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AND ANALYSIS
IN EDUCATIONAL RESEARCH

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School Accessibility Assessment Questionnaire (KODS) – Presentation of the Tool and of Its Application

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Abstract

Problem: The aim of the study was to develop and validate the School Accessibility Assessment Questionnaire (KODS) to assess the degree of accessibility of the school environment for students with disabilities and additional learning needs. *Method:* The tool consists of two parts: KODS-A to assess the accessibility of a school in general and KODS-B to assess accessibility for a specific student. A total of 462 Polish teachers and 1,302 parents took part in the

survey, the former assessing the accessibility of schools for 3,838 students, and the latter – for 1,387 students. *Results*: The analyses confirmed the three-factor structure of the tool including architectural, didactic and socio-emotional accessibility. The KODS showed satisfactory psychometric properties, including reliability and validity. The results indicated significant differences in accessibility scores by type of school, educational stage and assessor. *Conclusion*: The KODS can serve as a tool for a comprehensive assessment of school accessibility and as a component of the School Functional Assessment of students.

Keywords: school functional assessment, inclusive education, accessibility, special educational needs.

Introduction

Accessible education is a process in which every student has equal access to educational resources, helping them to develop their resources and to cope with difficulties. Accessibility encompasses various aspects, most often considered to include physical and digital accessibility as well as didactic accessibility, related to the implementation of the curriculum (Bright, 2022). In order to achieve this, it is necessary to remove mental, architectural, communication and social barriers, as well as to make adjustments and modifications necessary for curriculum implementation (Domagała-Zyśk, 2018), to proactively ensure communication and content accessibility, which also involves using modern technologies, and finally to differentiate the forms of content delivery and the ways of assessing the achievement of learning outcomes, which should be adapted to students' individual preferences and abilities.

Accessible education for students with disabilities and other additional, diverse needs is one of the pillars of inclusive education (Gajdzica et al., 2024). Needs with regard to educational accessibility have been postulated in Poland for two decades now, particularly in connection with Poland's 2012 ratification of the Convention on the Rights of Persons with Disabilities (UN, 2006) and the Act on Ensuring Accessibility for Persons with Special Needs (2019). Authors writing about schools accessible for students with various disabilities have included Wdówik (2009) as well as Małachowska and Tarwacki (2019), while the accessibility model proposed in the Convention involving the use of universal design in learning has been postulated for instance by Domagała-Zyśk (2015; 2021), Cichocka-Segiet, Mostowski, and Rutkowski

(2019) as well as Knopik, Papuda-Dolińska, Wiejak, and Krasowicz-Kupis (2021), among others. Accessibility is nowadays postulated at every stage of education, including university education (Domagała-Zyśk, 2023).

An important aspect involves the process of assessing the accessibility of education, both in general terms (in line with the call for "school accessible for all") as well as assessing the accessibility of education in a particular facility for a particular student who may have individual, diverse or additional (nonstandard) developmental or educational needs. Assistance in this process can be provided by the School Functional Assessment model, which involves a process of assessing students' needs and capabilities to prepare a process of developmental, educational and, if necessary, also specialist support (Knopik & Domagała-Zyśk, 2021). The ICF model used in Poland (International Classification of Functioning, Disability and Health, WHO, 2001) takes into account factors referring both to the individual's functioning and disabilities and to the context. Assessment of the former concerns the scope of barriers and needs related to body functions and structures as well as the scope of activities and participation, while assessment of the context includes analysis of personal factors, related to individual differences, and of environmental factors. Over the recent years, there has been a strong increase in work on the functional assessment model, with new tools and procedures being developed for the assessment of students of different ages, particularly in terms of assessing activities and participation (Domagała-Zyśk et al., 2022, Otrębski et al., 2022, Gajdzica et al., 2024). Relatively few studies, however, have addressed the understanding and mechanisms for assessing environmental factors.

The environmental factors that determine individual functioning are presented in detail in the ICF in the form of several dozen codes (ICF, 2001, pp. 171–208). These relate, among other things, to the products and technologies used by the individual, physical characteristics, life environment, as well as social support from loved ones, social attitudes, and systemic support. Guidance for the assessment of a range of environmental factors is also provided in the Accessible School Model (Model Dostępnej Szkoły, 2022), which calls for accessibility to be assessed in the architectural and educational/social dimensions. Educational accessibility is also indirectly assessed in the Raising the Achievement of all Learners self-review questionnaire (2021), developed in many languages by the European Agency for Special Needs and Inclusive Edu-

cation (ORE, 2021; Jachimczak & Podgórska-Jachnik, 2023, pp. 141–148; Byra & Gajdzica, 2024). The proposed model assesses the following dimensions of the school's work: the inclusive education conceptualisation, support for learning, the role of leaders, the extent of student participation, support of the curriculum development process, the extent of the school's cooperation with parents and interagency collaboration, and the extent of support for teachers and other school staff. In practice, scales or scorecards are also used to assess particular aspects of accessibility, such as the Facility Accessibility Scorecard (Karta dostępności obiektów, 2021) developed in the Lodz community.

An analysis of the existing research literature and of educational practice makes it possible to conclude that there is a need for a tool to assess the accessibility of the school environment, both in general terms and in relation to individual students' needs. In response to this need, the next section contains a presentation of the School Accessibility Assessment Questionnaire, of its psychometric properties and of its applicability to educational practice.

Tool design

The School Accessibility Assessment Questionnaire (KODS) is a tool used to determine the extent in which a school meets the requirements of accessibility for students with disabilities and additional, diverse educational needs. At the same time, it also makes it possible to assess the degree of accessibility of the school environment for a student participating in the School Functional Assessment process. The KODS consists of two compatible parts that directly address these two objectives: a) an overall assessment of the school's accessibility, and b) an assessment of accessibility for a specific student included in the School Functional Assessment. The tool formulates 42 statements (21 statements for each part) that relate to individual accessibility criteria. The statements are rated on the following scale: YES, NO, NOT APPLICA-BLE. In the first part (KODS-A): YES means that the school meets the given accessibility criterion, NO, on the other hand, indicates that the school does not meet the given accessibility criterion. In the second part (KODS-B): YES means that the student needs specific support, which is provided in the school (the school meets the given accessibility criterion); NO means that the student needs specific support, which is not provided in the school (the

school does not meet the given accessibility criterion); while NOT APPLI-CABLE means that the student does not need the support described in the given accessibility criterion.

The School Accessibility Assessment Questionnaire (KODS) consists of three subscales that define the levels of accessibility of the school environment being assessed: Architectural accessibility; Didactic accessibility; Socioemotional accessibility. The statements each of them includes were developed in a process consisting of several stages. Firstly, the literature on the principles of accessible education was analysed, together with an analysis of the practical solutions applied in Polish and foreign inclusive schools, at various levels of education. As a result, a database of accessibility indicators was created, with more than 100 items. The subsequent step involved a discussion in a group of competent judges: six individuals, i.e. five educators and a psychologist, specialists in the field of inclusive education, to reduce the number of indicators while satisfying the three-factor model adopted following the literature (Bright, 2022). A tool consisting of 21 items was created in this process. The tool was subsequently evaluated by three practitioners (teachers), with a view to adapting the description language to the competences of the tool's users, supposed to include both teachers (i.e., persons who completed formal pedagogical education) and students' parents. It should be added that the validation procedure described in this article involved asking the users of the tool (teachers and parents) about their potential suggestions regarding changes, but no such suggestions were obtained.

Testing the basic psychometric properties of the KODS

The School Accessibility Assessment Questionnaire (KODS) was tested for its basic psychometric properties: confirmation of the theoretically proposed internal structure; reliability coefficients, theoretical validity and collations with variables that should differentiate the individual elements in line with the assumptions. These variables were considered to include: the school type (mainstream/with inclusive classes); the stage of education (primary school levels 1 to 3, primary school levels 4 to 6, primary school levels 7 and 8, secondary school); the respondent filling in the KODS (teacher, parent).

Respondent group

The tool was tested with 462 teachers and 1,302 parents from Poland. Random sampling was used: schools were drawn first, then classes and students from those classes. Parents of the chosen students and class teachers from the chosen classes were invited to participate in the study. Both the teachers and the parents completed two parts of the KODS: KODS-A for the school and KODS-B for the students participating in the School Functional Assessment process (3,838 students assessed by teachers and 1,387 students assessed by parents). Random selection was used in the study. The teachers made their assessments with regard to a diverse group of students, ranging from 1 to 13. In turn, the vast majority of the parents (98.12%) assessed only one child; some of the parents assessed accessibility with regard to two of their children. Women prevailed among the teachers (93.4%), and similarly among the parents, accounting for 90.4% of the total sample. The mean age of the teachers surveyed was M = 46.05 (SD = 8.71), while the mean age of the parents was M = 45.21 (SD = 8.51).

The research was carried out as part of an ongoing ministerial innovation and implementation project (MEiN, 2022, DWEW 1070). The research project obtained a favourable opinion from the Research Ethics Committee of the Maria Curie-Skłodowska University in Lublin (No. 1/2022).

KODS internal structure

The first step in testing the psychometric properties of the KODS involved confirming the theoretically proposed three-factor internal structure comprising architectural accessibility, didactic accessibility, and socio-emotional accessibility. Confirmatory factor analysis was used for this purpose, performed for both the three-factor and for the one-factor solution. The results obtained in this area are presented in Table 1. They show that the model indicating a three-factor structure has a significantly better fit than the one-factor model. The three-factor model achieved satisfactory performance, so the results obtained confirm the validity of the theoretically outlined structure of the School Accessibility Assessment Questionnaire (KODS). The internal validity of the KODS is also confirmed by statistically significant correlations

of the individual subscales (factors) with the overall score. Pearson's r correlation coefficients are presented in Table 2.

Table 1. Confirmatory factor analysis results for the one- and three-factor structure of the KODS: model fit indices

Model	χ2	р	df	RMSEA	GFI
One-factor model	5,432.13	0.506	55	0.078	0.90
Three-factor model	2,321.09	0.611	47	0.059	0.96

Source: Authors' research.

Table 2. Correlation coefficients between individual subscales and the overall KODS score

	1	2	3	4
1. Architectural accessibility	-			
2. Didactic accessibility	0.74*	-		
3. Socio-emotional accessibility	0.69*	0.75*	-	
4. KODS – overall score	0.93*	0.91*	0.85*	_

^{*} p < 0.05

Source: Authors' research.

Table 3 presents the descriptive statistics of the individual subscales and the overall KODS score.

Table 3. Descriptive statistics for the individual subscales and the overall KODS score

Subscales and overall KODS score	Number of statements	Min	Max	M	SD	Skewness	Kurtosis
Architectural accessibility	10	0	10	5.31	1.97	0.06	0.27
Didactic accessibility	7	0	7	3.32	1.69	0.18	0.33
Socio-emotional accessibility	4	0	4	2.22	1.48	0.14	0.60
KODS — overall score	21	0	21	10.11	5.15	0.12	0.17

Source: Authors' research.

KODS reliability

The subsequent step in testing the psychometric properties of the KODS involved establishing its reliability. This was done using Cronbach's alpha coefficient for both versions of the KODS (A and B). The results obtained indicate satisfactory reliability, both for the individual subscales and for the overall KODS score (KODS – A: Architectural accessibility: $\alpha = 0.90$; Didactic accessibility: $\alpha = 0.79$; Socio-emotional accessibility: $\alpha = 0.85$; Overall score: $\alpha = 0.90$; KODS – B: Architectural accessibility: $\alpha = 0.91$; Didactic accessibility: $\alpha = 0.80$; Socio-emotional accessibility: $\alpha = 0.86$; Overall score: $\alpha = 0.91$). In addition, correlations of individual items with the overall questionnaire result were calculated (correlation coefficients in the range r = 0.83–0.94: KODS-A, r = 0.84–0.92: KODS-B).

KODS theoretical validity

The validity of the KODS, confirmed in the statistical analyses, can be successfully referred to the theoretical assumptions concerning the required accessibility of the school environment for students with diverse learning needs, including an increased need for individual support, directly related to the difficulties they might have or their specific, distinctive dispositions. Statistical analyses confirmed the value of using a model composed of the three dimensions of accessibility identified on the basis of the literature (Bright, 2022) and on the ICF model (2001). In fact, it is insufficient to focus merely on the architectural or on the technological aspect. Even the most advanced technology is not enough to ensure high-quality education and support, unless the pedagogical aspect is also taken into account (TPACK model, Mishra & Koehler, 2006). Students' well-being is determined also by emotional and social factors, in interpersonal relationships not only with their peers but also with adults working in the school environment, including non-teaching staff (Domagała-Zyśk, 2024). The inclusion of aspects related to didactics in the accessibility assessment was also found to be significant, as students spend most time during their time at school in class.

In line with the assumption concerning the potential difference in the assessment of school accessibility in general and in relation to a specific stu-

dent included in the School Functional Assessment process, scores of both parts of the KODS were compared (Student's test for dependent data, Table 4). It is found that the school's overall accessibility score is significantly higher in all its dimensions and with regard to- the overall score compared to the accessibility score related to students included in the School Functional Assessment process.

Table 4. KODS – summary of part A and part B results

KODS	Accessibil school in	lity of the general	of the sch	sibility ool for the in the SFA	,	ficance est
-	М	SD	М	SD	t	р
Architectural accessibility	5.37	2.57	2.34	1.99	84.46	< 0.001
Didactic accessibility	3.37	1.90	2.21	1.41	69.56	< 0.001
Socio-emotional accessibility	2.26	1.43	1.69	1.21	32.56	< 0.001
KODS — overall score	11.01	3.91	5.65	3.91	84.33	< 0.001

Source: Authors' research.

In the process of establishing the tool's validity, the results of the KODS were also collated in the context of factors of potential relevance for the formulated assessment of the accessibility of the school environment, i.e. the school type, the stage of education, and the respondent completing the KODS. The collations were performed taking into account both parts of the KODS: A) related to the assessment of the accessibility of the school in general and B) related to the assessment of the accessibility of the school for students included in the School Functional Assessment process. In doing so, it should be noted that the average score in the KODS-B part indicates the assessment of the school's degree of accessibility in the individual areas for students in need of specific support.

Firstly, the KODS scores were analysed taking into account the type of school (mainstream/with inclusive classes) using Student's *t*-test for independent data (Table 5).

Table 5. School type and KODS results

М		School with inclusive classes		Significance test		
	SD	М	SD	t	р	
5.82	2.16	6.36	2.14	-5.92	< 0.001	
2.06	1.68	3.46	2.06	-18.75	< 0.001	
3.46	1.70	3.85	1.63	-5.55	< 0.001	
1.30	0.87	1.85	0.91	-14.11	< 0.001	
2.38	1.52	2.57	1.03	-4.55	< 0.001	
1.69	1.21	2.07	1.01	-7.63	< 0.001	
11.66	4.43	12.79	4.22	-6.06	< 0.001	
5.06	2.95	7.39	1.99	-11.12	< 0.001	
	5.82 2.06 3.46 1.30 2.38 1.69	5.82 2.16 2.06 1.68 3.46 1.70 1.30 0.87 2.38 1.52 1.69 1.21 11.66 4.43	5.82 2.16 6.36 2.06 1.68 3.46 3.46 1.70 3.85 1.30 0.87 1.85 2.38 1.52 2.57 1.69 1.21 2.07 11.66 4.43 12.79	5.82 2.16 6.36 2.14 2.06 1.68 3.46 2.06 3.46 1.70 3.85 1.63 1.30 0.87 1.85 0.91 2.38 1.52 2.57 1.03 1.69 1.21 2.07 1.01 11.66 4.43 12.79 4.22	5.82 2.16 6.36 2.14 -5.92 2.06 1.68 3.46 2.06 -18.75 3.46 1.70 3.85 1.63 -5.55 1.30 0.87 1.85 0.91 -14.11 2.38 1.52 2.57 1.03 -4.55 1.69 1.21 2.07 1.01 -7.63 11.66 4.43 12.79 4.22 -6.06	

Source: Authors' research.

As shown by the results in Table 5, the type of school is a factor significantly differentiating the accessibility assessment. Statistically significant differences were captured in all subscales of both parts of the KODS and in the overall score. Overall school accessibility for students with diverse educational needs is significantly higher for schools with inclusive classes compared to mainstream schools. Similarly, accessibility of the school environment assessed in relation to students participating in the School Functional Assessment process was rated significantly higher in schools with inclusive classes.

The stage of education was also found to be a factor significantly differentiating the school's accessibility score. The results of the single-factor variance analysis with a post hoc NIR test are presented in Table 6.

Table 6. Educational stage and KODS results

KODS	Primary level 1 to : ()	Primary school level 1 to 3 students (1)	Primary school level 4 to 6 students (2)	school students)	Primary school level 7 and 8 students (3)	school level 7 students (3)	Secondary school studen (4)	Secondary school students (4)	<u>ı. </u>	Groups	d
	W	SD	W	SD	W	SD	W	OS	ı		
Architectural accessibility (A)	6.25	2.41	5.86	2.03	5.02	2.44	5.37	2.01	15.76***	1-2 1-3 1-4 2-3 2-4 3-4	< 0.001< 0.001< 0.001< 0.001< 0.001< 0.002
Architectural accessibility (B)	2.49	2.7	2.51	2.05	2.24	2.07	2.18	1.99	13.98***	1–3 1–4 2–3 2–4	0.002 < 0.001 < 0.001 < 0.001
Didactic accessibility (A)	3.80	1.65	3.66	1.40	3.33	1.33	3.73	1.31	8.63***	1–3 1–4 2–3 2–4 3–4	< 0.001 < 0.001 < 0.001 < 0.001
Didactic accessibility (B)	1.71	1.42	1.77	1.18	1.64	1.50	1.42	1.66	9.12***	1–4 2–3 2–4 3–4	< 0.001 0.021 < 0.001 < 0.001

Table 6 (continued)

Socio-emotional 2.49 1.99 2.43 0.94 2.15 1.33 accessibility (A) Socio-emotional 1.89 0.90 1.88 1.02 1.79 0.96 accessibility (B) KODS – 12.55 4.29 11.96 5.01 10.52 4.33 overall score (A) KODS – overall score (B) KODS – overall score (B)	KODS	Primary school level 1 to 3 students (1)	chool students	Primary school level 4 to 6 students (2)	school students)	Primary school level 7 and 8 students (3)	nool level 7 udents :)	Secondary school students (4)	ndary tudents t)	<u>ı.</u>	Groups	d
2.49 1.99 2.43 0.94 2.15 1.89 0.90 1.88 1.02 1.79 12.55 4.29 11.96 5.01 10.52 6.08 3.90 6.18 3.22 5.58		×	S	≥	SO	W	SD	×	SD			
1.89 0.90 1.88 1.02 1.79 12.55 4.29 11.96 5.01 10.52 6.08 3.90 6.18 3.22 5.58	ocio-emotional	2.49	1.99	2.43	0.94	2.15	1.33	1.99	1.42	5.12***	1–3	< 0.001
1.89 0.90 1.88 1.02 1.79 12.55 4.29 11.96 5.01 10.52 6.08 3.90 6.18 3.22 5.58	ccessibility (A)										1-4	< 0.001
1.89 0.90 1.88 1.02 1.79 12.55 4.29 11.96 5.01 10.52 6.08 3.90 6.18 3.22 5.58											2–3	< 0.001
1.89 0.90 1.88 1.02 1.79 12.55 4.29 11.96 5.01 10.52 6.08 3.90 6.18 3.22 5.58											2-4	< 0.001
1.89 0.90 1.88 1.02 1.79 12.55 4.29 11.96 5.01 10.52 6.08 3.90 6.18 3.22 5.58											3–4	< 0.001
12.55 4.29 11.96 5.01 10.52 6.08 3.90 6.18 3.22 5.58	ocio-emotional	1.89	0.90	1.88	1.02	1.79	96.0	1.43	1.11	9.58***	1-3	< 0.001
12.55 4.29 11.96 5.01 10.52 6.08 3.90 6.18 3.22 5.58	ccessibility (B)										1-4	< 0.001
12.55 4.29 11.96 5.01 10.52 6.08 3.90 6.18 3.22 5.58											2–3	< 0.001
12.55 4.29 11.96 5.01 10.52 6.08 3.90 6.18 3.22 5.58											2-4	< 0.001
12.55 4.29 11.96 5.01 10.52 6.08 3.90 6.18 3.22 5.58											3-4	< 0.001
6.08 3.90 6.18 3.22 5.58	- SOC	12.55	4.29	11.96	5.01	10.52	4.33	10.11	4.71	19.53***	1–2	0.003
6.08 3.90 6.18 3.22 5.58	verall score (A)										1–3	< 0.001
6.08 3.90 6.18 3.22 5.58											1-4	< 0.001
6.08 3.90 6.18 3.22 5.58											7–3	< 0.001
6.08 3.90 6.18 3.22 5.58											2-4	< 0.001
6.08 3.90 6.18 3.22 5.58											3-4	< 0.001
(8)	ODS — overall score	80.9	3.90	6.18	3.22	5.58	4.01	5.01	3.21	18.54***	1–3	< 0.001
	(\$										1–4	< 0.001
											2–3	< 0.001
											2-4	< 0.001
											3-4	/ 0 001

Source: Authors' research.

Statistically significant differences were found in both KODS-A and KODS-B, taking into account the stage of education of the students for whom accessibility of the school and the support elements potentially available within it were assessed. The results show that in the overall assessment school accessibility for students with special educational needs requiring additional support, the highest scores apply to the first educational stage, and these are statistically significantly different from the findings for the other educational stages. It is worth pointing out that lower accessibility scores were assigned to schools providing education on higher levels: primary school levels 7 and 8 and secondary schools. In terms of architectural accessibility and didactic accessibility, the lowest scores apply to primary school levels 7 and 8, while in terms of socio-emotional accessibility, this applies to secondary schools.

In the case of the KODS-B results concerning the accessibility assessment for students participating in the School Functional Assessment process, they are similar to those obtained in the overall school accessibility assessment. The highest and comparable scores here concern students of primary school levels 1 to 3 and 4 to 6, and they are statistically significantly different from the results obtained in levels 7 and 8 as well as in secondary schools. Both in terms of the overall KODS-B result and of the individual dimensions of accessibility: architectural, didactic and socio-emotional, the lowest scores were assigned in relation to accessibility for specific students covered by the SFA process in secondary schools.

Table 7 contains the results of the analyses of the KODS-A and KODS-B scores, broken down by the respondent type (teacher and parent). Statistically significant differences were found for both parts of the KODS. In terms of the overall assessment of the accessibility of the school for students with special educational needs, significantly higher scores apply to the teachers surveyed, who rated the architectural, didactic and socio-emotional accessibility significantly higher compared to the parents surveyed. On the other hand, different findings were obtained within KODS-B. The parents surveyed rated teaching accessibility significantly higher compared to the teachers, who in turn rated social-emotional accessibility significantly higher for students included in the School Functional Assessment process. In terms of architectural accessibility, teachers and parents did not differ significantly in their assessment.

Table 7. KODS results broken down by the respondent type

	Tea	cher	Par	ent	Signific	ance test
KODS	М	SD	M	SD	t	р
Architectural accessibility (A)	5.92	2.09	3.93	2.18	6.09	< 0.001
Architectural accessibility (B)	2.34	2.11	2.41	2.26	-1.07	0.286
Didactic accessibility (A)	3.53	2.01	2.97	1.06	9.26	< 0.001
Didactic accessibility (B)	1.47	1.67	2.10	1.34	4.05	< 0.001
Socio-emotional accessibility (A)	2.42	2.16	1.86	1.99	8.41	< 0.001
Socio-emotional accessibility (B)	1.75	1.01	1.54	1.34	5.16	< 0.001
KODS — overall score (A)	11.87	4.42	8.97	5.02	12.97	< 0.001
KODS — overall score (B)	5.57	3.02	6.04	4.02	-4.67	< 0.001

Source: Authors' research.

School Accessibility Assessment Questionnaire (KODS) application method and score interpretation

The KODS includes a total of 42 statements (KODS-A: 21 statements and KODS-B: 21 statements). The statements are identical in both versions, with KODS-A referring to an assessment of the school's accessibility in general, for students with special educational needs requiring additional support. KODS-B, on the other hand, involves assessing the school's accessibility for students included in the School Functional Assessment process. KODS-A and KODS-B make it possible to determine the degree of accessibility of the school environment in three areas: architectural, didactic and socio-emotional, and it is also possible to establish an overall score.

The respondents make their assessment using three categories: yes, no, not applicable. Yes and No are diagnostic answers. A Yes answer is assigned a value of 1, and a No answer is assigned a value of 0. The sum of the scores from the three accessibility subscales/areas provides an overall score. For KODS-A, the higher the score, the higher the school's accessibility rating for students with special educational needs requiring additional support, generally and in spe-

cific areas of accessibility. In the case of KODS-B, the score determined refers to students included in the School Functional Assessment process, affected by and having higher need for support in the respective accessibility areas. The NOT APPLICABLE option included in the tool (KODS-B) responds to the actual situations of students who, though being included in the School Functional Assessment process, do not need support from the school environment in certain areas (e.g., a student without impaired mobility does not require architectural accessibility to be provided).

Conclusion

The School Accessibility Assessment Questionnaire (KODS) has satisfactory psychometric properties, the theoretically assumed three-factor structure has been confirmed, and satisfactory reliability coefficients have been determined, as well as theoretical validity, also tested by making reference to variables that should differentiate the strength of the results. The KODS can be used as an independent tool in assessing the extent to which a school is adapted to the diverse needs of students, but it is particularly recommended for application in the School Functional Assessment process, to assess the context of students' functioning in terms of environmental factors (ICF, 2001). In fact, functional assessment of students should take into account the holistic and integral nature of the process as well as the need to analyse not only factors related to the characteristic of the students, but also those of the environment. As indicated by the latest literature (Rieser, 2008; Hollenwenger, 2014; Gajdzica et al., 2024) it is not appropriate to expect that only the student with diverse needs should adapt to the school environment. Each person forming this environment is obligated to modify their behaviour in such a way as to enable collaborative learning and harmonious co-existence (Narkun-Jakibińska et al., 2022).

An undoubted advantage of this tool is the possibility of using the results obtained with regard to two aspects. This is because the results of KODS-A can be used to perform an initial assessment of the school in terms of accessibility for students with diverse support needs, as part of what is referred to as institutional assessment, visualising the preparedness of the school environment to accommodate each student. In the case of KODS-B, on the other hand, the results obtained can constitute a concrete element of infor-

mation reinforcing the holistic assessment of the student within the School Functional Assessment framework, providing guidance on supplementing certain aspects of support that could be available to the student in the school environment. The results of analyses also confirmed the validity of conducting not only general studies (assessing the degree of accessibility of a particular school), but also surveys concerning parents' and teachers' assessments of school accessibility for individual students on different levels of education. In fact, even students attending the same school, but of different ages and with different needs, may perceive the accessibility-related activities offered in the school in different ways. An accessible school, however, does not follow the "one size fits all" model, but understands the individual differences between students.

An important aspect of the research presented here, but also a recommendation for future use of the tool, is related to parents' involvement. It is still most often the case that students' parents are perceived as recipients rather than as co-authors of various types of documents concerning the extent of support provided to their children. The parents' voice emerged particularly distinctly in this study. In some aspects parents' and teachers' opinions coincided (e.g., in the assessment of the school's architectural accessibility) while in other respects they diverged (e.g., in the assessment of the degree of didactic and socio-emotional accessibility). This phenomenon points to the need for further in-depth analyses.

Limitations of measurement using KODS

In the functional assessment process, an important role is attached to the aspect of participation of the individuals the process concerns. The research described here involved teachers and parents, but further studies also need to include the direct point of view of the student, particularly in terms of assessing didactic and socio-emotional accessibility. The subjective perspective of students of different ages and with different needs is an invaluable source of information, as they are the ones who know best how effective the support offered is and whether it is adequate.

The proposed questionnaire should be treated as a useful tool for preliminary assessment, as each of the statements indicated can be operationalised,

and their content analysed in much more detail. Each aspect, whether in the overall assessment or that concerning the needs of an individual student, that does not receive a positive indication (YES) should be analysed in detail so that measures can be developed to increase the extent of accessibility.

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School Accessibility Assessment Questionnaire (KODS)

(S. Byra, E. Domagała-Zyśk, Z. Gajdzica, B. Jachimczak, R. Piotrowicz, E. Widawska, 2024)

KODS-B

The School Accessibility Assessment Questionnaire (KODS) is a short tool to assess the level of accessibility of a school for students with disabilities and additional, diverse educational needs.

The questionnaire is recommended for the determination of the extent of accessibility of the school environment for a student participating in the School Functional Assessment process.

Instructions:

Please rate the extent to which the school is an accessible facility for the student.

YES – means that the student needs specific support, provided in the school

NO – means that the student needs specific support, not provided in the school

NOT APPLICABLE – means that the student does not need to use the support described in the criterion

	Criterion	YES	NO	NOT APPLICABLE
	Architectural	accessibility		
1	The school has access ramps leading to the entrance and to all rooms (including the library, gymnasium, and locker room)			
2	The school has a lift/stair lift to each floor			
3	Circulation routes are wide and allow the students to move around comfortably			
4	The school has a toilet adapted to the needs of persons with reduced mobility			
5	Induction loops are available in the school			
6	The noise level in the school is low (e.g., there are skid pads on chairs to reduce dragging noise, soundproofing panels/cork or foam boards on walls, etc.)			
7	Sections of the school/individual classrooms/ corridors have contrasting colour coding			
8	Signage in the school (e.g., classroom signs) are provided in Braille			
9	External light control is provided in classrooms (e.g., blinds, shutters)			
10	The school has a designated quiet area for students who are tired/display challenging behaviour			
	Didactic ac	cessibility		
11	The school has teaching aids in place for students with disabilities and additional needs and/or obtains them from a lending facility such as an SCWEW [Specialised Centre for Supporting Inclusive Education]			
12	Teachers know and apply the principles of universal design for learning			
13	Teachers know and apply reasonable modifications and adjustments in the teaching process			

	Criterion	YES	NO	NOT APPLICABLE
	Architectural a	ccessibility		
14	Therapeutic, revalidation, corrective-compensatory and speech therapy activities are provided in the school according to the students' needs			
15	There is a designated person in the school who coordinates support for students with disabilities and additional learning needs (e.g., School Functional Assessment coordinator, Learning Accessibility Advisor or another person)			
16	Talent development activities provided in the school are accessible to students with additional needs and disabilities			
17	Sports activities provided in the school are accessible to students with additional needs and disabilities			
	Socio-emotional	accessibility		
18	Primary school level 1 to 3 teachers, individual subject teachers and class tutors have the didactic and emotional/social competences to work with students with additional needs and disabilities			
19	Non-teaching staff at the school have the emotional and social competences to support students with disabilities/additional needs			
20	Students have high emotional and social competences, including with regard to relationships with peers with disabilities/additional learning needs			
21	Parents, including parents of students with disabilities and additional educational and developmental needs, cooperate with the school			