

Perceptions of inclusion among lower secondary level students in Finland

Minna Kyttälä, Hanna-Maija Sinkkonen & Raisa Harju-Autti

To cite this article: Minna Kyttälä, Hanna-Maija Sinkkonen & Raisa Harju-Autti (09 Oct 2023): Perceptions of inclusion among lower secondary level students in Finland, Scandinavian Journal of Educational Research, DOI: [10.1080/00313831.2023.2266728](https://doi.org/10.1080/00313831.2023.2266728)

To link to this article: <https://doi.org/10.1080/00313831.2023.2266728>



© 2023 The Author(s). Published by Informa UK Limited, trading as Taylor & Francis Group



Published online: 09 Oct 2023.



Submit your article to this journal [↗](#)




View related articles [↗](#)



View Crossmark data [↗](#)

Perceptions of inclusion among lower secondary level students in Finland

Minna Kyttälä ^a, Hanna-Maija Sinkkonen^a and Raisa Harju-Autti ^b

^aDepartment of Education, University of Turku, Turku, Finland; ^bUniversity of Jyväskylä, Kokkola University Consortium Chydenius, Jyväskylä, Finland

ABSTRACT

This study aims at investigating Finnish lower secondary grade students' (N = 469) emotional school well-being, social inclusion, and academic self-concept with regard to grade level, linguistic background, and needs for support. For collecting the data, a Finnish translation of the Perceptions of Inclusion Questionnaire for students was used. The results suggest that, considering the students' own perceptions, Finnish schools are quite inclusive with regard to students' linguistic backgrounds. Although the results showed a decrease in emotional well-being, social inclusion, and academic self-concept during the lower secondary level, this decrease was not related to any specific background factors. The results indicate that students receiving support showed lower levels of social inclusion and academic self-concept, suggesting that not all students feel equally included. These findings underline the importance of assessing students' own perceptions of inclusion. Additionally, educational implications are discussed.

ARTICLE HISTORY



Received 13 March 2023
Accepted 27 September 2023

KEYWORDS

Perceptions of inclusion questionnaire; lower secondary school; emotional well-being; social interaction; academic self-concept; inclusive education

Introduction

Inclusive education builds on the notion of meeting *all students'* emotional, social, and educational needs (see, e. g. Ainscow, 2020). Furthermore, accepting, understanding and attending to student diversity is an important priority in inclusive schools (Nilholm & Göransson, 2017). Traditionally, discussions on inclusion have focused on student placement, with the prerequisite of teaching all students in the same mainstream classrooms and schools with adequate support (Nilholm & Göransson, 2017). The aim of inclusive education, however, is not merely to physically locate all students in the same classrooms but to promote the participation and educational achievement of all students (UNESCO, 2008). According to Schwab and Alnahdi (2020), students' subjectively perceived emotional school well-being, social inclusion, and academic self-concept are indicators and outcomes of high-quality inclusive education. In the current study, we investigated Finnish lower secondary students' perceptions in these areas. Since current literature reveals some differences in students' perceptions of inclusion based on age (Koskela et al., [under review](#)), linguistic background (OECD, 2019), and needs for support (Bossart et al., 2015; DeVries et al., 2018; McCoy & Banks, 2012), those characteristics were also examined.

CONTACT Minna Kyttälä  minna.kyttala@utu.fi  Department of Education, University of Turku, Assistentinkatu 5, 20014 Turku, Finland

© 2023 The Author(s). Published by Informa UK Limited, trading as Taylor & Francis Group
This is an Open Access article distributed under the terms of the Creative Commons Attribution License (<http://creativecommons.org/licenses/by/4.0/>), which permits unrestricted use, distribution, and reproduction in any medium, provided the original work is properly cited. The terms on which this article has been published allow the posting of the Accepted Manuscript in a repository by the author(s) or with their consent.

Inclusive education for all

The Finnish school system is built upon public schools with highly educated teachers (Jakku-Sihvonen & Niemi, 2006; Pollari et al., 2018). At the systemic level, the Finnish educational system and policies are inclusive and follow the principles of international documents (Jahnukainen, 2015; UNESCO, 1994; United Nations, 2006; United Nations General Assembly, 2015). According to the Finnish National Core Curriculum (Finnish National Agency for Education, 2014), basic education is guided by the inclusion principle, and every student has the right to appropriate support when the student needs it. Basic education is based on a three-tiered support model where the amount of support increases and becomes more intensified and individualized according to need (general, intensified, special; Finlex, 2011). In 2020, intensified support was received by 12.2% of students and special support by 9.0% of students (Official Statistics of Finland, 2020a).

Although the principle of inclusion is mentioned in National Core Curriculum, inclusive education is not defined or even mentioned in Finnish education legislation (Jahnukainen et al., 2023). Furthermore, in Finland, local authorities have a relatively broad autonomy in implementing the law and the national guidelines (Simola et al., 2017). This has led to different interpretations on how inclusive education should be organized. Thus, means to offer support for students vary depending on the local decision making, as well as local resources targeted at education (see e. g. Lintuvuori et al., 2017), and sometimes to inaccurate use of ‘inclusion’ as a justification for cost-effective solutions (Honkasilta et al., 2019). This confusing situation has led to a lively and polarized debate in Finland about what inclusion means and should mean in school. Discussions on inclusive education often focus on the narrow interpretation of inclusion: placing ‘students with special needs’ in mainstream education (see e. g. Pitkänen et al., 2021).

Despite the ongoing debate and conceptual and practical ambiguities, the number of students receiving full-time special education in special schools or special classes is continually decreasing in Finland (Official Statistics of Finland, 2020a). In 2020, 34 percent of the students receiving special support received all education in a special education group or class while ten years earlier, the percentage was 46 (Official Statistics of Finland, 2010). The same phenomenon has been identified in many European countries (Ramberg & Watkins, 2020) and elsewhere (e. g. in Asia: Kalyanpur, 2020; in the U.S.: Powell, 2016), although there are differences between countries in the way inclusive education is implemented. These diverse ways of responding to learners’ rights to inclusive education may be associated with diverse understandings and interpretations of what inclusion means (Kiuppis & Sarromaa Hausstätter, 2014)—whether it is a matter of including students with special needs in mainstream education or simply a matter of including the whole diversity of students. In the current study, we adopt the definition that inclusion in education means every student’s right to belong to and participate in education for all with adequate support (see e. g. Jahnukainen et al., 2023), and requires that the student also feels included (Schwab & Alnahdi, 2020).

Valuing and accepting diversity as a characteristic of ‘everyone’ is a baseline for inclusion in education (Ainscow et al., 2006). Different needs for support are part of this diversity. In addition to individual approaches to learning and studying, students come from heterogenous backgrounds regarding culture, socio-economy, language, and educational history (Repo, 2020; Sinkkonen & Kyttälä, 2014), challenging the education system and its practices. One of the global challenges concerning educational systems is the question of languages (Suárez-Orozco et al., 2008), and how they are intertwined with diversity of cultures, cultural identities, and immigration histories (e.g., Scanlan & Zisselsberger, 2015). Although Finland is officially a bilingual (Finnish and Swedish) country, historically, it represents quite a homogenous country. During the past decades, Finland has become an increasingly multicultural society. Currently, 7.8% of the population speaks some first language other than Finnish, Swedish, or Samí (Official Statistics of Finland, 2020b). Simultaneously, the diversity and spectrum of different first languages among students in Finnish schools have significantly increased (Vipunen, 2023). Linguistic diversity also challenges the process of

identifying the actual need for support due to the lack of proper assessment methods (Sinkkonen & Kyttälä, 2014; Sinkkonen et al., 2009; Sinkkonen et al., 2011).

In Finnish basic education, newly arrived immigrant students can be provided with preparatory studies that cover 900 or 1000 h, depending on the grade level (Finnish National Agency for Education, 2019). During this period, they can adapt themselves to the new school culture and learn the language of schooling and instruction (Finnish or Swedish). All language groups also have a legal right to maintain and develop their own languages at school (Finnish National Agency for Education, 2014; Van Driel et al., 2016). However, the formal practices at school are often still monolingual, and the students' home languages are not used properly to support their learning (see, e.g., Alisaari et al., 2019), which, in turn, might expose students to experiences of exclusion. In addition, the PISA results (OECD, 2015; 2019) also suggest that immigrant backgrounds have a greater negative impact on learning outcomes in Finland compared to other countries. However, school well-being and satisfaction may often still be higher in students with immigrant backgrounds than among other students (Harinen & Halme, 2012; Räsänen & Kivirauma, 2011).

Emotional well-being, social inclusion, and academic self-concept

In the current study, we use the threefold framework of the Perceptions of Inclusion Questionnaire (PIQ; Venetz et al., 2015), which measures students' subjective perceptions of inclusion by measuring their 1) emotional school well-being, 2) social inclusion, and 3) academic self-concept. These three dimensions are related to concepts of school well-being (Tobia et al., 2019), school satisfaction (Liu et al., 2016), school engagement (Pietarinen et al., 2014), and school belongingness (Tian et al., 2016). All of these concepts refer to connectedness and feelings of being included emotionally, socially or academically. They contain emotional (positive emotions) and social (feelings of being accepted and valued by others) elements, and are associated with academic achievement (Braun, 2019; Bücker et al., 2018).

According to Guillemot and Hessels (2021), a student who experiences *emotional school well-being* enjoys going to school and feels good about being there. Furthermore, emotional well-being intertwines with the ability to form relationships with others (Denham et al., 2003; Pakarinen et al., 2020). Social interaction, relationships with schoolmates, and feeling socially accepted are prerequisites for *social inclusion* (Koster et al., 2009). For adolescents, a sense of feeling socially included at school is very important for academic success and emotional well-being (Catalano et al., 2004). Some studies suggest that immigrant students with underrepresented language backgrounds show lower levels of social inclusion in school (Osman et al., 2020), but opposite results have also been reported (Borgonovi & Ferrara, 2020). In mainstream classrooms, students with special educational needs (henceforth, SEN) are less accepted than their peers without SEN (Nepi et al., 2015; Pijl et al., 2008). Several literature reviews indicate that students with SEN are at greater risk of social isolation compared to students without SEN; they have fewer friends, feel less integrated in the social processes of their class, and perceive their peer relations more negatively (Bossaert et al., 2013; Heyder et al., 2020; Koster et al., 2009). Students with special needs also show lower levels of emotional well-being (McCoy & Banks, 2012) although other studies have shown no differences (Schwab et al., 2020).

Positive *academic self-concept* is one of the aims of inclusive education (DeVries et al., 2021). It means believing in oneself as a learner, and teachers are in a significant position for setting proper goals to support that (Ainscow et al., 2006; Woodcock, 2021). Academic self-concept is based on student's self-perceptions, which are formed through interaction with the environment and significant others (Shavelson et al., 1976). Research suggests that a strong academic self-concept is related to better academic achievement (Huang, 2011; Marsh & Martin, 2011). Thus, students with poor academic performance are at risk of developing a weak academic self-concept. In school, balancing expectations so that every student is able to reach their full potential as well as gain experiences of success is of crucial importance (Woodcock, 2021).

Academic self-concept is suggested to drop when students move to upper grades (Chang et al., 2003; Liu & Wang, 2005; Postigo et al., 2022). Students with immigrant backgrounds are observed to have lower academic self-concepts than students with native backgrounds (Figueiredo et al., 2020; Giavrimis et al., 2003; Postigo et al., 2022). Studies concerning linguistic background have provided mixed results. Second language learners have shown higher academic self-concept than native language learners, but the results vary based on language group (Niehaus & Adelson, 2013), suggesting a more complicated interaction of socio-cultural differences than ‘just language.’ DeVries et al. (2018) reported that students with SEN also have lower academic self-concept in inclusive mainstream classes than their peers without SEN. Similar results have been observed in Finland (Koskela, et al., [under review](#)).

Current study

Students’ emotional school well-being, social inclusion, and academic self-concept are suggested to be indicators and outcomes of high-quality inclusive education (Schwab & Alnahdi, 2020). However, as the results presented above indicate, not all students feel equally included. In the current study, these three dimensions were investigated using the student version of the PIQ questionnaire (Venetz et al., 2015), which has quite recently been validated with primary school students in Finland (Koskela, et al., [under review](#)) and previously in several other countries, including Switzerland, with German-speaking students (Zurbriggen et al., 2019), France, with French-speaking students (Guillemot & Hessels, 2021), and Sweden, with Swedish-speaking students (DeVries et al., 2021).

Since previous studies have suggested differences in perceptions of inclusion based on age (Koskela, et al., [under review](#)), and need for support (Bossaert et al., 2015; DeVries et al., 2018; McCoy & Banks, 2012), those aspects were investigated in the current study as well. In addition, we inspected the potential differences between students from monolingual (Finnish) backgrounds and students from multilingual backgrounds. Even though some families with multilingual backgrounds spoke Finnish as a second or third home language, in most multilingual families, Finnish was not among the languages spoken at home. This means that the home language of those students is different than the language of schooling and instruction, which, in turn, may pose challenges to feelings of school inclusion (Menken & Kley, 2010).

The following research questions were established:

RQ1: To what extent does the three-factor structure of the PIQ (emotional school well-being, social inclusion, academic self-concept; Venetz et al., 2015) fit the current Finnish sample of lower secondary school students?

RQ2: To what extent does the level of emotional school well-being, social inclusion, and academic self-concept differ with regard to grade level, linguistic background, and need for support?

The research expands the understanding of i) how the three-factor structure of the PIQ fits a sample of lower secondary school students in the Finnish educational and cultural context, and ii) how inclusion is currently actualized in Finland, a country with inclusive educational and supportive, less assimilating, multicultural policies (see, e.g., Schachner et al., 2017). This also complements the wider picture of the implementation of inclusion in different cultural contexts.

Based on previous studies suggesting a good fit of the PIQ structure in different linguistic and cultural contexts, we expected that the three-factor structure of the PIQ would also fit the current sample (H1). As for differences in grade levels, we assumed that older students would feel less included than younger students (H2). We based our assumption on results that showed a drop in feelings of inclusion during the transition from primary grades to lower secondary grades (Chang et al., 2003; Kuang et al., 2019; Liu & Wang, 2005; Postigo et al., 2022). Since the majority of the studies showed that students with SEN feel themselves less included than students without

SEN (e.g., Bossaert et al., 2015; Pijl et al., 2008), we expected similar results in our study as well (H3). Because of mixed results, no hypothesis for differences between students with monolingual and multilingual backgrounds was set.

Methods

Participants and procedure

Altogether, 469 students attending basic education grades 7–9 (aged 13–16) in mainstream classes in mainstream schools participated in the current study. The language of schooling was Finnish. The grade-level distribution was as follows: seventh graders ($n = 108$; 23.5%), eighth graders ($n = 184$; 40.1%), and ninth graders ($n = 167$; 36.4%). There was a total of 276 females (60.1%; nine participants did not declare gender). The distribution of gender across grade levels was equal ($\chi^2(4) = 2.63, p = .622$). The participants represented five Finnish comprehensive schools located in a relatively large municipality in southern Finland. In addition to subject teachers and special education teachers, the schools had a resource for an additional teacher for linguistic support, whose task was to work with recently arrived immigrant students transitioning from preparatory to mainstream education (see also Harju-Autti et al., 2022). Most of the participants received tier 1 support ($n = 353$, 76.9%). The others received tier 2 support ($n = 39$, 8.5%) or tier 3 support ($n = 18$, 3.9%), or there was no information available ($n = 49$, 10.7%). The number of students receiving intensified or special support is lower than in Finland on average (intensified support: 12.2%; special support: 9.0%; Official Statistics of Finland, 2020a). The distribution of students representing different support levels across grade levels was not equal ($\chi^2(4) = 15.57, p < .01$). The proportion of students in general support was 86.7% among seventh graders, 92.7% among eighth graders, and 78.4% among ninth graders. The data reflect the increasing multilingualism in Finland. There were 36 different home languages, and 70 (14.9%) participants reported two or more languages spoken at home. Seventy percent of them did not speak Finnish at home. In addition to Finnish, the most common languages spoken at home were Russian, Arabic, and English.

Permission to collect data was granted by the municipal authorities in fall 2018. Student participation was voluntary and required informed parental consent. One of the authors distributed informed consent documents, research instructions, background questionnaires, and PIQ questionnaires to students during class visits to the respective schools in fall 2018. The students filled out the informed consent documents, background questionnaires, and PIQ questionnaires at home with their parents or guardians. 93.2% of the students reported that they had filled out the background questionnaire and the PIQ questionnaire with the help of a parent or a guardian. Then the students returned all the documents in sealed envelopes to teachers, who delivered them to the researchers. Background information included gender, year of birth, tier of support, and the student's home language(s). This procedure followed the instructions of the Finnish National Board on Research Integrity (TENK, 2019).

Instrument

The Finnish version of the PIQ (Venetz et al., 2015) consists of 12 items with four Likert-type response categories (1- not at all true, 2- somewhat not true, 3- somewhat true, 4- certainly true). The questionnaire is freely available. The questionnaire measures three dimensions of inclusion: the emotional school well-being (e.g., “I like it in school”), social inclusion (e.g., “I get along very well with my classmates”) and academic self-concept (e.g., “I am able to solve very difficult problems”). Each dimension consists of four short and clearly understandable items, and one of them is negatively formulated. The Finnish version had previously been validated with Finnish primary school data (Koskela, et al., [under review](#)).

Analysis

The analyses were performed using SPSS software (IBM) version 27 and Mplus version 8.0 (Muthén & Muthén, 2017). To investigate how the three-factor structure of PIQ (emotional well-being, social inclusion, academic self-concept) fits the current Finnish sample of adolescents, the factorial structure of the PIQ was first tested by exploratory factor analysis (EFA) using principal axis factoring and Promax rotation with Kaiser normalization. Second, the three-factor structure was tested using confirmatory factor analysis (CFA). To evaluate the model fit, Root Mean Square Error of Approximation (RMSEA), Comparative Fit Index (CFI), and Standardized Root Mean Square Residual (SRMR) were utilized in this study. RMSEA values below .08 (MacCallum et al., 1996), CFI values above .90 (Cheung & Rensvold, 2002), and SRMR values below .08 (Hu & Bentler, 1999) indicated sufficient fit. Third, the potential grade-level differences were inspected by one-way MANOVA using the PIQ dimension composite scores as dependent variables. In addition, two-way MANOVAs were conducted to inspect grade level * lingual background and grade level * tier level interaction. Fourth, to investigate the extent to which the level of emotional well-being, social inclusion, and academic self-concept differs with regard to linguistic background (monolingual, multilingual), independent samples t-tests were conducted. Since there were students whose home language was Finnish among students with multilingual backgrounds, we also inspected, using a t-test, whether these two groups (multilingual, Finnish as home language vs. multilingual, Finnish not home language) differed from each other. Fifth, to investigate the extent to which emotional well-being, social inclusion, and academic self-concept differ with regard to need for support, differences between students receiving general support (tier 1) and students receiving intensified or special support (tiers 2 and 3) were inspected using an independent samples t-test. In addition, a two-way MANOVA was conducted to inspect tier level * linguistic background interaction.

Results

The results of EFA suggested that the three PIQ factors explained 68.2% of the variance ($KMO = .866$; $\chi^2(66) = 2429.91$, $p < .001$; Table 1; Table 2).

CFA lends acceptable support to the original three-factor structure of (1) emotional well-being ($\alpha = .85$; 4 items), (2) social inclusion ($\alpha = .82$; 4 items), and (3) academic self-concept ($\alpha = .82$; 4 items; CFI = .94; RMSEA = .08; SRMR = .05; Hooper et al., 2008; Steiger, 2007; West et al., 2012) suggested in previous studies with primary school children in Finland (Koskela, et al., under review), and in other cultural contexts outside Finland (Guillemot & Hessels, 2021; Zurbriggen et al., 2019). After some error covariances between items were added according to the modification indices, the fit of the model improved (CFI = .96; RMSEA = .07; SRMR = .05; Figure 1). All three factors correlated significantly and moderately with each other.

For descriptive statistics for composite scores (emotional well-being, social inclusion and academic self-concept), see Table 3. The results of one-way MANOVA showed that there were significant grade-level differences in the PIQ dimensions [Pillai's Trace = .04, $F(6,858) = 2.64$, $p < .05$, $\eta^2 = .02$; Table 3]. Pairwise post hoc tests showed that seventh and eighth graders had significantly higher scores in social inclusion and academic self-concept than ninth graders. No other significant group differences emerged. There was no grade level * linguistic background interaction [Pillai's Trace = .03, $F(6, 848) = 2.11$, $p = .050$, $\eta^2 = .02$] either. Even though the p -value was almost

Table 1. Factorial structure of PIQ (Venetz et al., 2015) in the Finnish sample.

PIQ dimension	Initial eigenvalues			Extraction sums of squared loadings		
	Eigenvalues	% of variance	Cumulative %	Total	% of variance	Cumulative %
Emotional well-being	1.731	14.43	56.93	1.312	10.93	50.06
Social inclusion	5.101	42.51	42.51	4.695	39.13	39.13
Academic self-concept	1.347	11.23	68.16	0.969	8.07	58.14

Table 2. Item loadings in EFA.

Item	Factor 1	Factor 2	Factor 3
Item 2	.84		
Item 5	.76		
Item 8	.58		
Item 11	.82		
Item 1		.94	
Item 4		.74	
Item 7		.54	
Item 10		.76	
Item 3			.80
Item 6			.81
Item 9			.48
Item 12			.73

Note. Factor 1 = Social inclusion; Factor 2 = Emotional well-being; Factor 3 = Academic self-concept.

statistically significant, there were no statistically significant between-subject effects. There was also no grade level * support level interaction (Pillai's Trace = .01, $F(6, 762) = 0.64, p = .697, \eta^2 = .01$).

The results of the independent samples t-test showed that there was a significant difference between students with monolingual and multilingual backgrounds in emotional well-being, with multilingual students showing significantly higher scores (Table 3). Students with monolingual and multilingual backgrounds responded equally in social inclusion and academic self-concept. More specific inspection showed that students with a multilingual background and Finnish as their home language did not show a statistically significant difference from the students with multilingual backgrounds without Finnish as their home language in emotional well-being ($t = -1.36$ ns, $d = -.29$), social inclusion ($t = .65$ ns, $d = .13$), or academic self-concept ($t = .58$ ns, $d = .12$).

There were significant group differences in social inclusion and academic self-concept between students receiving tier 1 ($n = 348$) and tier 2 or tier 3 support ($n = 55$; Table 4). In social inclusion and academic self-concept, students receiving general support (tier 1) had significantly higher scores than students receiving intensified or special support (tiers 2 and 3). In terms of emotional well-being, the two groups responded equally. There was a significant support level * linguistic

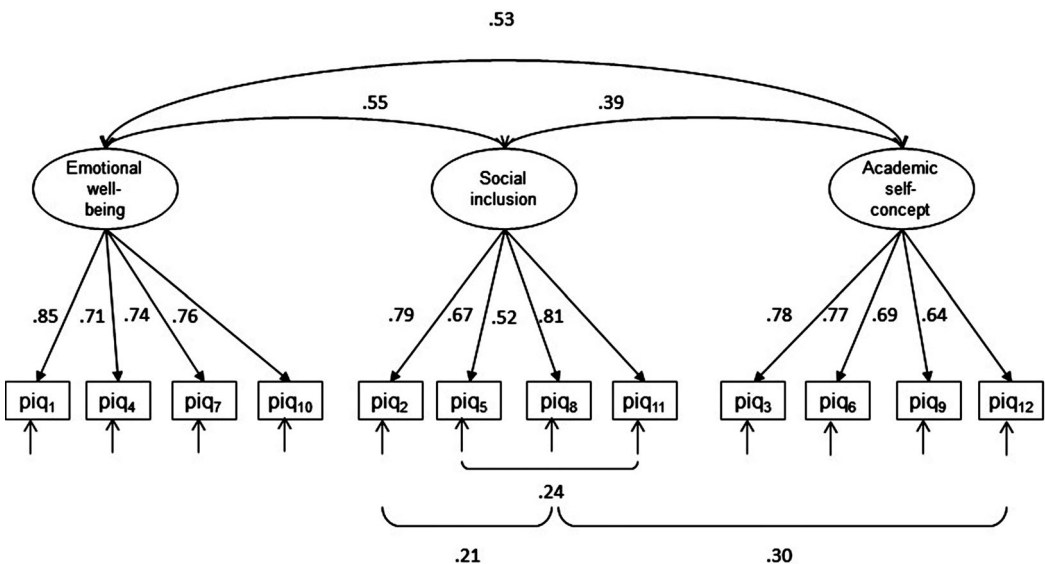


Figure 1. CFA for PIQ dimensions.

Table 3. Descriptive statistics for grade level and lingual background.

Dimension	All		Grade level						Lingual background				t	d		
	M	Sd	7th grade		8th grade		9th grade		F	η^2	Mono				Multi	
			M	Sd	M	Sd	M	Sd			M	Sd			M	Sd
Emotional well-being	3.11	0.63	3.23	0.64	3.14	0.59	3.04	0.62	2.96ns	.01	3.08	0.64	3.22	0.60	-2.02*	-.22
Social inclusion	3.47	0.59	3.55	0.53	3.53	0.57	3.36	0.63	4.42*	.02	3.49	0.57	3.42	0.63	1.19ns	.13
Academic self-concept	3.10	0.61	3.16	0.57	3.18	0.60	2.98	0.62	4.90**	.02	3.11	0.62	3.09	0.59	0.23ns	.03

Note. * $p < .05$; ** $p < .01$.

Table 4. Descriptive statistics for support level.

Dimension	Tier 1		Tier 2, 3		t	d
	M	Sd	M	Sd		
Emotional well-being	3.12	0.62	3.14	0.66	-.12	-.02
Social inclusion	3.52	0.56	3.26	0.66	2.98**	.44
Academic self-concept	3.17	0.59	2.87	0.58	3.42***	.51

Note. ** $p < .01$; *** $p < .001$.

background interaction (Pillai's Trace = .02, $F(3, 379) = 2.94$, $p < .05$, $\eta^2 = .02$). Among students with monolingual backgrounds, emotional well-being was lower among students receiving intensified or special support ($M = 2.91$; $SD = .72$) than among students receiving general support ($M = 3.12$; $SD = .61$). However, among students with multilingual backgrounds, the situation was exactly the opposite. Students receiving intensified or special support showed higher scores in emotional well-being ($M = 3.40$; $SD = .48$) than students receiving general support ($M = 3.17$; $SD = .64$). In academic self-concept, students who had monolingual backgrounds and were receiving intensified or special support had lower scores ($M = 2.64$; $SD = .55$) than students who were receiving general support ($M = 3.18$; $SD = .58$). Among students with multilingual backgrounds, the students receiving general support ($M = 3.12$; $SD = .63$) and intensified or special support ($M = 3.07$; $SD = .49$) responded equally in items measuring academic self-concept.

Discussion

We investigated how the three-factor structure of the PIQ (emotional school well-being, social inclusion, academic self-concept) fits the Finnish sample of lower secondary school students, and how the level of emotional, social, and academic dimensions differs with regard to grade level, linguistic background, and need for support. First, as expected (H1), our results showed that the three-factor structure (PIQ; Venetz et al., 2015) fits the Finnish sample of lower secondary school students. The results are in concordance with previous studies in Finland (Koskela, et al., [under review](#)), and elsewhere in other culturally and linguistically diverse contexts (DeVries et al., 2021; Guillemot & Hessels, 2021; Zurbruggen et al., 2019) and suggest that the PIQ is a suitable tool for measuring lower secondary level students' perceptions of inclusion in Finnish.

As we expected (H2), there were significant grade-level differences showing a drop in social inclusion, and academic self-concept during the lower secondary level. The results are in line with previous Finnish studies (Konu et al., 2015; Koskela, et al., [under review](#)), suggesting that school well-being in basic education is lower in older age groups. The results are also in line with several other studies representing diverse educational and cultural contexts (Chang et al., 2003; Kuang et al., 2019; Liu & Wang, 2005; Postigo et al., 2022), suggesting that decline is not context-dependent but universal. It is also in line with results suggesting a decline in overall academic motivation during the same period following the transition from primary to secondary education (Peetsma et al., 2005). No interaction between grade level and linguistic background or support level was observed, suggesting that the drop equally concerns the whole diversity of students.

There was a significant difference between students with monolingual and multilingual backgrounds in emotional well-being, with multilingual students showing significantly higher scores. Students with monolingual and multilingual backgrounds responded equally in social inclusion and academic self-concept, suggesting that linguistic background does not seem to be a risk for feeling excluded in Finnish school. The perceptions of inclusion of students with multilingual backgrounds were similar regardless of whether they used Finnish as their home language or not. This result is in line with previous Finnish studies suggesting that students with immigrant backgrounds show equal or even higher school well-being or satisfaction than other students (Harinen & Halme, 2012; Räsänen & Kivirauma, 2011). On the other hand, opposite results have also been

presented (Matikka et al., 2015). Although multilingual background does not necessarily indicate immigrant background, most of the students from a multilingual home (70%) did not speak Finnish at home. This suggests that many of the students with multilingual backgrounds are likely to be either first- or second-generation immigrants. Our results contradict many previous international studies that have suggested that students with language minority and immigrant backgrounds show lower levels of school well-being (OECD, 2018; Osman et al., 2020) or academic self-concept (Figueiredo et al., 2020; Giavrimis et al., 2003; Postigo et al., 2022), indicating lower levels of experienced inclusion. However, also results in line with our results have been reported (Borroni & Ferrara, 2020).

The students classified as having multilingual backgrounds represent a heterogeneous group. Previous studies have suggested that academic inclusion is a result of interaction between diverse socio-cultural factors and not just the result of a foreign language (Romo et al., 2018). Consequently, this means that although the results in general suggest that linguistic background does not seem to be a risk for feeling excluded in Finnish schools, there might be student groups that are more vulnerable to exclusion, or 'not being included'. For instance, Matikka et al. (2015) observed that first-generation immigrants experienced more problems and felt less support at school compared to second-generation immigrants or native-born Finns.

As we expected (H3), the students receiving intensified or special support showed significantly lower levels of social and academic inclusion than students receiving general support did. These results are in line with previous studies showing that students with SEN feel lower levels of social inclusion (Bossaert et al., 2013; Koskela, et al., [under review](#)), and lower academic self-concept (DeVries et al., 2018; Koskela, et al., [under review](#)) in mainstream classes than students without SEN, and suggest that Finnish schools are not equally inclusive for all students at different support levels. Even though our previous Finnish results suggested that primary school students receiving intensified support also had lower levels of emotional well-being (Koskela, et al., [under review](#)), in the current lower secondary data the results were not repeated.

More interestingly, receiving more intensive support than general support was a risk for lower emotional well-being and academic self-concept among students with monolingual backgrounds but not among students with multilingual backgrounds. Among students with multilingual backgrounds, the students who were receiving intensified or special support felt themselves more emotionally and academically included than students receiving general support. Among students with monolingual backgrounds, the situation was exactly the opposite: students receiving intensified or special support showed lower levels of emotional well-being and academic self-concept. There are several potential explanations for these results. First, young people learning the language of schooling have themselves indicated that support at Finnish schools may not always have been the best possible (Sinkkonen et al., 2020). If this was the case, the transition to more intensive and systematic support might strengthen the feelings of inclusion. Second, the schools in the current data had additional support for Finnish language learners (Harju-Autti et al., 2022), which may have supported students' perceptions of inclusion as well. This suggests that providing the recently arrived language learners with additional, targeted, intensified support after the period of preparatory studies may result in positive outcomes considering emotional well-being and academic self-concept in mainstream education. Furthermore, previous studies have suggested that students with immigrant backgrounds value the support they receive from school professionals (Harju-Autti et al., 2022; Sinkkonen et al., 2020).

Limitations

There are certain limitations that should be acknowledged. First, the data was gathered using the Finnish version of the PIQ questionnaire, which may have caused misunderstandings among non-native respondents. Second, most of the participants filled out the PIQ questionnaire at home with the help of an adult. This means there are at least two potential risks for the data. On

the one hand, the presence of an adult may have influenced the students' responses. On the other hand, not everyone who needed help may have received it. These limitations need to be addressed in future studies. Since inclusive education concerns all students, all students should also be able to participate in studies concerning their experiences of inclusion. Third, the number of students receiving intensified or special support was lower than in average in Finland suggesting that the data is less heterogeneous than in typical Finnish lower secondary schools and may thus give more concise picture of students' perceptions of inclusion. However, since over ten percent of the participants did not respond to this question, the percentage of those receiving intensified or special support may appear lower than it really is. Fourth, the schools in the current data had additional support for Finnish language learners (Harju-Autti et al., 2022), which may have also supported students' experiences of inclusion, and thus give an overly positive picture of perceptions of inclusion among students with multilingual backgrounds in Finnish schools. Fifth, the PIQ questionnaire (Venetz et al., 2015) provides one perspective on the concept of inclusion, as the instrument narrows the concept of inclusion down to emotional school well-being, social inclusion, and academic self-concept.

Conclusion

Our results complement previous studies in other cultural and linguistic contexts and reinforce the conception that the PIQ is suitable for assessing students' subjective perceptions of inclusion in a variety of contexts. Our results also suggest that, based on lower secondary level students' own perceptions, Finnish school is quite inclusive with regard to students' linguistic backgrounds. Although the results showed a drop in emotional well-being, social inclusion, and academic self-concept during the lower secondary level, the drop was not specifically related to any specific background factors but concerned the whole diversity of students. However, there were differences in perceptions of social inclusion and academic self-concept between students receiving diverse levels of support, suggesting that not all students feel equally included. These findings also underline the importance of assessing students' own perceptions of inclusion in Finnish schools and elsewhere to truly measure the quality of inclusive education. Since the students' perceptions of inclusion are intertwined with school well-being as well as school belonging, assessing and frequently monitoring them should be essential parts of every school's well-being work. Our results also support the notion that pedagogical support, such as additional support for Finnish language learners (see Harju-Autti et al., 2022), may help support the inclusion of students who might be at risk of feeling excluded.

Disclosure statement

No potential conflict of interest was reported by the author(s).

ORCID

Minna Kyttälä  <http://orcid.org/0000-0003-1489-2516>

Raisa Harju-Autti  <http://orcid.org/0000-0002-2217-8630>

References

- Ainscow, M. (2020). Promoting inclusion and equity in education: Lessons from international experiences. *Nordic Journal of Studies in Educational Policy*, 6(1), 7–16. <https://doi.org/10.1080/20020317.2020.1729587>
- Ainscow, M., Booth, T., & Dyson, A. (2006). *Improving schools, developing inclusion*. Routledge.
- Alisaari, J., Heikkola, L. M., Commins, N., & Acquah, E. O. (2019). Monolingual ideologies confronting multilingual realities. Finnish teachers' beliefs about linguistic diversity. *Teaching and Teacher Education*, 80, 48–58. <https://doi.org/10.1016/j.tate.2019.01.003>

- Borgonovi, F., & Ferrara, A. (2020). Academic achievement and sense of belonging among non-native-speaking immigrant students: The role of linguistic distance. *Learning and Individual Differences*, 81, 101911. <https://doi.org/10.1016/j.lindif.2020.101911>
- Bossaert, G., Colpin, H., Pijl, S. J., & Petry, K. (2013). Truly included? A literature study focusing on the social dimension of inclusion in education. *International Journal of Inclusive Education*, 17(1), 60–79. <https://doi.org/10.1080/13603116.2011.580464>
- Bossaert, G., de Boer, A. A., Frostad, P., Pijl, S. J., & Petry, K. (2015). Social participation of students with special educational needs in different educational systems. *Irish Educational Studies*, 34(1), 43–54. <https://doi.org/10.1080/03323315.2015.1010703>
- Braun, A. M. (2019). Psychological inclusion: Considering students' feelings of belongingness and the benefits for academic achievement. In M. J. Schuelka, C. J. Johnstone., G. Thomas, & A. J. Artiles, *The SAGE Handbook on Inclusive and Diversity in Education* (pp. 66–75). Sage.
- Bücker, S., Nuraydin, S., Simonsmeier, B. A., Schneider, M., & Luhmann, M. (2018). Subjective well-being and academic achievement: A meta-analysis. *Journal of Research in Personality*, 74, 83–94. <https://doi.org/10.1016/j.jrp.2018.02.007>
- Catalano, R. F., Oesterle, S., Fleming, C. B., & Hawkins, J. D. (2004). The importance of bonding to school for healthy development: Findings from the social development research group. *Journal of School Health*, 74(7), 252–261. <https://doi.org/10.1111/j.1746-1561.2004.tb08281.x>
- Chang, L., McBride-Chang, C., Stewart, S., & Au, E. (2003). Life satisfaction, self-concept, and family relations in Chinese adolescents and children. *International Journal of Behavioural Development*, 27(2), 182–189. <https://doi.org/10.1080/01650250244000182>
- Cheung, G. W., & Rensvold, R. B. (2002). Evaluating goodness-of-fit indexes for testing measurement invariance. *Structural Equation Modeling*, 9(2), 233–255. <https://doi.org/10.1207/S15328007SEM0902>
- Denham, S. A., Blair, K. A., DeMulder, E., Levitas, J., Sawyer, K., Auerbach-Major, S., & Queenan, P. (2003). Preschool emotional competence: Pathway to social competence? *Child Development*, 74(1), 238–256. <https://doi.org/10.1111/1467-8624.00533>
- DeVries, J. M., Knickenberg, M., & Trygger, M. (2021). Academic self-concept, perception of inclusion, special needs and gender: Evidence from inclusive classes in Sweden. *European Journal of Special Needs Education*, 37(3), 511–525. <https://doi.org/10.1080/08856257.2021.1911523>
- DeVries, J. M., Vo, S., & Gebhardt, M. (2018). Do learners with special education needs really feel included? Evidence from the perception of inclusion questionnaire and strengths and difficulties questionnaire. *Research in Developmental Disabilities*, 83, 28–36. <https://doi.org/10.1016/j.ridd.2018.07.007>
- Figueiredo, S., Marôco, J., Martins, M. A., & Nunes, O. (2020). Self-concept in immigrant school children and the impact of length of residence: Evidence from PISA 2015 for current educational practice. *Center for Educational Policy Studies Journal*, 11(4), 213–235.
- Finlex. (2011). *Basic Education Act*. 628/1998. Amendments up to 1136/2010. <https://www.finlex.fi/en/laki/kaannokset/1998/en19980628>
- Finnish National Agency for Education. (2014). *Perusopetuksen opetussuunnitelman perusteet* [Finnish Core Curriculum for Basic Education]. <https://www.oph.fi/fi/koulutus-ja-tutkinnot/perusopetuksen-opetussuunnitelman-perusteet>
- Finnish National Agency for Education. (2019). *Maahanmuuttajataustaisten oppilaiden opetus* [Teaching students with immigrant backgrounds]. https://www.oph.fi/koulutus_ja_tutkinnot/perusopetus/kieli-ja_kulttuuriryhmat/maahanmuuttajataustaiset_oppilaat
- Giavrimis, P., Konstantinou, E., & Hatzichristou, C. (2003). Dimensions of immigrant students' adaptation in the Greek schools: Self-concept and coping strategies. *Intercultural Education*, 14(4), 423–434. <https://doi.org/10.1080/1467598032000139859>
- Guillemot, F., & Hessels, M. G. P. (2021). Validation of the student version of the perceptions of inclusion questionnaire on a sample of French students. *European Journal of Special Needs Education*, 37, 850–865. <https://doi.org/10.1080/08856257.2021.1961195>
- Harinen, P., & Halme, J. (2012). *Hyvä, paha koulu. Kouluhyvinvointia rakentamassa*. [Good, bad school. Building school well-being.] Nuorisotutkimusseura verkkojulkaisu 56. Unigrafia Oy.
- Harju-Autti, R., Mäkinen, M., & Rättyä, K. (2022). 'Things should be explained so that the students understand them': Adolescent immigrant students' perspectives on learning the language of schooling in Finland. *International Journal of Bilingual Education & Bilingualism*, 25(8), 2949–2961. <https://doi.org/10.1080/13670050.2021.1995696>
- Heyder, A., Südkamp, A., & Steinmayr, R. (2020). How are teachers' attitudes toward inclusion related to the social-emotional school experiences of students with and without special educational needs? *Learning and Individual Differences*, 77, 101776. <https://doi.org/10.1016/j.lindif.2019.101776>
- Honkasilta, J., Ahtiainen, R., Hienonen, N., & Jahnukainen, M. (2019). Inclusive and special education and the question of equity in education: The case of Finland. In M. J. Schuelka, C. J. Johnstone, G. Thomas, & A. J. Artiles (Eds.), *The SAGE handbook on inclusion and diversity in education* (pp. 481–495). Sage Publications. <https://doi.org/10.4135/9781526470430.n39>

- Hooper, D., Coughlan, J., & Mullen, M. R. (2008). Structural equation modelling: Guidelines for determining model fit. *The Electronic Journal of Business Research Methods*, 6(1), 53–60.
- Hu, L., & Bentler, P. M. (1999). Cutoff criteria for fit indexes in covariance structure analysis: Conventional criteria versus new alternatives. *Structural Equation Modeling: A Multidisciplinary Journal*, 6(1), 1–55. <https://doi.org/10.1080/10705519909540118>
- Huang, C. (2011). Self-concept and academic achievement: A meta-analysis of longitudinal relations. *Journal of School Psychology*, 49(5), 505–528. <https://doi.org/10.1016/j.jsp.2011.07.001>
- Jahnukainen, M. (2015). Inclusion, integration, or what? A comparative study of the school principals' perceptions of inclusive and special education in Finland and in Alberta, Canada. *Disability & Society*, 30(1), 59–72. <https://doi.org/10.1080/09687599.2014.982788>
- Jahnukainen, M., Hienonen, N., Lintuvuori, M., & Lempinen, S. (2023). Inclusion in Finland: Myths and realities. In M. Thrupp, P. Seppänen, J. Kauko, & S. Kosunen (Eds.), *Finland's famous education system*. Springer. https://doi.org/10.1007/978-981-19-8241-5_25
- Jakku-Sihvonen, R., & Niemi, H. (eds.). (2006). *Research-based teacher education in Finland: Reflections by Finnish teacher educators*. Research in Educational Sciences 25. Finnish Educational Research Association.
- Kalyanpur, M. (2020). Inclusive and special education in Asia. *Oxford Research Encyclopedia of Education*. <https://doi.org/10.1093/acrefore/9780190264093.013.1262>
- Kiuppis, F., & Sarronmaa Hausstätter, R. (2014). Inclusive education for all, and especially for some? In F. Kiuppis, & R. Sarronmaa Hausstätter (Eds.), *Inclusive education twenty years after Salamanca*. Disability studies on education, 19. (pp. 1–5). Peter Lang.
- Konu, A., Joronen, K., & Lintonen, T. (2015). Seasonality in school well-being: The case of Finland. *Child Indicators Research*, 8(2), 265–277. <https://doi.org/10.1007/s12187-014-9243-9>
- Koskela, T., Kyttälä, M., & Sinkkonen, H.-M. (under review). Validation of the Student Version of the Perceptions of Inclusion Questionnaire (PIQ) in Finland.
- Koster, M., Nakken, H., Pijl, S. J., & van Houten, E. (2009). Being part of the peer group: A literature study focusing on the social dimensions of inclusion in education. *International Journal of Inclusive Education*, 13(2), 117–140. <https://doi.org/10.1080/13603110701284680>
- Kuang, X., Mok, M., Chiu, M. M., & Zhu, J. (2019). Sense of school belonging: Psychometric properties and differences across gender, grades, and East Asian societies. *PsyCh Journal*, 8(4), 449–464. <https://doi.org/10.1002/pchj.275>
- Lintuvuori, M., Jahnukainen, M., & Hautamäki, J. (2017). Oppimisen ja koulunkäynnin tuen vaihtelu kunnissa – alueellinen tasa-arvo perusopetuksessa. [Regional differences and equity within the support for learning and school attendance system in Finnish basic education]. *Kasvatus*, 48(4), 320–335.
- Liu, W., Mei, J., Tian, L., & Huebner, E. S. (2016). Age and gender differences in the relation between school-related social support and subjective well-being in school among students. *Social Indicators Research*, 125(3), 1065–1083. <https://doi.org/10.1007/s11205-015-0873-1>
- Liu, W. C., & Wang, C. K. J. (2005). Academic self-concept: A cross-sectional study of grade and gender differences in a Singapore secondary school. *Asia Pacific Education Review*, 6(1), 20–27. <https://doi.org/10.1007/BF03024964>
- MacCallum, R. C., Browne, M. W., & Sugawara, H. M. (1996). Power analysis and determination of sample size for covariance structure modeling. *Psychological Methods*, 1(2), 130–149. <https://doi.org/10.1037/1082-989X.1.2.130>
- Marsh, H. W., & Martin, A. J. (2011). Academic self-concept and academic achievement: Relations and causal ordering. *British Journal of Educational Psychology*, 81(1), 59–77. <https://doi.org/10.1348/000709910X503501>
- Matikka, A., Luopa, P., Kivimäki, H., Jokela, J., & Paananen, R. (2015). *The well-being of eight-year and ninth-year pupils with an immigrant background*. School Health Promotion Study 2013. National Institute for Health and Welfare (THL). Discussion paper 006/2015.
- McCoy, S., & Banks, J. (2012). Simply academic? Why children with special education needs don't like school. *European Journal of Special Needs Education*, 27(1), 81–97. <https://doi.org/10.1080/08856257.2011.640487>
- Menken, K., & Kleyn, T. (2010). The long-term impact of subtractive schooling in educational experiences of secondary English language learners. *International Journal of Bilingual Education and Bilingualism*, 13(4), 399–417. <https://doi.org/10.1080/13670050903370143>
- Muthén, L. K., & Muthén, B. O. (2017). *Mplus Version 8* [Statistical software]. Muthén & Muthén.
- Nepi, L. D., Fioravanti, J., Nannini, P., & Peru, A. (2015). Social acceptance and the choosing of favourite classmates: A comparison between students with special educational needs and typically developing students in a context of full inclusion. *British Journal of Special Education*, 42(3), 319–337. <https://doi.org/10.1111/1467-8578.12096>
- Niehaus, K., & Adelson, J. (2013). Self-concept and native language background: A study of measurement invariance and cross-group comparisons in third grade. *Journal of Educational Psychology*, 105(1), 226–240. <https://doi.org/10.1037/a0030556>
- Nilholm, C., & Göransson, K. (2017). What is meant by inclusion? An analysis of European and North American journal articles with high impact. *European Journal of Special Needs Education*, 32(3), 437–451. <https://doi.org/10.1080/08856257.2017.1295638>
- OECD. (2015). *Immigrant students at school. Easing the journey toward integration*. OECD Publishing. https://read.oecdilibrary.org/education/immigrant-students-at-school_9789264249509-en#page1

- OECD. (2018). *The resilience of students with an immigrant background: Factors that shape well-being*. Paris: OECD Publishing. <https://doi.org/10.1787/9789264292093-en>
- OECD. (2019). *PISA 2018 results (Volume II): Where all students can succeed*. PISA OECD Publishing. <https://doi.org/10.1787/b5fd1b8f-en>
- Official Statistics of Finland. (2010). *Support for learning*. Helsinki: Statistics Finland [referred: 26.6.2023]. http://www.stat.fi/til/erop/2010/erop_2010-06-09_tie_001_en.html
- Official Statistics of Finland. (2020a). *Support for learning*. ISSN = 1799-1617. 2020. Helsinki: Statistics Finland [referred: 27.5.2022]. http://www.stat.fi/til/erop/2020/erop_2020-06-08_tie_001_en.html
- Official Statistics of Finland. (2020b). *Foreign language speakers*. Statistics Finland. https://www.stat.fi/tup/maahanmuutto/maahanmuuttajat-vaestossa/vieraskieliset_en.html
- Osman, F., Mohamed, A., Warner, G., & Sarkadi, A. (2020). Longing for a sense of belonging—Somali immigrant adolescents' experiences of their acculturation efforts in Sweden. *International Journal of Qualitative Studies on Health and Well-being*, 15(2), 1784532. <https://doi.org/10.1080/17482631.2020.1784532>
- Pakarinen, E., Lerkkanen, M.-K., & von Suchodoletz, A. (2020). Teacher emotional support in relation to social competence in preschool classrooms. *International Journal of Research & Method in Education*, 43(4), 444–460. <https://doi.org/10.1080/1743727X.2020.1791815>
- Peetsma, T., Hascher, T., van der Veen, I., & Roede, E. (2005). Relations between adolescents' self-evaluations, time perspectives, motivation for school and their achievement in different countries and at different ages. *European Journal of Psychology of Education*, 10(3), 209–225. <https://doi.org/10.1007/BF03173553>
- Pietarinen, J., Soini, T., & Pyhältö, K. (2014). Students' emotional and cognitive engagement as the determinants of well-being and achievement in school. *International Journal of Educational Research*, 67, 40–51. <https://doi.org/10.1016/j.ijer.2014.05.001>
- Pijl, S. J., Frostad, P., & Flem, A. (2008). The social position of pupils with special needs in regular schools. *Scandinavian Journal of Educational Research*, 52(4), 387–405. <https://doi.org/10.1080/00313830802184558>
- Pitkänen, H., Huilla, H., Lappalainen, S., Juvonen, S., & Kosunen, S. (2021). Inklusiokeskustelu Helsingin Sanomissa 2009–2019 – diskursiivista kamppailua kaikkien koulusta. *Kasvatus*, 52(5), 497–509.
- Pollari, P., Salo, O.-P., & Koski, K. (2018). In teachers we trust—the Finnish way to teach and learn. *Inquiry in Education*, 10(1), <https://digitalcommons.nl.edu/ie/vol10/iss1/42018>
- Postigo, Á, Fernández-Alonso, R., Fonseca-Pedrero, E., González-Nuevo, C., & Muñiz, J. (2022). Academic self-concept dramatically declines in secondary school: Personal and contextual determinants. *International Journal of Environmental Research and Public Health*, 19(5), 3010. <https://doi.org/10.3390/ijerph19053010>
- Powell, J. J. W. (2016). *Barriers to inclusion: Special education in the United States and Germany*. Routledge. <https://doi.org/10.4324/9781315635880>
- Ramberg, J., & Watkins, A. (2020). Exploring inclusive education across Europe: Some insights from the European agency statistics on inclusive education. *Forum for International Research in Education*, 6(1), 85–101. <https://doi.org/10.32865/fire202061172>
- Räsänen, M., & Kivirauma, J. (2011). Oppilaana monikulttuurisessa koulussa. In K. Klemelä, A. Tuittu, A. Virta, & R. Rinne (Eds.), *Vieraina koulussa? Monikulttuurinen koulu oppilaiden, vanhempien, opettajien ja rehtoreiden kokema* (pp. 35–95). University of Turku.
- Repo, E. (2020). Discourses on encountering multilingual learners in Finnish schools. *Linguistics & Education*, 20, 1–15. <https://doi.org/10.1016/j.linged.2020.100864>
- Romo, H. D., Thomas, K. J. A., & García, E. E. (2018). Changing demographics of dual language learners and English learners: Implications for school success. *Social Policy Report*, 31(2), 1–35. <https://doi.org/10.1002/j.2379-3988.2018.tb00028.x>
- Scanlan, M., & Zisselsberger, M. (2015). The formation of communities of practice in a network of schools serving culturally and linguistically diverse students. *Journal of Education for Students Placed at Risk*, 20(1-2), 58–78. <https://doi.org/10.1080/10824669.2014.986574>
- Schachner, M. K., He, J., Heizmann, B., & Van de Vijver, F. J. R. (2017). Acculturation and school adjustment of immigrant youth in six European countries: Findings from the Programme for International Student Assessment (PISA). *Frontiers in Psychology*, 8, 649. <https://doi.org/10.3389/fpsyg.2017.00649>
- Schmidt, M., Schwab, S., & Zurbriggen, C. L. A. (2021). Social inclusion, emotional inclusion and academic self-concept of Slovenian students with learning disabilities. *Journal of Contemporary Educational Studies*, 72(2), 218–234.
- Schwab, S., & Alnahdi, G. H. (2020). Teachers' judgments of students' school-wellbeing, social inclusion, and academic self-concept: A multi-trait-multimethod analysis using the perception of inclusion questionnaire. *Frontiers in Psychology*, 11. <https://doi.org/10.3389/fpsyg.2020.01498>
- Schwab, S., Sharma, U., & Loreman, T. (2018). Are we included? Secondary students' perception of inclusion climate in their schools. *Teaching and Teacher Education*, 75, 31–39. <https://doi.org/10.1016/j.tate.2018.05.016>
- Schwab, S., Zurbriggen, C. L. A., & Venetz, M. (2020). Agreement among student, parent and teacher ratings of school inclusion: A multitrait-multimethod analysis. *Journal of School Psychology*, 82, 1–16. <https://doi.org/10.1016/j.jsp.2020.07.003>

- Shavelson, R. J., Hubner, J. J., & Stanton, G. C. (1976). Self-concept: Validation of construct interpretations. *Review of Educational Research*, 46(3), 407–441. <https://doi.org/10.3102/00346543046003407>
- Simola, H., Kauko, J., Varjo, J., Kalalahti, M., & Sahlström, F. (2017). *Dynamics in education politics. Understanding and explaining the Finnish case*. Routledge.
- Simons-Morton, B. G., & Crump, A. D. (2003). Association of parental involvement and social competence with school adjustment and engagement among sixth graders. *Journal of School Health*, 73(3), 121–126. <https://doi.org/10.1111/j.1746-1561.2003.tb03586.x>
- Sinkkonen, H.-M., Aunio, P., & Väliniemi, S. (2009). Maahanmuuttajalasten koulunkäynti kolmen opettajan näkökulmasta. [The education of multicultural children from teachers' perspective]. *NMI Bulletin*, 19(4), 36–47.
- Sinkkonen, H.-M., & Kyttälä, M. (2014). Experiences of Finnish teachers working with immigrant students. *European Journal of Special Needs Education*, 29(2), 167–183. <https://doi.org/10.1080/08856257.2014.891719>
- Sinkkonen, H.-M., Kyttälä, M., Karvinen, O., & Aunio, P. (2011). Maahanmuuttajalasten erityisluokkasiirrot – syynä todelliset oppimisvaikeudet vai heikko kielitaito? [Immigrant children in special education – is it about real learning difficulties or poor skills in Finnish?]. *NMI-Bulletin*, 21(1), 14–25.
- Sinkkonen, H.-M., Närhi, M., & Kyttälä, M. (2020). Maahanmuuttajataustaisten oppilaiden käsitkset ja kokemukset oppimista ja koulunkäyntiä tukevista tekijöistä. [Immigrant students' experiences of factors supporting learning and schooling]. *NMI-Bulletin*, 30(2), 38–59.
- Steiger, J. H. (2007). Understanding the limitations of global fit assessment in structural equation modeling. *Personality and Individual Differences*, 42(5), 893–898. <https://doi.org/10.1016/j.paid.2006.09.017>
- Suárez-Orozco, C., Suárez-Orozco, M. M., & Todorova, I. (2008). *Learning in a new land: Immigrant students in American society*. Harvard University Press.
- TENK. (2019). *The ethical principles of research with human participants and ethical review in the human sciences in Finland. Finnish national board on research integrity (TENK) guidelines 2019*. Helsinki.
- Tian, L., Zhang, L., Huebner, E. S., Zheng, X., & Liu, W. (2016). The longitudinal relationship between school belonging and subjective well-being in school among elementary school students. *Applied Research in Quality of Life*, 11(4), 1269–1285. <https://doi.org/10.1007/s11482-015-9436-5>
- Tobia, V., Greco, A., Steca, P., & Marzocchi, G. M. (2019). Children's wellbeing at school: A multi-dimensional and multi-informant approach. *Journal of Happiness Studies*, 20(3), 841–861. <https://doi.org/10.1007/s10902-018-9974-2>
- UNESCO. (2008). *General presentation at the 48th session of the international conference on education, "inclusive education: The way of the future"*, Geneva. http://www.ibe.unesco.org/fileadmin/user_upload/Policy_Dialogue/48th_ICE/General_Presentation-48CIE-English.pdf
- UNESCO [The United Nations Educational, Scientific and Cultural Organization]. (1994). *The Salamanca statement and framework for action on special needs education*. Retrieved September 20, 2021, from <https://unesdoc.unesco.org/ark:/48223/pf00000984271994s>
- United Nations. (2006). *United Nations Convention on the Rights of Persons with Disabilities*. Retrieved September 21, 2021, from [https://www.un.org/development/desa/disabilities/convention-on-the-rights-of-persons-with-disabilities-2.html](https://www.un.org/development/desa/disabilities/convention-on-the-rights-of-persons-with-disabilities/convention-on-the-rights-of-persons-with-disabilities-2.html)
- United Nations. (2015). *Transforming our world: The 2030 agenda for sustainable development*. Retrieved September 21, 2021, from <https://sdgs.un.org/publications/transforming-our-world-2030-agenda-sustainable-development-17981>
- Van Driel, B., Darmody, M., & Kerzil, J. (2016). *Education policies and practices to foster tolerance, respect for diversity and civic responsibility in children and young people in the EU*. NESET II Report. Luxembourg: Publications Office of the European Union. <https://doi:10.2766797305>
- Venetz, M., Zurbriggen, C. L. A., Eckhart, M., Schwab, S., & Hessels, M. G. P. (2015). *The Perceptions of Inclusion Questionnaire (PIQ)*. Finnish version. https://piqinfo.ch/wp-content/uploads/2021/01/PIQ-Suomi-Finnish_2021.pdf
- Vipunen. (2023). *Esi- ja perusopetuksen oppilaat vuosiluokittain. Vieraskieliset oppilaat*. [Pupils in pre-primary and basic education by nationality and mother tongue]. Retrieved March 7, 2023, from <https://vipunen.fi/fi-fi/perus>
- West, S. G., Taylor, A. B., & Wu, W. (2012). Model fit and model selection in structural equation modeling. In R. H. Hoyle (Ed.), *Handbook of structural equation modeling* (pp. 209–231). The Guilford Press.
- Woodcock, S. (2021). Teachers' beliefs in inclusive education and the attributional responses toward students with and without specific learning difficulties. *Dyslexia*, 27(1), 110–125. <https://doi.org/10.1002/dys.1651>
- Zurbriggen, C. L. A., Venetz, M., Schwab, S., & Hessels, M. G. P. (2019). A psychometric analysis of the student version of the Perceptions of Inclusion Questionnaire (PIQ). *European Journal of Psychological Assessment*, 35(5), 641–649. <https://doi.org/10.1027/1015-5759/a000443>