



Global Competencies of Slovenian Students: Relatedness of Knowledge, Skills, Attitudes, and Values

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Annotation. The aim of the article is to explicate, compared to the OECD average, lower perceived global competencies of Slovenian 15-year-olds in PISA 2018. The results demonstrate the relatedness of different domains of global competencies. Based on the results, the article exposes the importance of establishing an appropriate national framework, which would strengthen students' knowledge as a basis for cultivating all other virtues (skills, attitudes, and values) of modern global citizens.

Keywords: *global competencies, PISA, Slovenia, assessment, policy framework.*

Introduction

In the last few decades, globalisation has affected almost all public policies, including education. Its implications are evident in the increasing endeavours of national education systems to raise global citizens who will be able to deal with the challenges of the modern globalized world (Majewska, 2022). The pedagogical basis for global education dates back to the world studies projects created by Richardson in the UK in the 1970-80s (e.g., Richardson, 1979). Inspired by Freire's (1972) educational philosophy and his views on education as a means for promoting social change, these projects presented an important shift from the passive learning of facts towards the active development of skills, values, and attitudes regarding the world's problems (Hicks, 2003). Over the years and decades, these foundations have been developed and adopted by national states and various international

organisations such as the Council of Europe (2002) in terms of global education, UNESCO (2015) in terms of global citizenship education, and, most recently, OECD in terms of the assessment of global competencies within the Programme for International Student Assessment (PISA) 2018 framework.

Sälzer and Roczen (2018) explain that while, as the concept *global competence*, has been used in common language for several decades (e.g., Hanvey, 1976; Lambert, 1994), it is a relatively young scientific construct (Boix Mansilla & Jackson, 2013; Reimers, 2010) and is mostly studied in the Western context (Deardorff, 2011). Skinner (2012) adds that very little academic research has been carried out in the field of global education in Slovenia or in the wider Central Eastern European region. Martini and Robertson (2022) indicate that research on the OECD assessment of global competencies in PISA 2018 is still emerging, while Šterman Ivančič and Štremfel (2022) reveal that PISA 2018 presents the first assessment of students' global competencies in Slovenia. It shows that, compared to their peers in OECD countries, Slovenian students reported somewhat lower levels of global competencies, and as such, indicates the need for further research in this area.

Taking into consideration the OECD PISA 2018 results and their contextualisation in Slovenia, the article with its original empirical scientific contribution fills the research gap in the field and provides an understanding of the effectiveness of the current Slovenian policy framework for developing students' global competencies and its implications for further development of the field. After introducing the interplay of political science insights into modern (global) citizenship and educational science insights into global competence as a set of virtues (knowledge, skills, attitudes, and values) that the modern global citizen should possess, the article focuses on the relatedness of the most commonly recognized domains of global competencies: awareness of global issues, responsiveness to global issues (global mindedness), self-efficacy regarding global issues, and attitudes towards immigrants in order to provide an in-depth understanding of self-reported global competence attitudes and dispositions of Slovenian students on the PISA international scale. The relevance and importance of focusing on these virtues/domains are at least four-fold. The first originates within the theoretical framework of competency-based education, which emphasizes knowledge, skills, attitudes, and values as important outcomes of education and has become the prevailing educational paradigm across the world in the last decades (e.g., Baartman & Bruijn, 2011; Gardinier, 2021). Second, the leading international institutions and organisations in the field (Council of Europe, 2002; Council of the European Union, 2018; OECD, 2018; UNESCO, 2015) define these domains as the main dimensions of (global) citizenship education. Third, while the existing theoretical and empirical research (e.g., Banjac, 2019; Galston, 2004) demonstrates the relatedness of all four domains in the field of traditional national citizenship, their relatedness has not been well addressed in the field of global citizenship (e.g., Andreotti, 2015; Deželan et al., 2019), which makes the empirical research conducted on large-scale PISA 2018 data in this article an important scientific contribution to the research field. Forth,

according to Reimers (2010), these dimensions represent sufficiently distinct domains that can be treated, for purposes of policy and programming, as independent, meaning that different pedagogical approaches can be used for their development. These arguments make it important to understand, how Slovenian students perform in different domains of global competencies and of how they are interrelated.

The article aims to provide answers to the following research questions:

- What are Slovenian students' self-reported global competence attitudes and dispositions compared to the international (OECD) average in different global competence domains?
- How are different domains related in Slovenia? Is awareness of global issues a significant predictor of global mindedness, self-efficacy regarding global issues, and attitudes towards different global issues?
- What are the implications for further development of students' global competencies in Slovenian education policy and practice?

To follow its research aims, the article proceeds as follows: First, inter-disciplinary political, educational, and theoretical views on different domains of global competencies are discussed and synthesized. Second, the PISA framework of global competencies assessment and the achievement of the Slovenian students are introduced. Third, the article presents the results of secondary analyses of the PISA 2018 data, demonstrating the relatedness of the four domains of global education studied. Fourth, the results of the secondary analyses are critically discussed, with implications for further development of students' global competencies in Slovenian education policy and practice provided. Fifth, the concluding remarks synthesize the main findings.

Global competencies as an interplay of knowledge, skills, attitudes, and values

For centuries, citizenship has been seen as membership in a bounded community, with rights and responsibilities defined by a given polity. Citizenship education has been recognised as a measure to increase one's civic awareness, which generally refers to the knowledge, attitudes, and skills necessary to live and function as members of the polity (Heater, 1999).

The impact of globalization requires a shift from national citizenship to global citizenship (e.g., Delanty, 2000). The lack of an agreed-upon definition for global education, as well as the variety of theories surrounding whether or not it should be taught and, if so, how best to develop global citizenship, have yielded broad criticism and debates (Goren & Yemini, 2017) and resulted in several different models of global education. Despite differences in their focus and scope, these models share a common goal of promoting students' understanding of the world and empowering them to express their views and participate in (global) society (OECD, 2018). Global education should therefore help students to acquire the so-called *global competencies* (combination of knowledge, skills, attitudes, and values) needed for new identities relating to an individual's membership

in, and identification with, a multileveled polity embracing life in personal and in social, local, national, and global communities (Law, 2007; Chiba et al., 2021; Duarte & Robinson-Jones, 2022). In the educational scientific debates related to competency-based education (e.g., Baartman & Bruijn, 2011), it is frequently stressed that knowledge, skills, attitudes, and values are mutually conditioned. Although their relatedness has been relatively well demonstrated in civic education theoretical and empirical research, their relatedness in the field of global education has been rather overlooked. In what follows, the existing research on their relationship in the civic education field is discussed with implications for the field of global competencies provided.

Galston (2004, p. 264) points out that civic knowledge is not an end in itself but is related to a number of civic characteristics. As he explains, “Civic knowledge promotes political participation. All other things being equal, the more knowledge people have, the more likely they are to participate in civic and political affairs” (p. 264). Similarly, Crick (2004) writes, a politically literate person is not only well-informed about politics but is also capable of active participation and communication. Banjac (2019) explains that young people should acquire all the necessary (basic) knowledge about forms of political participation and available participatory tools within democratic arrangements, to ensure that their political engagement in wider democratic processes is informed and meaningful, not just for them, but for society as a whole. He further exposes that participation skills on their own (without the necessary knowledge base) are not sufficient. Therefore, an important condition for practicing global citizenship is appropriate political competence. In this regard, Deželan et al. (2017) explain that an individual as a “global citizen” is not tied to a territorially limited political community, which basically allows him a certain level of participation in politics, at least in the form of participation in elections. To be politically active at the global level, the “global” citizen should demonstrate a much higher level of political competence in terms of the very choice of level and topic of participation. In the field of global competencies, the OECD (2018, p. 61) outlines the relationship among the dimensions of knowledge, skills, and attitudes with the following example: “Examining a global issue such as climate change requires good knowledge of that particular topic, the skill to transform this awareness into deeper understanding, the ability to reflect on this issue from multiple cultural perspectives and the willingness to take action for sustainability and collective well-being” (OECD, 2018, p. 61). Milfont and Sibley (2012) explain that the capacity to take action is seen as the culmination of the knowledge, skills, and attitudes acquired by students. In this regard, OECD explains that students who perceive themselves high on scales of knowledge of global and intercultural issues, understanding the perspectives of others and interest in other cultures, are expected to positively contribute more to their local communities and the world in which they live (OECD, 2020).

According to Galston (2004), civic knowledge can alter opinions on specific civic issues as well. For example, he argues that “the more civic knowledge people have, the

less likely they are to fear new immigrants and their impact on our country” (p. 265). Based on Banks’s (2001) dimensions of intercultural education and secondary analyses of the data of the International Civic and Citizenship Education Study conducted in 2009, Klemenčič et al. (2011) empirically demonstrated that knowledge of multicultural topics is related to reducing prejudice with respect to multicultural themes. Going further, Andreotti (2015) even warns about the negative consequences of superficial knowledge about global issues. She argues that responsible education in current “global times” requires a deeper understanding of the social, cultural, economic, and historical forces and flows that connect people, places, spaces, and worldviews, and of the difficulties of intervening in complex and dynamic systems. In that framework, Pan (2011) explains that taking into consideration the abstract nature of the global society, children’s global mindedness is not self-evident and needs to be actively discovered, created, and sustained by providing appropriate knowledge and in-depth understanding of the global community. Barrett (2018) reports that “studies have revealed that young people who have a high level of global-mindedness are more likely to be engaged in intercultural contact, cooperation, interaction, and dialogue; tolerant of cultural differences and appreciative of cultural diversity; supportive of global human rights and humanitarian needs, and willing to contribute to international humanitarian relief; concerned for the environment and engaged in pro-environmental activities.”

Global competencies of Slovenian students in PISA 2018

The OECD defines global competence as “the capacity to examine local, global and intercultural issues, to understand and appreciate the perspectives and world views of others, to engage in open, appropriate and effective interactions with people from different cultures, and to act for collective well-being and sustainable development” (OECD, 2018, p. 7).

To provide an international comparative assessment of students’ global competencies, a cognitive assessment was used to measure knowledge and skills, and a student questionnaire to measure students’ self-reported attitudes and dispositions (OECD, 2018). In addition, contextual data about acquiring students’ global competencies has been collected by the school principal, teacher, and parent questionnaires. From a total number of 79 countries collecting PISA data in 2018, 27 countries participated in the global competence cognitive assessment and student and school principal questionnaires, and 66 countries, amongst them Slovenia, completed just the student and school principal questionnaires. Although Slovenian students did not participate in the PISA 2018 cognitive assessment of global competence, their awareness of global issues, as a precondition for higher-order knowledge, was measured in the student questionnaire.

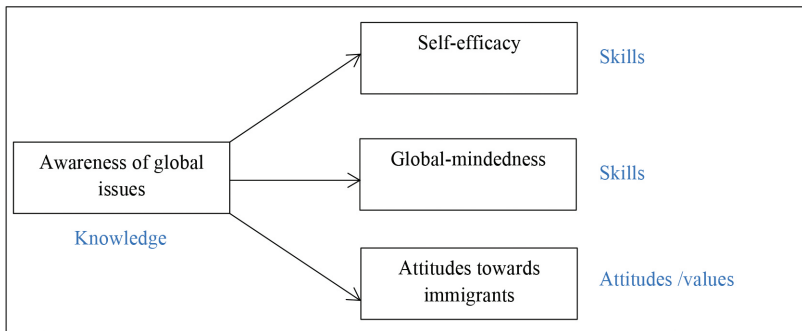
The student questionnaire items covered students’ attitudes and dispositions regarding their: awareness of global issues (AWARENESS); self-efficacy regarding global issues (SELF-EFFICACY); interest in learning about other cultures; respect for people

from other cultures; ability to understand the perspectives of others; cognitive adaptability; attitudes towards immigrants (ATTITUDES); awareness of intercultural communication; and global-mindedness (GLOBAL-MINDEDNESS). The questionnaire also covered the availability of learning opportunities at school (OECD, 2020).

In accordance with the dimensions of global competencies elaborated in the first section, we are interested in the knowledge, skills, attitudes, and values of Slovenian students regarding global issues. Considering the OECD PISA 2018 framework, we operationalized these as awareness of global issues (knowledge), self-efficacy and global mindedness (skills), and attitudes towards immigrants (attitudes/values) (see Figure 1). In the continuation of the article, we will address the connections between these dimensions through the analysis of PISA 2018 data for Slovenia.

Figure 1

Relatedness of Different Dimensions of Global Competencies



Source: Own compilation.

Method

In order to answer the research questions, the following research methods have been applied: a) a review of theoretical and empirical scientific research identified in the Web of Science, PsycARTICLES, ERIC, Scopus, and SOC INDEX databases by searching for the following terms: global education, global citizenship, global competencies, knowledge, skills, attitudes, values in October and November of 2021; b) a review of international and national policy documents regarding global education, global citizenship, and global competencies; c) secondary analyses of the OECD PISA 2018 data for which the method (participants, instruments and data analysis) is explained in the following paragraphs.

Participants

For the purpose of the data analysis, we used the data from the PISA 2018 survey, which in Slovenia includes all male and female students aged between 15 years and 3 months and 16 years and 2 months, regardless of the educational programme they attend. Sampling in the PISA survey is multi-level and stratified. In Slovenia, the sample includes all secondary education programmes and a few randomly selected primary schools and adult education institutions. 6401 male and female students participated in PISA 2018. For the analysis, we excluded from the sample 15-year-olds who attended vocational education programmes of short duration, as these students did not fill in the questionnaire on global competence attitudes and dispositions. The final sample in the analysis includes a representative sample of 6241 15-year-old male and female students, of which 2941 (47.1%) are female and 3300 (52.9%) are male. In the sample, there are only 9% of students with an immigrant background.

Instruments

After a 2-hour PISA 2018 reading, mathematics, and science literacy assessment, students completed the student questionnaire, which is used to identify the effects of different background factors on student achievement. In 2018, the questionnaire also included an evaluation of students' global competence attitudes and dispositions. For the purpose of the analysis, we used separate scales addressing students' AWARENESS, GLOBAL-MINDEDNESS, SELF-EFFICACY, and ATTITUDES, where students responded to 23 statements altogether.

AWARENESS scale assessed the degree to which students are aware of different global issues, i.e., climate change and global warming, global health (e.g., epidemics), migration (movement of people), and causes of poverty. Students responded on a 4-point Likert scale with the response categories ranging from "I have never heard of this" to "I am familiar with this and I would be able to explain this well". The scale consisted of 7 statements and showed good internal consistency for the Slovenian sample, with the coefficient alpha value of $\alpha = .86$ (OECD, 2021).

GLOBAL-MINDEDNESS scale assessed how students see themselves as connected to the world community and feel a sense of responsibility towards its members. As such, global-mindedness comprised a sense of world citizenship, responsibility for others in the world, a sense of interconnectedness, and global self-efficacy. Students responded on a four-point Likert scale with the response categories ranging from "Strongly disagree" to "Strongly agree". The scale consisted of 6 statements and showed good internal consistency for the Slovenian sample, with the coefficient alpha value of $\alpha = .83$ (OECD, 2021).

SELF-EFFICACY scale addressed a students' self-efficacy regarding explaining or discussing several complex global issues; for example, how carbon-dioxide emissions affect global climate change and why some countries suffer more from global climate change than others. Students responded on a four-point Likert scale with the response

categories ranging from “I couldn’t do this” to “I could do this easily”. The scale consisted of 6 statements and showed good internal consistency for the Slovenian sample, with the coefficient alpha value of $\alpha = .88$ (OECD, 2021).

ATTITUDES scale assessed students’ attitudes toward equal rights for immigrants. For example, students were asked whether they think immigrant children should have the same opportunities for education that other children in the country have and whether immigrants should have the same rights as everyone else in the country. Students responded on a four-point Likert scale with the response categories ranging from “Strongly disagree” to “Strongly agree”. The scale consisted of 4 statements and showed good internal consistency for the Slovenian sample, with the coefficient alpha value of $\alpha = .86$ (OECD, 2021).

Data analysis

For the analysis, we used the standardized values of indices for Slovenia from the PISA 2018 database for all the above-mentioned scales. The index is a standardized value with a mean of 0 and a standard deviation of 1 and enables the comparison of Slovenian scores on a certain scale to the OECD average. Negative values of the index mean that Slovenian students on average evaluated their global competence attitudes and dispositions on a certain scale lower than their peers from the OECD countries, and positive values of the index mean, that their self-evaluation on a certain scale was higher. First, we compared the average values of the index of AWARENESS, the index of GLOBAL-MINDEDNESS, the index of SELF-EFFICACY, and the index of ATTITUDES for Slovenia with the OECD average. Since we were interested in the effects of students’ awareness of global issues on students’ global-mindedness, self-efficacy regarding global issues, and attitudes towards immigrants, we used the linear regression procedure to further analyse the size effects. Pearson correlation coefficients were used to examine associations between the independent variable (AWARENESS) and the dependent variables (GLOBAL-MINDEDNESS, SELF-EFFICACY, ATTITUDES) prior to undertaking regression. We also undertook preliminary screening of the data through the examination of residuals with the scatterplot of residuals against predicted values and checked the data for multivariate outliers (Tabachnick & Fidell, 2007). No obvious pattern to the errors and no multivariate outliers were identified.

Data were analysed using the statistical programme IEA IDB Analyzer (Version 4.0.39), which, in processing data due to two-stage sampling in the study in addition to the use of weights for individual students (W_FSTUWT), also allows us to use sample weights to properly assess the standard parameter errors in the population using the Bootstrap method.

Results

In this section, we first present the results of descriptive statistics, i.e., the average values of internationally comparable indices for students' self-reported global competence attitudes and dispositions in Slovenia, compared to the OECD average. We are especially interested in students' AWARENESS, GLOBAL-MINDEDNESS, SELF-EFFICACY, and ATTITUDES. Following this, we present the correlations between the different aspects of students' self-reported global competence attitudes and dispositions and end this section with the results of linear regression models, where we are interested in the effects of AWARENESS when explaining GLOBAL-MINDEDNESS, SELF-EFFICACY, and ATTITUDES. As statistically significant, we defined those differences and correlations between the considered factors for which the level of alpha error was lower than 5%.

Compared to their peers from the OECD countries, Slovene students on average reported (Table 1) somewhat lower levels of AWARENESS (-.01), GLOBAL-MINDEDNESS (-.10), SELF-EFFICACY (-.10), and ATTITUDES (-.05).

Results (Table 2) also showed that different students' self-reported global competence attitudes and dispositions in Slovenia are low to moderate, but significantly correlated. The highest values of correlation coefficients were found between AWARENESS and SELF-EFFICACY and GLOBAL-MINDEDNESS and ATTITUDES.

Table 1

Mean Indices For Study Variables in Slovenia Compared to the OECD Average

	Slovenia		OECD	
	M	SE	M	SE
AWARENESS	-.01	.02	.01	.00
GLOBAL-MINDEDNESS	-.10	.02	.00	.00
SELF-EFFICACY	-.10	.02	.00	.00
ATTITUDES	-.05	.02	.02	.00

Note. M = Mean value of internationally comparable index - standardized value with the mean of 0 and standard deviation of 1.

Table 2

Correlations for Study Variables

	1	2	3	4
1. AWARENESS	–			
2. GLOBAL-MINDEDNESS	.26*	–		
3. SELF-EFFICACY	.46*	.22*	–	
4. ATTITUDES	.20*	.33*	.13*	–

Note. The Pearson correlation coefficient was calculated as a measure of correlation. *p < .001.

When assessing the predictive power of AWARENESS in explaining GLOBAL-MINDEDNESS (Table 3), the results confirmed that AWARENESS is a significant predictor of GLOBAL-MINDEDNESS. An increase in one unit of the index of AWARENESS corresponds to an increase of the index of GLOBAL-MINDEDNESS by .26, which can be considered a moderate effect. With the index of AWARENESS, we can explain 7% ($F = 400.03$, $p < .001$) of variability in the index of GLOBAL-MINDEDNESS.

AWARENESS also proved to be a significant predictor of SELF-EFFICACY (Table 4). An increase in one unit of the index of AWARENESS corresponds to an increase in the index of SELF-EFFICACY by .48, which can be considered a large effect. With the index of AWARENESS, we can explain 21% ($F = 1567.47$, $p < .001$) of variability in the index of SELF-EFFICACY.

Significant effects were also found when considering the association between AWARENESS and ATTITUDES (Table 5). AWARENESS proved to be a significant predictor of ATTITUDES, where the increase in one unit of the index of AWARENESS corresponded to an increase of the index of ATTITUDES by .19, which can be considered a moderate effect. With the index of AWARENESS, we can explain 4% ($F = 225.94$, $p < .001$) of variability in the index of ATTITUDES.

Table 3

Regression of Association Between AWARENESS and GLOBAL-MINDEDNESS

	<i>B</i>	<i>SE</i>	<i>t</i>	<i>p</i>	95% CI
Constant	-.10	.02	-6.33	<.001	[-.12, -.07]
AWARENESS	.26	.02	12.57	<.001	[.23, .29]

Note. CI = confidence interval; R^2 adjusted = .07.

Table 4

Regression of Association Between AWARENESS and SELF-EFFICACY

	<i>B</i>	<i>SE</i>	<i>t</i>	<i>p</i>	95% CI
Constant	-.10	.01	-6.94	<.001	[-.12, -.07]
AWARENESS	.48	.02	32.28	<.001	[.46, .50]

Note. CI = confidence interval; R^2 adjusted = .21.

Table 5

Regression of Association Between AWARENESS and ATTITUDES

	<i>B</i>	<i>SE</i>	<i>t</i>	<i>p</i>	95% CI
Constant	-.05	.02	-2.81	<.01	[-.07, -.02]
AWARENESS	.19	.02	9.61	<.001	[.17, .22]

Note. CI = confidence interval; R^2 adjusted = .04.

Discussion and Conclusions

Results of the secondary analyses of PISA 2018 data on students' self-reported global competence attitudes and dispositions in Slovenia show that, compared to their peers in OECD countries, Slovenian students reported somewhat lower levels of awareness of global issues, global-mindedness, self-efficacy regarding global issues, and attitudes towards immigrants.

Although the variance of student's global-mindedness, self-efficacy regarding global issues, and attitudes towards immigrants we can explain by students' awareness of global issues is relatively low, the results also show that students' awareness of global issues has a moderate to high effect on already mentioned dimensions of global competence and is a significant predictor of all three, especially of the students' self-efficacy regarding global issues. We can therefore argue that the results, to some point, support the theoretical dispositions and other research findings about the relatedness of knowledge, skills, attitudes, and values regarding global issues. As Galston (2004) explains: civic knowledge helps citizens learn more about civic affairs. It is difficult to acquire more knowledge unless we have a certain basis of knowledge. The new knowledge we gain can be effectively used only if we are able to integrate it into an existing framework. Although Skinner (2012) points out that learning about the facts is important but not sufficient, taking into consideration the dynamics of a rapidly changing world and emphasizing the importance of developing the skills to be able to analyse, apply, and potentially adapt knowledge in line with a constantly changing world, it should be taken into consideration that knowledge about global issues provides a necessary and indisputable basis for all other global competence dimensions (skills, attitudes, and values). According to Reimers (2010, p. 187), these dimensions represent sufficiently distinct domains that can be treated, for purposes of policy and programming, as independent, meaning that different pedagogical approaches can be used for their development. The literature review of Chiba et al. (2021) suggests that effective curricula for global competencies development include opportunities both to promote students' theoretical understanding (knowledge) and practical experience (skills, attitudes, and values development). Such curricula in addition to the traditional learning approaches involve modern learning approaches, such as transformative learning, including discussions, participation, and simulations in class and study exchange programs as well as student-centered teaching methodologies, including group-based cooperative project work or community-based learning (Majewska, 2022). It is important that these approaches support the exploration of multiple perspectives and the development of critical approaches through authentic learning experiences. However, while the development of knowledge of global issues facilitates the development of all other dimensions, as demonstrated in the sample of Slovenian students and in the PISA 2018 global education framework, it is worthwhile to

first put all focus on further educational endeavours in Slovenia to strengthen students' knowledge about global issues.

Measuring the global competencies of 15-year-olds in the PISA survey is argued to be important to provide system-level data to countries. This would enable a country's education system to develop interventions that enhance students' global competencies. (OECD in Robertson, 2021). The PISA 2018 results, analysed in this article, provide the only research findings on the level of global competencies of students in Slovenia. The article research results and explanations provided for the below-average results of the Slovenian students in the field can be therefore supported by the very rare existing Slovenian studies in the field of (global) citizenship education. Firstly, although the current Slovenian policy framework, particularly from the White Paper (2011) onwards, puts significant emphasis on global education and entails all four dimensions of global competence studied (knowledge, skills, attitudes, and values), the formal curricula for Patriotic and Citizenship Culture and Ethic (2011), as the core subject of (global) citizenship education in Slovenia, is not yet aligned with the latest trends in the field (Šterman Ivančič & Štremfel, 2021). The forthcoming, competence-based curricula should therefore provide enough opportunities to enhance students' knowledge but also their skills, attitudes, and values so that they are empowered to act as autonomous agents capable of pursuing global action effectively (Barrett, 2018). Secondly, Slovenian students in PISA 2018 reported participation in, on average, four out of ten global and intercultural learning activities, which is below the OECD average (five activities). Namely, the findings (OECD, 2020, p. 225) show that students that reported more learning activities on average also reported on more positive attitudes and dispositions. These results correspond with the Dolinar and Vodopivec (2012, p. 10) research study, in which out of 67 secondary school teachers, 75% of them reported they had heard of global education, yet only 20% reported that they integrate it into their lessons. Similarly, Skinner (2012) reports that although Slovenian teachers and headteachers appeared to have some understanding of global education, including elements of active, critical reflective approaches and higher thinking skills, the involvement of global issues in educational practices is very limited due to time restrictions of the curricula. These data indicate that limited learning activities about global issues, which Slovenian students report in the PISA 2018 and teachers and headmasters report in other surveys, can hinder the development of students' global competencies. It would be therefore valuable to provide Slovenian students with more opportunities to enhance global competencies in curricular and extracurricular activities (e.g., Mayevska, 2022). The studies as well report on a discrepancy between the institutional and normative guidelines (i.e., policy objectives), on the one hand, and the real practice in the field, on the other hand (i.e., policy results) (Neubauer, 2012; Skinner, 2012), lack of cross-sectoral (inter-ministerial, state-nongovernmental) cooperation and lack of systematic approach to global competencies development in Slovenia (e.g., Arbeiter, 2019). Lower levels of reported global competencies of Slovenian students, compared to

their peers in OECD countries in all four domains of global competencies together with rare existing studies in the field indicate that institutional infrastructure for developing global competencies of youth in Slovenia could be improved. The article provides so far missing empirical and international comparative evidence about Slovenian students' global attitudes and dispositions and complements existing policy recommendations in the field with its main finding, indicating the importance of strengthening knowledge of global issues as a precondition for all other attributes (skills, attitudes, and values) of global citizens. Demonstrating the relatedness of these domains on the large-scale PISA 2018 data, it as well contributes to the development of emerging global competencies research and theory.

However, this study has its own limitations in the sense, that Slovenian students did not participate in the PISA 2018 cognitive assessment on global competence, and we only have their self-reports on their awareness of global issues, as a precondition for higher-order knowledge. Although these data are reliable in assessing their knowledge of global issues, the involvement of Slovenia in the PISA 2018 global competencies cognitive assessment would further reveal the actual knowledge of global issues among Slovenian students.

Also, since the research (e.g., Duarte & Robinson-Jones, 2022; Kerkoff & Cloud, 2020; Parmigiani et al., 2022; Ramos et al., 2021) indicate that teacher readiness for teaching global competencies and their global mindedness, are important factors for enhancing students' global competencies, further research should be focused on how well Slovenian teachers are prepared for the development of different domains of global competencies, investigated in this article, as well. The data on which didactical-methodical approaches they use during global education lessons (e.g., Chiba et al., 2021) Mayevska, would as well present an additional important contextualisation of the results, as demonstrated in this article.

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Slovėnijos mokinių globaliosios kompetencijos: žinių, įgūdžių, nuostatų ir vertybių sąsajos

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Santrauka

Globaliosios kompetencijos – tai žinių, įgūdžių, nuostatų ir vertybių, kuriomis turėtų pasižymėti pasaulio pilietis, rinkinys. Tyrimo analizei atlikti pasirinkta reprezentatyvi imtis – 6074 Slovėnijos penkiolikmečiai iš tarptautinio penkiolikmečių tyrimo PISA 2018 (angl. *Programme For International Student Assessment*, 2018) duomenų. Šiame straipsnyje aptariamos Slovėnijos mokinių globaliosios kompetencijos – nuostatos ir polinkiai – iš daugiadisciplininės politikos ir edukologijos perspektyvos remiantis antrine PISA 2018 rezultatų analize. Rezultatai rodo, kad palyginti su EBPO vidurkiu (globalių kompetencijų nuostatų ir polinkių vidurkiu) Slovėnijos penkiolikmečiai prasčiau suvokia globalias problemas (žinios ir įgūdžiai) ir yra mažiau teigiamai nusiteikę imigrantų atžvilgiu (nuostatos / vertybės). Rezultatai taip pat patvirtina, kad mokinių supratimas apie globalias problemas reikšmingai apima visas globaliųjų kompetencijų dimensijas, ypač mokinių saviveiksmingumą globalių problemų atžvilgiu. Remiantis iki šiol trūkstamais empiriniais įrodymais, straipsnis papildo jau atliktus tyrimus, kuriuose nurodoma keletas esamos Slovėnijos nacionalinės politikos sistemos, skatinančios globalųjį švietimą, trūkumų. Tai atskleidžia, kaip svarbu stiprinti mokinių žinias apie globalias problemas, nes tai yra pagrindas ugdyti visas šiuolaikinių pasaulio piliečių vertybes Slovėnijoje ir platesnėje tarptautinėje aplinkoje.

Esminiai žodžiai: *globalios kompetencijos, PISA, Slovėnija, vertinimas, politikos gairės.*

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