the theoretical models discussed, suggest that students with disabilities need an environment that would allow them to function just like other students, i.e. architectural accessibility, orientation training for PwDs and disability awareness training for the other members of the academic community, better communication, psychological support, accessibility of audio materials and proper signage.

A trivialised problem is the impact of architectural barriers on the social isolation of persons with disabilities. The adjustment of side entrances to buildings or installing elevators away from the front part of the building makes students with disabilities use 'other routes' in the HEI premises than their non-disabled peers. As regards the elimination of architectural barriers, students with disabilities should be included in the process of universal design and acceptance of new investments. This is important, as knowledge about the principles of universal design is poor. This notion refers to the design of buildings, programmes, and services so that they can be useful for everyone to the maximum possible extent, without the necessity of adapting them to the needs of persons with disabilities.

Conclusion

The geographical model of disability abolishes social divisions into PwDs and non-disabled people. Its main assumption is based on geodiversity, i.e. perceiving the entire spectrum of diversity of components of the natural environment, including its integral part and the subject – human. Rational adaptation of the natural and social environment to the needs of PwDs is a continuous process. The development of social inclusion requires the involvement of the whole of society. Clear definition of one's needs and the expected forms of adapting the conditions of studying to PwDs at HEI enables the implementation of the expected solutions in practice. Unfortunately, many people refuse to take part in studies like this. Generally, it was difficult to get in direct contact with students with disabilities. Very often, they do not want to talk and discuss their disability.

The research was qualitative in nature and made it possible to demonstrate key problematic issues for social inclusion in universities through interviews and open-ended questions. These include the problem reported by the participants of the study, which is the exclusion of PwDs from the group of students. The consequence of this is that some students hide their disability until it is visible. As a result, they do not receive adequate support and limit the achievement of goals that were the main motivation for studying. It can also cause the mentioned difficulties in studying – 'lack of understanding from others'.

In the light of the presented results, priority actions aimed at increasing the availability of HEIs for PwDs include disability awareness training for all members of the academic community. There is still much room for improvement, especially in the area of education and social awareness about the needs and rights of persons with disabilities. The same stereotypical notions and trite opinions are continuously repeated not only in the academic community but also in the general public sphere. The voice of persons with disabilities remains at the margin of the public debate.

Research conducted in Poland has provided information about the implementation of multifaceted changes, which gradually improve the situation of students with disabilities at Polish HEIs. However, it also needs to be stressed that the optimisation of study conditions (eliminating architectural barriers, adjusting programmes, regulations, etc.) should be accompanied by changes in mentality within the entire society.

Challenges related to the adjustment of Polish HEIs to the needs of students with disabilities include raising the awareness and improving the knowledge of research, teaching, administrative and technical staff of how persons with various types of disability function and incorporating these aspects in the academic system of training and promotional activities and teacher training programmes.

In the context of increasing the accessibility of HEIs, what is also worth discussing in advance is the subject of so-called cultural disability, of cultural adaptation of foreign students and inhabitants, constituting a source of difficulties in the general public sphere, which Europe is facing today. Measures taken to support students with different needs at HEIs must have a systemic nature and be addressed to the entire academic community, as well as to the society.

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