



Measuring Inclusion in Vocational Education and Training through the Prism of Justice of Education

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Abstract: The highest possible level of inclusion and justice are the primary goals of most contemporary education systems, including vocational education and training. The Index for Inclusion, which was developed two decades ago, defines inclusion on three levels, i.e. policy, culture and practice, and provides a methodological framework for measuring the inclusive orientation of schools. This paper raises the question of whether the selected Index for Inclusion indicators can be used to also measure different dimensions of justice, which is defined as a multidimensional concept. The just redistribution of basic goods is complemented by recognition, representation and relationality. A study with the aim to determine the multidimensionality of the implementation of inclusivity in Vocational Education and Training institutions using statistical analysis was carried out. An online questionnaire was created and completed by 427 education professionals (head teachers, teachers and school counsellors) employed in vocational education and training. The dimensionality of the measured constructs was checked using a set of 28 variables with factor analysis, i.e. the Maximum Likelihood method and Varimax rotation. It was found that the statements that had been formulated on the basis of the Index for Inclusion can also be used to measure different dimensions of justice. The final version of the questionnaire (modified questionnaire), which contains a set of twenty items, adequately measures the redistribution and recognition aspects of justice, whereas the representation and relational aspects have proven to be two-dimensional concepts. A modified questionnaire could be a suitable starting point both for the self-evaluation of schools and a general measurement of inclusion in terms of justice.

Keywords: inclusion, justice, redistribution, recognition, representation, relationality.

Introduction

Over the past three decades, aspirations towards greater inclusion of the education system have marked many theoretical discussions (Banks, 2023; Haug, 2017; Opertti, Brady, and Duncombe, 2009; Reindal, 2015; Thomas, 2013; Warnock, 2010). In fact, two decades ago, they were the reason for developing the Index for Inclusion (Booth and Ainscow, 2002) in the UK, which can be used both to evaluate and foster efforts for more inclusive schools. The Index for Inclusion anticipates measures for the operation of an educational institution at three levels (Booth and Ainscow, 2002):

1. the policy level by establishing systemic solutions and defining the rights of those who often face exclusion,
2. the culture level by establishing and consolidating inclusive community values,
3. the practice level as didactic support for those who often face exclusion and as the nurturing of relationships.

The Index for Inclusion constitutes a framework for identifying attitudes, obstacles, potentials and efforts to establish a more inclusive culture, policy and practice in a certain educational institution, which can also use it as a self-evaluation tool (Ainscow, 2023).

Ainscow (2023, p. 6) argues that inclusion is a matter of two interconnected dimensions. 'First, it is a matter of *fairness*, which implies ensuring that personal and social circumstances – for example,

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gender, socio-economic status or ethnic origin – are not an obstacle to achieving success in learning. Second, it is to do with inclusion, which is about ensuring the presence, participation and achievement of all children and young people.’ (Ainscow, 2023, p. 6) The coherence of the two concepts, inclusion and justice, has been explored by a variety of other authors (Banks, 2023; Burke, Goriss-Hunter, and Emmett, 2023; Cochran-Smith and Stringer Keefe, 2022; Skubic Ermenc, Jeznik, and Mažgon, 2019; Kielblock and Woodcock, 2023; Lynch, Kalaitzake, and Crean, 2021; Operti, Brady, and Duncombe, 2009).

The UNESCO document titled *Reimagining our Futures Together: A New Social Contract for Education* (2021, p. 3) includes the following statement: ‘Any new social contract must build on the broad principles that underpin human rights – inclusion and equity, cooperation and solidarity, as well as collective responsibility and interconnectedness’. In addition to an analysis of the situation, the document contains several complex proposals for reforming education, which relate to the issue of pedagogy and didactics, the school as an institution, and interpersonal relations within the school. In fact, the first chapter *Towards more equitable educational futures* focuses precisely on the issue of justice in education: ‘If education is to help transform the future, it must first become more inclusive by addressing past injustices. Factors that shape these inequalities and exclusions must be clearly identified if policies and strategies are to support marginalised students, especially those who experience compounded disadvantages.’ (Reimagining our Futures Together: A New Social Contract for Education, 2021, p. 23) It highlights access to education as a fundamental right for all, while also noting that it is incomplete and unjust. In poverty-stricken countries, one in four adolescents is still illiterate, one in five children does not even attend primary school, and the situation is even worse in secondary education (Reimagining our Futures Together: A New Social Contract for Education, 2021, p. 23).

A brief summary of the UNESCO document draws attention to the complexity and multidimensionality of the core concepts, which are also studied in this paper. As noted by Akkan and Buğra (2020, p. 143) the life chances of individuals from minority groups depend on the feeling of belonging to an inclusive education system. Exclusion that results from inequality in opportunities to access quality education and the experience of alienation and discrimination due to non-recognition affects an individual’s performance and reduces the added value of education when it comes to developing the abilities of children from groups that are often subject to exclusion. Inclusive education systems are supposed to recognise children’s diversity, while also recognising parents’ choices about their children’s education and what it should be like. According to the aforementioned, this should also have an impact on the development of children’s abilities (Akkan and Buğra, 2020).

The second part of this paper provides an analysis of the validity and reliability of the measurements of inclusion in vocational education and training based on the data from the survey titled *Inclusion in Vocational Education and Training (Inkluzija v poklicnem in strokovnem izobraževanju, 2022)*, which was conducted in spring 2022 under the auspices of the Institute of the Republic of Slovenia for Vocational Education and Training. The aim of the study was to examine the situation in terms of the implementation of inclusion in Slovenian vocational education and training. The Index for Inclusion (Booth and Ainscow, 2002) has not yet been translated into Slovenian language, and no methodologically validated tool to measure inclusiveness at the school and system level is available. The population of students enrolled in vocational education and training* is heterogeneous. According to the official statistics from the Ministry of Education 24,9 % of students enrolled in lower vocational education (2-year programs), 19,6 % of students enrolled in vocational education (3-year programs) and 9,9 % of students enrolled in vocational education (4-year programs) have special educational needs. Only 4,9 % such students are enrolled in general secondary education (grammar schools). The data on immigrants enrolled in secondary education refer to a variety of educational programs, both vocational and general. In 2022, 6.5% of students enrolled in secondary education were immigrants (Strategy for integrating foreigners who are not citizens of the European Union into the cultural, economic and social life of the Republic of Slovenia, n.d.). Various studies point to the impact of low SES on the educational trajectories of students, which is becoming increasingly evident (Cankar and Zupanc, 2020; Pedagoški inštitut, 2023). This has led to the survey with the aim of measuring the state of inclusion in schools, and to develop a valid and reliable instrument that can be used by the schools in the future to self-evaluate the field or that can be used at system level as a tool for measuring inclusion in the prism of justice.

A total of 427 education professionals employed in vocational education and training (head teachers,

* In Slovenia, this refers to the upper-secondary level of education.

school counsellors and teachers) from all over Slovenia took part in the survey. Individual indicators were selected from the Index for Inclusion (Booth and Ainscow, 2002) based on the theoretical assumption that inclusion can be implemented in a more holistic way by taking into account the multidimensional concept of justice (Fraser, Dahl, Stoltz, and Willig, 2004; Lynch, Baker, and Lyons, 2009; Lynch, Kalaitzake, and Crean, 2021; Lesar, 2013; Lesar, 2019). The index defines inclusion on three levels (policy, culture and practice), the multidimensional concept, however, not only views justice at the level of meritocracy and redistribution, but also highlights three other aspects, i.e. recognition, representation and relationality. This paper analyses the data used to substantiate the theoretical assumption about the relationship between the concepts of inclusion and justice, and examines whether the selected Index for Inclusion indicators can be used to also measure different dimensions of justice.

Definition of inclusion

There is no single definition of inclusion. The definition depends on a particular environment, the historical circumstances of education, the initial education methods of education professionals and many other factors (Banks, 2023). However, what is common to various present-day definitions is that they are characterised by a departure from the medical discourse and a special educational approach to individuals who often face exclusion towards community-centred and general pedagogical and didactic approaches and strategies intended for everyone. Several authors (Ainscow, 2023; Burke, Goriss-Hunter, and Emmett, 2023; Skubic Ermenc, Jeznik, and Mažgon, 2019; Haug, 2017; Lesar, 2019) have pointed out that the general educational concept of inclusion goes beyond the focus on individuals and groups that traditionally receive different, usually special educational treatment within the school environment (e.g. individuals with special needs). Baglieri et al. (2011 in Burke, Goriss-Hunter, and Emmett, 2023, p. 18) have identified three important cornerstones of inclusive education:

1. inclusive education *should be aimed at everyone* and not just minority groups, such as persons with special needs;
2. learning and teaching should be *participatory and inclusive* and should not be based solely on physical integration;
3. inclusive education should be supported by *democratic principles and principles of social justice*, anchored in educational practices.

The way cultural, ethnic, linguistic, religious, racial, sexual and other diversity is dealt with in the education system also determines the degree of its inclusion, which can promote the belonging or alienation of students from minority communities (Akkan and Buğra, 2020). Burke, Goriss-Hunter, and Emmett, 2023) pointed out that while diversity and inclusion are increasingly emphasised in educational environments across the globe, the pedagogical and didactic approaches to teaching are still distinctly homogenous and based on a normative image of learners. The extent of diversity may remain invisible, and teachers may remain unprepared to use more inclusive pedagogical approaches. The authors also pointed out that not all people are equally different from one another. Some groups have been traditionally disadvantaged even within the education system in some way: 'Diversity, however, is complicated and difficult to identify and describe in its complexity, meaning that single aspects of identified differences often become the focus of any programme or intervention.' (ibid., p. 19)

Inclusion through the prism of justice

Mel Ainscow (2023, p.127), co-author of the aforementioned Index for Inclusion, argues that the extent of inclusive and just experiences not only depends on educational practices, but also on various interlinked processes that form 'an ecology of equity' (Ainscow, 2023). Attention should be paid to the following:

1. *within-school factors*, such as existing policies and practices,
2. *between-school factors* that arise from the characteristics of local school systems,
3. *beyond-school factors*, including the demographics, economics, cultures and histories of local areas – all with a focus on reducing inequalities.

In the latter part of the paper, the interconnectedness between inclusion and justice is substantiated through the multidimensional model of justice (Fraser, Dahl, Stoltz, and Willig, 2004; Lynch, Baker, and Lyons, 2009; Lynch, Kalaitzake, and Crean, 2021; Lesar, 2019), which is based on four dimensions:

redistribution, recognition, representation and relationality. Each of these four dimensions highlights a certain way of individuals' inclusion. Hence, the assumption is that inclusion is a concept that can be implemented in a more just way by taking into account all four dimensions of justice.

The foundations of redistributive justice were laid five decades ago by [John Rawls \(1971\)](#). At the forefront of his *Theory of Justice* is a just distribution of basic liberties and goods, including universal access to public education. Both individuals and society benefit from this – individuals because they can realise their potential, while society benefits from promoting social cohesion and trust in public institutions through education ([Christodoulou, et al., 2022](#)). Rawls' *Theory of Justice* ([Rawls, 1971](#)) is based on two requirements. The first is that each person is to have an equal right to achieving the basic liberties in the broadest sense of the word. The second is that social and economic inequalities between people are to be arranged in such a way that one can expect the measures introduced to benefit everyone. Rawls further divides the original two requirements into three principles: the equal opportunity principle or meritocracy, the principle of fair equality of opportunity or positive discrimination, and the difference principle. On a practical level, these principles commit us to acting in a way that will provide everyone, regardless of their position, with equal conditions for success and that the only differences between us that are just are those that bring benefits to the most disadvantaged individuals in society ([Rawls, 1971](#)). In terms of identity, this means that the identity of a group or an individual should not be an obstacle to achieving social positions, goods, rights and liberties ([Jeznik, 2015](#)), and a just society takes care of the weakest individuals first.

As early as the 1990s, ([Fraser, Dahl, Stoltz, and Willig, 2004](#); [Fraser and Honneth, 2003](#); [Knijn, Theuns, and Miklós, 2020](#)) pointed out that socioeconomic deprivation is significantly interwoven with cultural differences. Thus, they added two more dimensions to redistributive justice: first, recognition and later representation. Recognition basically means respect for different lifestyles, worldviews, life circumstances, health situations, etc., i.e. not only in terms of recognising certain rights and liberties, as assumed by the redistributive dimension of justice. [Fraser and Honneth \(2003\)](#) argue that not all concrete forms of social injustice can be reduced to violations of the equal opportunity principle or the difference principle, which underpin the redistributive dimension of justice. They analyse the cases of individuals with atypical gender identities, proving that these identities must often be hidden in order for these individuals to be exposed in visible (political) decision-making positions within society.

[Fraser \(2007\)](#) also draws attention to the limitations of recognition. He points out two things: misrecognition and non-recognition, which can be illustrated using an example of the schooling of students from migrant backgrounds and their integration into the education system. An immigrant may suffer serious damage to their identity if, as education experts, we have a stigmatised view of them (misrecognition), which can consequently lead to the immigrant developing a negative self-concept and prevent them from developing a healthy identity. To be more specific, this is a matter of connecting individual's personality traits with stereotypical beliefs about a certain culture, linguistic community, nationality, etc., which is highly problematic in the context of an educational system. [Fraser \(2007\)](#) notes that it is similarly problematic if an individual's identity position is invisible. In this case, this is a matter of non-recognition. In this kind of situation, for various reasons, a person's right to different treatment is not recognised due to them being underprivileged.

The injustices experienced by minority groups are often divided between the misrecognition of diversity, including ethnic, religious or racial differences, and the redistribution of inequality. The dynamics of exclusion created by inequalities that exist in access to quality education, as well as the experience of alienation due to non-recognition, affect student achievement and limit the value of education, which is supposed to help develop the abilities of children from minority groups. [Lynch and Baker \(2005\)](#) point out that in education this can be noticed in a null and hidden curriculum or in poor evaluation of certain knowledge, as well as in a culture that is usually reproduced through the education system as a culture of middle-class values.

[Fraser, Dahl, Stoltz, and Willig \(2004\)](#) therefore added another dimension to redistribution and recognition, namely representation, which strives for different social groups and individuals to be involved in decision-making in terms of their power and influence on positions within the community. [Akkan and Buğra \(2020\)](#) argue that actual representation is often limited and individuals do not have the opportunity to adequately express their demands and challenge stereotypes and stigmatisation related to their values or cultural value. Equal participation, trust and representation are important concepts in understanding the

role education plays in the creation of a good society and democracy, as pointed out by Dewey in the early 20th century. Sometimes the values of different groups are almost incompatible and cultural transmission is very difficult, requiring the coordination of the demands of family and society (Akkan and Buğra (2020)). A similar observation was made by Julie Allan in relation to children's voice and rights in special education (Allan, 2023, p. 31).

Lynch, Baker and Lyons (2009) added a fourth dimension to the three-dimensional model of justice (redistribution, recognition and representation), i.e. relationality. In fact, the three-dimensional model is based on the perception of an independent adult and disregards the importance of emotional interpersonal relations. It is unclear if, how and when individuals who at a given moment are very dependent on others due to old age, poor health, etc. hold any power and significance. The authors also raised the question of the relationship between those who receive care and those who provide it. This is a political issue that mainly concerns the female part of the population, the commonly unpaid or underpaid care workers (Lynch, Kalaitzake, and Crean, 2021, p. 56). Since relationality is not a social derivative, it is subordinated to economic, political or cultural relations in social life. It represents ethically based, care-relational relationships that are expressed differently in different cultures, their main purpose, however, is to be with others and co-build relationships in a way that is not alienating or exploitative (Lynch, Kalaitzake, and Crean, 2021, p. 58). While the three-dimensional theory of justice paved the way for questions of social justice in the social sciences, relationality opens up space for new scientific analyses (Lynch, Kalaitzake, and Crean, 2021, p. 62).

With its inclusion and exclusion practices, education, on the one hand, reinforces existing social inequalities, while on the other, it plays an important role in fighting against injustices and eliminating social injustice and inequality. Despite some criticism, further research into the various dimensions of justice is important mainly because socioeconomic inequalities can also affect access to education. Poverty is thus still considered one of the causes and consequences of inequality in education, which lead to early school leaving and affect the opportunities of children from disadvantaged backgrounds; not only poverty, but also many other personal circumstances, such as gender, race, ethnicity, culture, religion, etc. (Akkan and Buğra (2020)). Despite the limitations of the model that they pointed out (positivism and formalism), Knijn, Theuns and Miklós (2020) view the multidimensional model of justice as an adequate basis that can be used to support research in this field while also offering a useful heuristic tool for interdisciplinary and empirically based consideration of the different demands for justice.

Materials and Methods

The following part of the paper empirically shows that the concepts of inclusion and justice can be considered together based on the data obtained as part of a survey on inclusion in vocational education and training. The aim of the authors of this paper was to learn whether the selected Index for Inclusion indicators can also be used as a starting point for measuring individual dimensions of justice, i.e. redistribution, recognition, representation and relationality. We opted for a quantitative approach with the aim to explore the dimensionality of the implementation of inclusivity in Vocational Education and Training institutions through statistical analysis, i.e. factor analysis.

The national survey included 427 education professionals (teachers, head teachers and school counsellors) employed in vocational education and training. A questionnaire for measuring inclusion in vocational education and training, which was designed for the purposes of the survey, was used for data collection. Data collection was carried out between 27 June and 14 July 2022 using an online data collection tool.

Most of the survey participants in the survey sample are teachers, whereof just over a fifth are male. The school counsellors are predominantly female. The structure of the sample by gender gives a realistic picture of the population. The sample is also very representative in terms of the education professionals' experience. More than half of the sample is represented by professionals with more than twenty years of work experience in education.

Table 1. Sample Description

	All	Teachers	Head Teachers	School Counsellors
N	427	354	44	29
Gender				
Male	21.2%	21.6%	29.3%	3.7%
Female	75.0%	74.1%	68.3%	96.3%
Prefer not to answer	3.8%	4.3%	2.4%	0.0%
Years of work experience in education				
Up to 5 years	8.9%	8.6%	0.0%	25.9%
6–10 years	9.4%	10.1%	2.4%	11.1%
11–20 years	23.3%	23.9%	14.6%	29.6%
More than 20 years	58.5%	57.5%	82.9%	33.3%

For research purposes, a questionnaire was designed for measuring inclusion in vocational education and training. The questionnaire was based on the multidimensional model of justice and the Index of Inclusion by Booth and Ainscow (2002). The Index of Inclusion includes a set of indicators for measuring inclusion at the level of inclusive policy, culture and practice. Those indicators that, in the authors' opinion, also reflect a certain dimension of justice were selected from the index. The selected indicators were operationalised with statements and the respondents specified their level of agreement on a four-point scale with the following answers: *not true at all*, *mostly not true*, *mostly true* and *absolutely true*. The respondents had the option of not answering, i.e. choosing the answer *I prefer not to answer*, if they did not have sufficient information about the situation to be able to provide an answer. The questionnaire, which was given to education professionals to fill out, contained a total of 28 statements (Inkluzija v poklicnem in strokovnem izobraževanju [Inclusion in Vocational Education and Training], 2022, p. 89–93).

In this paper the focus is on checking the dimensionality of the measured constructs, which was carried out by means of factor analysis.

Results

The dimensionality of the measured constructs was checked using a set of 28 variables. The design of the questionnaire was based on the assumption that measuring the inclusion of schools is a four-dimensional construct, consisting of redistribution, recognition, representation and relationality. The multidimensionality of the measured construct was checked with factor analysis, i.e. the Maximum Likelihood method and Varimax rotation.

Several versions of factor solutions were created, this paper, however, describes the final solution, which is the most appropriate in terms of measurement validity and reliability.

After excluding the variables whose loadings were low, a 5-factor structure was obtained; in terms of content, this structure is more compatible with the assumed (theoretical) structure. Twenty items were kept in the analysis and were used to measure the inclusion of vocational education and training.

Bartlett's Test ($X^2 = 2350.9$; $df = 190$; $p < 0.001$) shows that the correlation matrix is not an identity matrix, which means that dimension reduction can be used. The high Kaiser-Meyer-Olkin (KMO) Measure values indicate that the data are suitable for performing factor analysis.

Table 2. KMO and Bartlett's Test

Kaiser-Meyer-Olkin Measure of Sampling Adequacy		0.898
Bartlett's Test of Sphericity	X ²	2350.873
	df	190
	p	< 0.001

The first factor explains a 14.8% variance of the measured construct, the second factor 13.6% and the third factor 11.8% variance of the measured construct. The fourth extracted factor explains a variance of 10.1% and the last factor, i.e. the fifth, a variance of less than 10% of the measured construct. All five factors together explain a variance of 60% of the measured construct.

Table 3. Percentage of Explained Variance

Factor	Rotation Sums of Squared Loadings		
	Total	% of Variance	Cumulative %
1	2.960	14.798	14.798
2	2.715	13.573	28.371
3	2.353	11.765	40.135
4	2.029	10.145	50.280
5	1.939	9.696	59.976

The table below illustrates the factor loadings for each variable from the rotated factor matrix. Those variables that clearly load one of the five extracted factors were kept in the analysis.

Table 4. Rotated Factor Matrix

	Factor				
	1	2	3	4	5
Employees at our school strive to remove the obstacles students face in achieving their goals in all areas (learning, extracurricular activities, personal development, career, etc.).	.216	.529	.251	.145	.214
The school fund resources are used sensibly to ensure equal opportunities for students.	.281	.455	.213	.146	.127
Our school's development plan and related practices effectively reduce learning- and participation-related obstacles for all students.	.165	.684	.155	.320	.102
We help all new students get used to the school as soon as possible.	.193	.552	.111	.160	.232
At our school, we intentionally discuss the meaning of the concept of inclusion.	.306	.217	.129	.826	.132
At our school, we have a uniform understanding of an inclusive school.	.279	.225	.185	.855	.097
The teacher-parent cooperation at our school is good.	.261	.570	.273	-.026	.126

The definition of inclusion/inclusive school and the resulting practices (lesson organisation, lesson accommodations and modifications, etc.) are included in our school's development plan.	.371	.468	.119	.393	.152
Students at our school help one another.	.260	.257	.387	.148	.215
When it comes to planning the teaching process, the employees at our school successfully accommodate all students, regardless of their differences.	.450	.410	.207	.111	.208
I ensure I include topics related to the understanding of diversity in my teaching work.	.459	.335	.042	.193	.134
The employees at our school work with one another in planning, teaching and evaluating the teaching process for students with special needs.	.712	.248	.239	.235	.201
The employees at our school work with one another in planning, teaching and evaluating the teaching process for students from migrant backgrounds.	.818	.186	.141	.191	.114
The employees at our school work with one another in planning, teaching and evaluating the teaching process for low-SES students.	.766	.279	.176	.231	.111
Standards of ethical conduct at our school are very high.	.153	.315	.408	.151	.474
At our school, we immediately respond to various exclusionary practices among students.	.183	.282	.283	.077	.689
At our school, we immediately respond to various exclusionary practices adopted by employees when dealing with students.	.174	.167	.199	.115	.880
At our school, there is mutual respect between employees and students.	.122	.105	.814	.068	.225
At our school, students respect one another.	.070	.219	.658	.084	.058
At our school, employees respect one another.	.204	.165	.620	.138	.216

The first factor is strongly and clearly loaded by the variables that were at the outset assumed to measure recognition. Factor analysis revealed that recognition is a one-dimensional construct defined by the following elements:

1. accommodating different students when planning the teaching process
2. making sure teaching work includes topics related to the understanding of diversity
3. planning, teaching and evaluating the teaching process for students with special needs
4. planning, teaching and evaluating the teaching process for students from migrant backgrounds
5. planning, teaching and evaluating the teaching process for low-SES students

The second factor is loaded by the variables that were at the outset assumed to measure redistribution, however, at the same time it is also loaded by two variables from the representation set. Considering that these two dimensions are not compatible in terms of the content, it was decided that the variables that clearly load the second factor would be treated as part of two dimensions. The first is called redistribution, which is defined by the following elements:

1. striving to remove the obstacles students face in achieving their goals in all areas
2. using school fund resources to ensure equal opportunities for students
3. the effectiveness of reducing learning- and participation-related obstacles of all students
4. helping new students get used to the school

The second dimension, as part of the second factor, is defined by two variables that were used to measure representations. Representation is a two-dimensional construct, where two variables load the second factor (and two variables the fourth factor). The two elements in question are:

1. teacher-parent cooperation
2. an inclusive orientation of the school's development plan

Two variables that were at the outset assumed to measure representations load the fourth factor:

1. intentionally discussing the meaning of the concept of inclusion
2. a uniform understanding of an inclusive school

The third factor is loaded by the variables that were at the outset assumed to measure relationality, namely:

1. mutual respect between students and employees
2. mutual respect among students
3. mutual respect among employees
4. students' mutual help

The fifth factor is loaded by the variables that were at the outset assumed to measure relationality, namely:

1. high standards of ethical conduct
2. immediate response to various exclusionary practices among the students
3. immediate response to various exclusionary practices adopted by employees when dealing with students

Relationality has thus proven to be a two-dimensional construct, which encompasses the relational aspect on the one hand, and the functioning of schools on the other.

Factor analysis revealed that an inclusive orientation through the prism of justice of schools is a six-dimensional construct defined by the elements shown in the table below. The reliability of the measurement of dimensions was checked in terms of their internal consistency, and Cronbach's alpha coefficient was calculated to this end. Cronbach's alpha coefficients are provided next to the name of each dimension.

Table 5. *Extracted dimensions of an inclusive orientation through the prism of justice with the internal consistency coefficient, the definition of dimensions and their operationalisation*

DIMENSION	DEFINITION (ITEMS)	OPERATIONALISATION
REDISTRIBUTION ($\alpha = 0.748$)	Striving to remove the obstacles students face in achieving their goals in all areas	Employees at our school strive to remove the obstacles students face in achieving their goals in all areas (learning, extracurricular activities, personal development, career etc.).
	Using school fund resources to ensure equal opportunities for students	The school fund resources are used sensibly to ensure equal opportunities for students.
	The effectiveness of reducing learning- and participation-related obstacles for all students	Our school's development plan and related practices effectively reduce learning- and participation-related obstacles for all students.
	Helping new students get used to the school	We help all new students get used to the school as soon as possible.
REPRESENTATION (the functioning-of-school aspect) ($\alpha = 0.603$)	Teacher-parent cooperation	The teacher-parent cooperation at our school is good.
	Inclusive orientation of the school's development plan	The definition of inclusion/inclusive school and the resulting practices (lesson organisation, lesson accommodations and modifications, etc.) are included in our school's development plan.
REPRESENTATION (declarative aspect of school) ($\alpha = 0.904$)	Intentionally discussing the meaning of the concept of inclusion	At our school, we intentionally discuss the meaning of the concept of inclusion.
	A uniform understanding of an inclusive school	At our school, we have a uniform understanding of an inclusive school.
RECOGNITION ($\alpha = 0.846$)	Accommodating different students when planning the teaching process	When it comes to planning the teaching process, the employees at our school successfully accommodate all students, regardless of their differences.
	Making sure teaching work includes topics related to the understanding of diversity	I ensure I include topics related to the understanding of diversity in my teaching work.
	Planning, teaching and evaluating the teaching process for students with special needs	The employees at our school work with one another in planning, teaching and evaluating the teaching process for students with special needs.
	Planning, teaching and evaluating the teaching process for students from migrant backgrounds	The employees at our school work with one another in planning, teaching and evaluating the teaching process for students from migrant backgrounds.
RELATIONALITY (functioning of the school) ($\alpha = 0.804$)	Planning, teaching and evaluating the teaching process for low-SES students	The employees at our school work with one another in planning, teaching and evaluating the teaching process for low-SES students.
	High standards of ethical conduct	Standards of ethical conduct at our school are very high.
	Immediate response to various exclusionary practices among students	At our school, we immediately respond to various exclusionary practices among the students.
RELATIONALITY (relational aspect) ($\alpha = 0.762$)	Immediate response to various exclusionary practices adopted by employees when dealing with students	At our school, we immediately respond to various exclusionary practices adopted by employees when dealing with students.
	Students' mutual help	The students at our school help one another.
	Mutual respect between students and employees	At our school, there is mutual respect between employees and students.
	Mutual respect among students	At our school, students respect one another.
	Mutual respect among the employees	At our school, employees respect one another.

Cronbach's alpha coefficients indicate a sufficiently high internal consistency of the measured constructs. The consistency of the representation factor is somewhat lower from the declarative aspect, where Cronbach's alpha coefficient is at the lower limit of consistency, however, this result was attributed to a small number of items used to measure the factor.

Discussions

The aim of this paper was to check the dimensionality of the measured constructs. It was revealed that justice is a multidimensional construct that can be measured by means of the indicators of the Index for Inclusion by [Booth and Ainscow \(2002\)](#).

The survey has provided the first comprehensive insight into the state of inclusion in the prism of justice in vocational education and training in Slovenia. A valid and reliable methodological tool for measuring the domain in the future has been developed. It can be used for identification of the state of inclusion in the prism of justice at the school level on the one hand, and for the evaluation of the impact of systematic support in the field of inclusion and justice on the other hand. Many challenges in this area remain and some are highlighted below.

As defined in the first part of the paper based on [Rawls' Theory of Justice \(1971\)](#), the redistribution of various basic goods is the foundation for the way justice is viewed in Western societies. It is based on asserting individual rights, which are ensured by redistributing goods and providing access to social positions – at school, this is achieved by enabling conditions necessary for optimal learning outcomes, i.e. by removing obstacles and offering additional support to those who need it. The differences in rights are justified if they benefit the most disadvantaged individuals (positive discrimination). The research in this paper has revealed that the redistribution of basic goods can be inferred on the basis of (1) the efforts to remove the obstacles students face in achieving their goals in all areas, (2) the use of school fund resources to ensure equal opportunities for students, (3) the effectiveness of reducing learning- and participation-related obstacles for all students, and (4) helping new students get used to school. The assessments by head teachers, school counsellors and teachers of the implementation of inclusion in terms of redistribution was comparable to this (Inkluzija v poklicnem in strokovnem izobraževanju [[Inclusion in Vocational Education and Training](#)], 2022). They assessed that new students were getting a great deal of help in getting used to school and that school employees made considerable efforts to remove obstacles students face in achieving their goals in all areas (learning, personal development, career, etc.) The respondents also mostly confirmed a sensible use of school fund resources to ensure equal opportunities for all students. This is a standard aid measure for students from low-SES families and a typical positive discrimination measure, which can also have a downside. On the one hand, the redistribution of rights can indeed constitute support for individuals' inclusion, while on the other, as pointed out in the first part of this paper, such measures can lead to even greater stigmatisation of those who often face exclusion ([Akkan and Buğra, 2020](#); [Fraser, Dahl, Stoltz, and Willig, 2004](#); [Fraser and Honneth, 2003](#); [Knijn, Theuns, and Miklós, 2020](#)). The research also found that schools' development plans and the resulting practices are to a lesser extent aimed at effectively reducing the learning- and participation-related obstacles for all students. This can be attributed to the fact that, in general, teachers are sometimes unfamiliar with all the documents that guide their work. Even if the documents as such do not have a direct impact on their actual pedagogical practice, detailed familiarity with these documents can be a prerequisite for improving the quality of pedagogical work.

Recognition foregrounds the rights of traditionally overlooked cultures. At school, just recognition is manifested, for instance, as the discourse of inability (negative recognition) being replaced by the discourse of obstruction (positive recognition) ([Fraser and Honneth, 2003](#)). It was found that the implementation of recognition in vocational education and training can be implied on the basis of (1) accommodating different students when planning the teaching process, (2) the inclusion of topics related to the understanding of otherness in teaching work, (3) school employees working with one another in planning, teaching and evaluating the teaching process for students with special needs, (4) [...] for students from migrant backgrounds, and (5) [...] for low-SES students. The report *Inclusion in Vocational Education and Training* (Inkluzija v poklicnem in strokovnem izobraževanju [[Inclusion in Vocational Education and Training](#)], 2022) shows that school employees work most with one another in planning, teaching and evaluating the teaching process when it concerns students with special needs, less so when it concerns students from

migrant backgrounds, and even less so when it concerns students from low-SES families. When it comes to discussing recognition and looking for an answer to the question of which students to pay more attention to, it would be necessary to take a step away from certain groups of students whose schooling is relatively well regulated to those groups who often face exclusion (Ainscow, 2023; Lynch and Baker, 2005). In practice, recognition is also directly related to the implementation of various accommodating measures that are the result of the rights enjoyed by students who often face exclusion. The respondents' answers show that among the school practices focused on accommodating the students' differences, those related to knowledge assessment and evaluation are the most common, as are those related to planning and adapting the teaching process to different students and including topics related to the understanding of diversity into school lessons. In the future, other research approaches should be used to study the specific accommodation practices used by education professionals in schools.

Representation stems from the equality of conditions for (political) power in taking part in (co) decision-making at different levels of social life and for different social groups (Akkan and Buğra, 2020; Fraser, Dahl, Stoltz, and Willig, 2004). At school, this is manifested as everyone being involved in various decision-making processes. Factor analysis has revealed representation to be a two-dimensional construct and should be considered as such. In terms of the functioning of a school, representation includes (1) teacher-parent cooperation, and (2) definitions of inclusion and the resulting practices being included in the school's development plan. The two items that were used to measure representation in terms of the functioning of a school saturate the factor that very clearly measures redistribution. However, based on the content of these items, it was decided that representation in terms of the functioning of a school should be kept as a separate dimension. Representation from the declarative aspect of school includes (1) intentionally discussing the meaning of the concept of inclusion, and (2) a uniform understanding of an inclusive school. The report *Inclusion in Vocational Education and Training (Inkluzija v poklicnem in strokovnem izobraževanju, 2022)* shows that the respondents assessed cooperation with the students' parents as good. Intentional discussions about the meaning of the concept of inclusion, however, are present to a lesser extent, and a uniform understanding of an inclusive school is weak (ibid.). Considering the complexity of the concept, the findings come as no surprise. In the future, even more attention should be paid to defining it as precisely and unambiguously as possible.

Relationality also proved to be a two-dimensional construct. Relationality arises from the question of how to structure a just social environment in order to stimulate the development of individuals' ability to (co-)live in a community. At school, this is manifested as nurturing an accepting, respectful and supportive culture of coexistence between children/adolescents and adults (Lynch, Kalaitzake, and Crean, 2021). The research revealed that it is necessary to look at relationality from two aspects: the relational aspect and the functioning-of-school aspect. The former is defined by respect (1) among students, (2) among employees, and (3) between students and employees, as well as (4) students' mutual help, which was initially hypothesised to be a measure of representation. The findings show (Inkluzija v poklicnem in strokovnem izobraževanju [Inclusion in Vocational Education and Training], 2022) a relatively low level of mutual respect between school employees and students, and a similarly low level of mutual respect was also found among school employees themselves. Above all, however, the respondents believe that the level of mutual respect is low among students. This might be interpreted as a consequence of the fact that education professionals often pay more attention to conflicts between students and to peer violence, or that they are more likely to notice inappropriate rather than appropriate communication. This might result in their belief that there is no respect among students.

Relationality that relates to the functioning of a school is defined by (1) the implementation of high standards of ethical conduct and immediate response to various exclusionary practices (2) among students, and (3) adopted by employees when dealing with students. The findings (Inkluzija v poklicnem in strokovnem izobraževanju [Inclusion in Vocational Education and Training], 2022) suggest that only a little over one third of the respondents believe that the standards of ethical conduct at their school are high, which is actually also connected with the presence of students with special needs and low-SES students. In fact, the larger the number of these groups of students, the lower the standards of ethical conduct. The research also revealed that more than a half of the education professionals stated that their respective schools' response to various exclusionary practices among students and exclusionary practices adopted by employees when dealing with students is not immediate.

It can be concluded that inclusion in terms of justice is not only a four-dimensional concept, but

rather a six-dimensional one. There are other theoretical discussions of justice, e.g. restorative justice (González, 2012; Sellman, Cremin, and McCluskey, 2014; Thorsborne and Blood, 2013), hence this finding does not come as much of a surprise. In the future, it would thus make sense to supplement the existing dimensions and the statements used to measure them, both in terms of the theoretical concepts and research conducted, which would further increase the set of Index for Inclusion indicators, which can also be used to draw conclusions about the justice of school environments.

Conclusions

Based on a review of 225 relevant studies, Kielblock and Woodcock (2023) concluded that none of the existing instruments measures inclusiveness appropriately. Hence, a new instrument that would measure the attitude towards inclusive education for all students is needed. Taking into account inclusion viewed as a concept that is intended for everyone, this paper has shown that the Index for Inclusion can not only be used as a tool for measuring inclusion, but also as a starting point for designing a tool to be used for measuring the multidimensional concept of justice. Despite the perceived need to modify the questionnaire, which was completed by education professionals employed in Slovenian vocational education and training, the paper confirmed a connection between the two complex concepts, i.e. justice and inclusion. This connection was substantiated both theoretically and empirically.

One of the research limitations that needs to be highlighted is the unclear loading of the items that have been shown to measure representation in terms of the functioning of schools. In fact, factor analysis showed a correlation between the items measuring teacher-parent cooperation and inclusion of the definition of inclusion and the resulting practices into schools' development plans, and the items used to measure redistribution. The decision to keep the factor as a separate dimension of representation was based on the content as the main decisive criterion, i.e. in terms of the content, the two items do not measure redistribution. The factor has borderline acceptable internal consistency, thus in future, it might be worthwhile to consider redefining the representation dimension in terms of the functioning of schools.

It would also make sense to upgrade such measurements through process-oriented activities to eliminate weak areas perceived when it comes to operation in specific educational institutions. These areas refer to viewing inclusion and justice as fundamental principles of school communities. When planning various activities aimed at promotion of inclusion and justice, it is imperative to use as much data as possible and to make sure the data is as diverse as possible. Moreover, the changes must include the organisational culture of institutions, as well as measures at the level of a wider community.

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Conflict of interests

The authors declare no conflict of interest.

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